

RFP-ERP\_2020 An Enterprise Financial Solution

# **Molly Kelham**

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# Response Guidelines

## **Corporate Entity**

This Response is being made by Oracle America, Inc., a wholly owned subsidiary of Oracle Corporation. All responses reflect information concerning Oracle Corporation (hereinafter referred to as Oracle) except where otherwise indicated as being information of Oracle America, Inc. (hereinafter Oracle America, Inc.).

#### Definition

Throughout this Response, the term "solution" refers to and is interchangeable with "approach" or "system." Solution is not intended to contractually bind Oracle to "solve" any issues or problems. It is intended to express the concept that an approach to your project has been well thought out and is the result of the use of our products, methods, and experience.

Throughout this Response, the term "partner" refers to and is interchangeable with "ally" or "collaborator." Partner is not intended to contractually or legally bind Oracle to any third party.

## **Response Validity**

This Response shall remain valid until for 180 days from the date of submission, unless otherwise mutually agreed, in writing, by Oracle and the State.

#### **Attachment list**

The complete response includes the following documents.

Document Name	Reference
Offeror Transmittal Letter	Attachment to Exhibit 1
Attachment: Customer References     Offeror Form OF-1	Background and Experience
3. Attachment: Offeror Form OF-1 Section 2a-2b a. Atlas Roofing b. Intermountain HealthCare c. Navy	Background and Experience
4. Attachment: Form OF-2 EXCEPTIONS	Attachment to Exhibit 1
Attachment: Form OF-3 – Confidential Information	Attachment to Exhibit 1, Offeror Form OF3 RFP Document Section 1.23
Attachment: Non-Disclosure     Agreement	Required Attachment

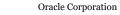


Document Name	Reference
7. Attachment 5 – Staff Resumes	Project Organization and Staffing
8. Appendix A-1 Core Phase Req	RFP Document Section 6
17 S	Functional Requirements
9. Appendix A-2 Expansion Phase Req	RFP Document Section 6
70 SS SASS	Functional Requirements
10. Appendix B – Optional Phase Req	RFP Document Section 6
10 101	Functional Requirements
11. Appendix C – Technical Requirements	RFP Document Section 6
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12. Appendix D-Implementation Services	RFP Document Section 6
Req	Implementation Services
13. Appendix E – Ongoing Services Req	RFP Document Section 6
	Hosting Services
14. Appendix F – Service Level	RFP Document Section 6
Agreements	Service Level Agreements
15. Appendix L – Cost Workbook	Pricing
16.202010K report	6.2 Financials
17.2019 10K report	
18.2018 10K report	
19. Attachment: Offeror Checklist	Attachment to Exhibit 1
20.2021 OAI HI Vendor Compl-Cert.pdf	RFP Document Section 1.21 and
	1.22
21. Oracle RFP ERP 2020 NDA	Required to submit RFP
Attachment A LV encrypted.pdf	

# **Security Information**

Please note that the relevant contract(s) between you and Oracle determine the scope of services provided and the related legal terms. Oracle disclaims any terms or statements contained herein that seek to impose legal or operational requirements on Oracle for the delivery of the services.







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February 9, 2021

State of Hawaii Department of Accounting and General Services, Office of Enterprise Technology Services

Attention: Todd Omura todd.t.omura@hawaii.gov (808) 586-1824

1151 Punchbowl Street, Room B10

Honolulu, HI 96813

Dear Mr. Omura:

Oracle is pleased to present this proposal to State of Hawaii (the State) for an Oracle Enterprise Financial System. With millions of users worldwide, thousands of unique environments and world-class datacenter facilities, the State can be confident in Oracle's capabilities for Oracle products and services.

Oracle is teaming with a locally-owned Native Hawaiian Organization, Na Ali'i Company. Na Ali'i provides IT services to customers while supporting their Native Hawaiian Community. Oracle and Na Ali'i have an outstanding commitment to delivering end-to-end solutions.

Oracle delivers services across the entire portfolio of Oracle Cloud and On Premises solutions. With a choice of deployment models and a full range of services, you can rapidly and safely transition to an Oracle cloud or at your data center—and operate at peak efficiency leveraging Oracle's years of experience and end-to-end enterprise services for increased productivity, reduced risk, and a low total cost of ownership.

Oracle provides better service through engineered best practices based on the Information Technology Infrastructure Library, tooling and automation. With access to Oracle Support and Oracle Product Development, issues are addressed quickly and access to the latest product innovations and capabilities is accelerated.

Oracle values the relationship that our organizations have begun to establish and looks forward to working with you to enhance your offerings for years to come. Oracle is proud of its industry-leading technologies and services and we are prepared to help you meet your information management goals. We will work closely with you to further define our engagement to maximize the value of your technology investments. We are excited about this opportunity and confident that our service will be of value. Thank you for your consideration. I can be reached at +1 925.285.8744 or via e-mail at molly.maher@oracle.com to answer questions or provide further information.

Sincerely,

Molly Kelham Advanced Customer Services Sales Director Oracle America, Inc.



# **Table of Contents**

Table of Contents	3
Table of Diagrams	4
Executive Summary	5
Oracle Response	13
1 – Oracle Qualifications	13
Financial Statements	13
Background and Experience	14
Na Ali'i	14
Oracle	16
2 - Project Organization and Staffing	21
3 - Business Solution – Functional Requirements	31
Phase 1 Core: Functional Solution Overview:	31
Phase 2 Expansion: Functional Solution Overview:	42
Phase 3 Optional: Functional Solution Overview:	47
4 - Business Solution – Technical Requirements	50
Core Phase	51
Expansion Phase	55
Optional Phase	58
Technical Architecture	64
Solution Architecture	70
Solution Technology	77
5 - Business Solution – Implementation Services Requirements	82
Implementation Services	82
6 - Business Solution – On Going Services	95
7 - Price	107
Scope and Assumptions	109
Implementation Assumptions	109
Run and maintain Assumptions	109
Commercial Assumptions	111
Cloud Service Units	112
Service Descriptions	114
Terms & Conditions of Response	116



# **Table of Diagrams**

1: Managed Services	9
2: Oracle Financials	13
3: Na Ali'is History Supporting NP2	15
4: Governance Structure	21
5: Layered Approach	22
6: Communications Structure	22
7: Sample Organization Structure	24
8: Core Phase High Level Timeline	50
9: Expansion Phase High Level Timeline	54
10: Optional Phase High Level Timeline	58
11: Sample Probability-Impact Matrix	61
12: Comparison of Risk Responses Based on Desired Outcomes	62
13: Quality Control Plan	64
14: Scaled Sprint Delivery	86
15: Sample Bi-Weekly Release Schedule	87
16: Design Sprint Activities	87
17: Sprint Development Activities	91
18: Release Activities - Sprint Hardening	92
19: Application Management Services	95
20: ACS ITIL Based Services	98
21: Lifecycle Services	99
22: Production Assessment	100
23: Periodic Maintenance Plan	100
24: Security Qualifications	101
25: Security in the Stack	103
26: Cloud Metrics in the Portal	105
27: Managed Services Metrics in the Portal	106
28: CSU Consumption	113





# **Executive Summary**

Oracle Advanced Customer Services (ACS) and Na Ali'i are pleased to offer the State of Hawaii DAGS a comprehensive suite of Enterprise Financial Technology Solution as outlined in our response to this Request for Proposal (RFP) ERP\_2020 an Enterprise Financial Solution.

Oracle Advanced Customer Services enables Public Sector clients to leverage their Oracle investments to extend into the cloud with greater value, choice and confidence. Since 2000, Oracle ACS has years of experience enabling over 6 million end users to increase their productivity and gain competitive advantage, ACS is a recognized leader in delivering enterprise-grade, end-to-end managed services across every layer of the Oracle Cloud technology stack. With ACS you get Governance, Service Level Agreements, Functional and Integration Services, and Managed Security and Compliance Services. In addition, automation, monitoring and custom tools provide visibility across your entire cloud solution.

Na Ali'i Consulting & Sales, LLC is a Native Hawaiian Organization (NHO) owned 8(a) small business that delivers innovative management and technology solutions. Together with our sister company, Nakupuna Solutions, LLC, we form the Nakupuna Companies. We have deep experience supporting government agencies including the Department of State, the United States Navy, the Office of the Secretary of Defense, the Defense Information Systems Agency (DISA), and the Defense POW/MIA Accounting Agency (DPAA). Our agility, curiosity, and resourcefulness enables us to find creative, elegant solutions to solve our customers' hardest business challenges. Our diverse team of employees is passionate about finding innovative solutions for our clients, and we have extensive experience modernizing and automating IT solutions for government agencies.

The State of Hawaii DAGS can dramatically improve the performance, reliability, scalability and security of your information technology by using the services provided proposed in this response. Increase the efficiency of your business processes and systems with Oracle's industry-leading technology and let Oracle ACS and Na Ali'i handle the implementation of your PeopleSoft application with security and ongoing updates, patching and maintenance. The State of Hawaii DAGS can then focus staff on key application enhancements, deploying resources and technology for better user productivity and customer satisfaction.

Our solution embraces the philosophy of "Organizing around the customer"; we are committed to the State getting the most possible value from their technology investments and supporting their requirements for protecting, extending and evolving their enterprise software solutions to continue to meet the unique needs of the State's business into the future.

# Meeting the State's Objectives

In support of The State of Hawaii DAGS business objectives, your evaluation team issued an RFP requesting a proposal for an EFS contractor to provide a solution that will unify and modernize certain State IT systems business processes.





Oracle offers a complete solution for Public Sector institutions for Enterprise Financial System (EFS) applications, technology and cloud management. Oracle is uniquely qualified to provide a complete and integrated solution that meets the objectives, requirements and regulations of the State of Hawaii DAGS. The following response will address your needs including:

- Oracle ACS and Na Ali'i understand and are committed to providing functionality in the EFS that will deliver the greatest business benefit to the State. We will help the State of Hawaii DAGS by proposing an improved process, timeliness, consistency and accuracy of financial transactions and reporting.
- Oracle ACS and Na Ali'i will improve transparency, enable consistent adoption
  of policies and procedures, while minimizing risk and disruption. We will
  improve efficiency to the State's services to its employees, and for the citizens,
  residents and businesses in the State.
- Oracle ACS and Na Ali'i will provide training on the EFS solution and ongoing knowledge transfer regarding the application and operating system.

#### The Solution

Oracle and Na Ali'i are pleased to present the State of Hawaii DAGS with a technical and functional implementation of the PeopleSoft application in the Oracle Cloud Infrastructure. Oracle will perform the technical requirements with the local Hawaii partner Na Ali'i supporting the functional implementation. With an experienced and skilled working relationship this offers the State an optimal project team.

# PeopleSoft

The foundation for the proposed functional solution is centered around PeopleSoft's latest Financial & Supply Chain Management (FSCM) version 9.2 Image 38 release combined with Oracle's best-in-class solutions for Data Warehousing (Autonomous Data Warehouse) and Planning/Budgeting (PBCS). There are several advantages to the State in adopting a PeopleSoft-centered solution, including the following:

**Simplified Change Management** - The State currently runs PeopleSoft as its Human Capital Management (HCM) platform with a reach of 65,000 users. The financials product will provide a familiar look and feel to users.

**Integrated Solution**- PeopleSoft provides a modularized, yet highly integrated solution including many delivered integrations points with the State's Human Capital and Payroll solutions.

The data structures and data edits established within General Ledger and Commitment Control emanate outward to all other modules which allows for strong data integrity and flexible/extendible application security. The integration points between all modules allow for the seamless exchange of data across all business





processes including the ability to provide real time funds checking across all transaction entry points. The delivered Integration Broker web services framework allows for integration with 3rd party applications and services.

Lower Cost of Ownership - PeopleSoft's unique "selective adoption" delivery model provides the utmost flexibility for the State to adopt features that will provide the best business value. PeopleSoft delivers full update releases (PUM updates) approximately once a quarter and provides a toolset for consuming updates ala carte. Once the initial implementation is complete there are simply no more large scale, disruptive system overhauls required.

Ownership cost has further been reduced by PeopleSoft's shift towards focusing on configurability versus customization. Frameworks such as the Approvals Framework, Activity Guides Framework, Alerts Framework, and Form Builder allow for business rules to be configured in the system instead of code changes. This reduces operations and maintenance costs as well as reliance on IT staff.

The Oracle Cloud Infrastructure solution provides the ability to scale up or down infrastructure to align with current business needs. For example, additional testing environments can be quickly deployed to test the impact of new accounting regulations or business transactions and then scaled back down once the objective is met.

**Enhanced User Experience** - PeopleSoft offers a highly intuitive user interface. The "fluid" interface has a tile-based look and feel, much like modern mobile devices. This interface is highly configurable to present application features in an efficient manner for users but can be standardized by the organization.

The product comes delivered with several mobile applications including Travel and Expenses, eProcurement Requisitioning, Mobile Inventory, a variety of approvals, and much more. The fluid technology is built into the system such that there are no native applications on mobile devices and the application renders to the form factor being used. This means that users pick up their devices, connect to the system, and go.

In addition, the system comes delivered with many configurable Work Centers. These Work Centers provide a single point of interest for users where all their job functions, approvals, and reports are at their fingertips. WorkCenters eliminate the need to know complex system navigations and, as a result, users can accomplish their work with less clicks.

Finally, the system is delivered with many configurable on-page analytics, drilldowns and related content items, and robust reporting tools to give users the information they need. The objective is to remove users from the data compilation business and propel them towards high value analytics.

As you can see, the current PeopleSoft solution provides a high value proposition for the State. However, the product road map for PeopleSoft will extend the software beyond its current state. Innovations such as integrated AI with digital assistants, IoT (internet of things) asset tracking, and text messaging integration are on the forefront of financial system innovation and prove that Oracle is dedicated to the continued development and improvement of the product.





# Why Oracle Cloud Infrastructure Versus SaaS

The benefits of having PeopleSoft in Oracle Cloud Infrastructure (OCI) will help the State in achieving a solution that will unify and modernize the State IT system. With OCI, the State will not need to rebuild anything or rework any current statutory business procedures in place. The State can automate the unique statutory state requirements that may not generally be in a SaaS solution. This will minimize manual work arounds when these statutory requirements are encountered now and in the future. In addition, the current department users will experience the same look and feel when using the application. The State can continue using what they know and what they enjoy about PeopleSoft. At the same time, the State can take advantage of the faster and more flexible features of OCI. With PeopleSoft in the cloud, the timeline to go live is on average 2-3 months, while adopting SaaS could be 4X this to go live. This will have a positive impact on the State's return on investment by being able to utilize the investment more quickly.

OCI users had a TCO reduction from running on premises to cloud and 43% savings running PeopleSoft in OCI. It also increases your agility and flexibility, allows you to scale on-demand, and optimizes your cloud resources with PeopleSoft operation automation. OCI customers had a 2-10X performance increase backed by SLAs. With OCI, customers can move faster with implementation of security features to consistently keep up with the State's guidelines. Peoplesoft Cloud Manager is a tool developed by Oracle to make Peoplesoft a SaaS-like user experience. Cloud Manager is an orchestration framework to provision and manage PeopleSoft environments on OCI. The PeopleSoft Cloud Manager helps creating task specific environments that can last as long as the task is needed. PeopleSoft Cloud Manager will enable you to focus more on business and less on infrastructure management by taking away all the complexities involved in acquiring and managing the infrastructure to run PeopleSoft on OCI.

# Oracle Cloud Infrastructure

In Oracle Cloud Infrastructure Oracle has built a true enterprise oriented public cloud designed on security-first principles and delivering predictable performance. Oracle's cloud performs better and more predictably than most on-premises environments, with industry leading price/performance. Oracle is the only company to also offer management and availability SLAs. Availability SLAs cover Compute, Block Volumes, Object Storage and FastConnect. OCI delivers the best price/performance available in the market today. Workloads deployed on OCI often require fewer compute servers and block storage volumes and hence lower cost to deliver the same or better workload performance than competitors.

OCI Security is a key differentiator for running applications and data. OCI is a Gen2 laaS offering, industry unique in that it was conceived and architected on security-first design principles. Innovations such as isolated network virtualization and pristine host deployment offer superior customer isolation and reduced risk from advanced persistent threats.

Oracle provides a simple way to migrate most on-premises PeopleSoft deployments to OCI that doesn't require significant re-architecture, re-integration or business





process changes. Once on OCI, PeopleSoft will be more flexible, more reliable, and deliver higher performance at a lower cost than deployments running on-premises or with other cloud providers.

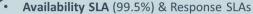
Oracle has a validated solution to accomplish these goals, quickly and reliably. It includes procedures, supporting services, and reference architectures. These consider real production needs, including security, network configuration, high availability, disaster recovery, identity integration, and cost management. With this validated solution, you can take advantage of:

- 38-52% lower TCO
- 2-10x faster reporting speed
- No single point of failure
- Quick and seamless migration without re-architecture
- Rapid in-place technology refresh and patching
- Proactive costs and usage monitoring
- Near instant scaling up or down
- Ability to retain control over security and governance using familiar tools

# **Oracle Managed Cloud Services**

Oracle Advanced Customer Services supports over 400 customers in Managed Services deployment models on Oracle Clouds and provides advanced support to over 6000 customers. As the developer of the Oracle programs that the State operates and of the OCI, we are uniquely qualified to support your needs.

Oracle understands that you currently have a variety of systems that are difficult to operate and report on in a cohesive manner. After the implementation of OCI, ACS proposes a fixed price managed service to support your programs in a run and maintain service. Oracle's Managed Cloud Services solution will provide these services for PeopleSoft on OCI:



- Disaster Recovery (1 hr/12 hr (RPO/RTO)
- RAC Enabled
- 24X7 Monitoring and Resolution
- Change Management Configuration & Patching
- Incident and Problem Mgmt (Root Cause Analysis)
- Capacity Management
- Backup and Recovery
  - **Unified Governance**















1: Managed Services



One Contract for Apps Mgmt

& OCI Infrastructure



With ACS Managed Application Cloud Services, our goal is to provide:

- Reduced Cost

   Pay for what you use, right-size your environments
- Improved Agility Add computing capacity as required, Accelerated provisioning and refreshes
- Reduced Risk 99.5% availability SLAs and 1hr/12hr RPO/RTO; secure global infrastructure, Encrypted data and vulnerability scans.
- **Service Accountability** Single point of contact for service and account governance.
- Transparent Full visibility into service health and entitlements Vs Consumption via mobile devices or desktop portal using Oracle Pulse
- Cloud Security- Ensuring data and sensitive information is protected by putting in place regulatory and compliance services.
- Increase Business Productivity- With rapid provisioning and elasticity

With Oracle providing experienced resources to execute the State's technology support, the State can focus staff on activities to advance your strategic objectives.

# Why ACS and Na Ali'i

Oracle Advanced Customer Services (ACS) has over 20 years' experience focusing only on Oracle products and services. Running production environments for Oracle programs over this time brings exceptional depth of knowledge.

As the software developer, Oracle knows Oracle best, and is incomparably qualified to provide world-class implementation, hosting, maintenance, support and ongoing management. Having one point of contact for the hosting and application issues reduces problem resolution time and provides that the customer always knows whom to call. Customers see tremendous value in being closely tied to Oracle's product development teams. Advanced Customer Services customers have access to the latest integration paths, newest releases and technologies. These are benefits that simply cannot be offered by a third-party but will facilitate huge financial and productivity gains for our customers.

The State can expect us to be transparent about what we're doing, why we're doing it, and what it costs. We're here to help the State meet its business needs today and tomorrow.

Na Ali'i has extensive experience delivering Oracle PeopleSoft solutions to the Government sector market and are highly qualified to solve the complex challenges faced by Government organizations. Na Ali'i has assembled the best combination of PeopleSoft expertise consisting of project leaders, solution architects, business analysts, testers and other supporting resources. Na Ali'i currently has approximately 85 consultants both in Hawaii and Washington DC. Our implementation team for this proposal will be local residents that work in our office that is located at 3375 Koapaka





Street. Na Ali'i combined with Oracle brings to the table both government and solution experience and professionalism delivered with a local style.

Oracle continues to make significant investments in technologies and programs to support our customers that have chosen Oracle as their partner. Oracle understands how customers use our products and how to optimize them through infrastructure architecture, automation tools, and efficient processes that allow customers to maintain a competitive edge in their market.

The State is a valued customer of Oracle, and we look forward to continuing and strengthening our partnership. The State's ongoing adoption of Oracle's technology as a corporate standard means that Oracle is uniquely positioned to support the State's objectives.

Throughout this response we will refer to the combined delivery of services from Oracle and Na Ali'i as "the Team".





# **Oracle Response**

# 1 - Oracle Qualifications

# **Financial Statements**

Oracle has been a profitable company enabling the reinvestment of more than \$58 billion in product development since 2004. Provided below is a five-year history of Oracle's financial highlights.

Year Ended May 31 US dollars in millions, except per-share amount and Percentage	2019	2018	2017	2016	2015
Total revenues	\$ 39,506	\$ 39,831	\$37,728	\$37,047	\$38,226
Operating income	\$ 13,535	\$ 13,679	\$12,710	\$12,604	\$13,871
Net income	\$ 11,083	\$ 3,825	\$9,335	\$8,901	\$9,938
Earnings per share—basic	\$ 3.05	\$ 0.93	\$2.27	\$2.11	\$2.26
Earnings per share— diluted	\$ 2.97	\$ 0.90	\$2.21	\$2.07	\$2.21
Working Capital	\$27,756	\$56,769	\$50,337	\$47,105	\$47,892
Total assets	\$108,709	\$137,851	\$134,991	\$112,180	\$110,903
Total non-current liabilities	\$ 67,706	\$ 71,845	\$56,567	\$47,182	\$46,514
Total Research and Development expenditure	\$6,026	\$6,091	\$6,159	\$5,787	\$5,524
Percentage of total revenues invested in R&D	15%	15%	15.6%	16%	14.5%

2: Oracle Financials

# Litigation

Oracle does engage in litigation in the normal course of business. Oracle does not comment on pending claims and/or litigation; however, Oracle is a public company and, as such, reports all litigation and/or legal claims that may have a material, adverse effect on the operation of its business in its Form 10-K filings and any subsequent updates with the Securities and Exchange Commission. Oracle's Form 10-K can be found at the following site:

https://investor.oracle.com/overview/highlights/default.aspx.





# **Background and Experience**

# For References please see:

- Attachment Form OF-1
- Attachment Forms:
  - OF-1 Section 2a-2b Reference Intermountain Healthcare
  - OF-1 Section 2a-2b Reference Atlas Roofing
  - OF-1 Section 2a-2b Reference Navy

# Na Ali'i

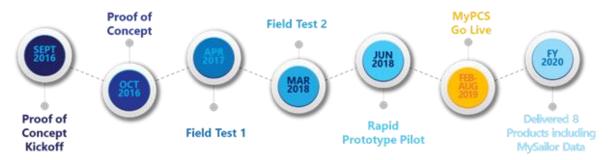
Na Ali'i has rapidly assembled the best PeopleSoft implementation team in the federal market. We designed, developed, and delivered working software to the US Navy to enable personnel transactions that automatically drive payroll calculations of earnings and deductions including:

- Streamlining 13 different accession paths into the Navy to create a member's pay record.
- Calculating special pay entitlements based on a member's transfer to a unit location and billet.
- Integrating with legacy manpower, training, and order writing systems that directly impact pay.
- Automating pay impacting events and Treasury Direct Disbursing (TDD) payroll processes.
- Establishing accounting protocols to preserve detailed transaction records while transmitting summary records through an interface to the accounting system of record.

The solution architecture we delivered was integrated, scalable, and streamlined because our engineering and design teams were working from a uniform set of design principles focused on minimal customization and optimal utilization of data. Agile Loa (Hawaiian for "Very Agile") is our unique Scaled Agile methodology for incremental delivery of PeopleSoft solutions in a cloud environment. Our expert solution architects lead multiple development teams to design, develop, and deliver working integrated software every two weeks, with live demonstrations to our product owners and end-users.







3: Na Ali'is History Supporting NP2

Over the past four years, the Navy Personnel and Pay (NP2) program evolved from a small Proof of Concept (POC) and Field Test to prove the viability of a commercial off the shelf (COTS) solution, to the larger Rapid Prototype Pilot (RPP) that will be wrapped into the initial operating capability (IOC) project to deliver Treasury Direct Disbursement (TDD) by January 1st, 2022. During that stretch, the design and development of Na Ali'i has been the one constant. The core leaders of our PeopleSoft delivery team were also responsible for the award winning deployment of a PeopleSoft Personnel and Pay solution for the US Coast Guard.

- Due to time, complexity, and impact constraints, NP2 is being implemented in a phased approach. The Initial Operating Capability (IOC) of NP2 will eventually replace the Navy's existing payroll processes and all the personnel processes that have a direct impact on pay. Based upon the analysis Na Ali'i performed in POC and FT1, the Navy decided to use Commercial-Off-The-Shelf (COTS) software as the platform for NP2, which is built on these Oracle PeopleSoft modules: Human Capital Management (HCM), Global Payroll (GP), and Financials & Supply Chain Management (FSCM). One metric of our success is the sheer extent of the integrated functionality delivered: 474 features, 155 pay earnings/deductions in Global Payroll, 35 interfaces, and 1,056,188 configurations, including 16 different TDD file formats generated from PeopleSoft Global Pay that passed the Treasury's initial validation tests.
- To satisfy the documentation and requirements traceability needs as the project scaled, Na Ali'i also created a custom design and configuration management tool within PeopleSoft called "Feature Map." This tool contains functional specifications, technical configuration and objects pulled directly from PeopleSoft database, interface specifications, Global Payroll configurations, and linked User Stories and associated Acceptance Criteria/Requirements. The tool can be used for any PeopleSoft upgrade or implementation and greatly improves documentation delivery and development metric reporting accuracy and efficiency.
- The RPP project was an 18-month effort where each of our eight development teams seamlessly integrated enhancements and new functionality into the existing PeopleSoft solution baseline every two weeks. Our ability to scale from the smaller POC and FT1 efforts to a full-scale implementation was recognized by our customer with exceptional Contractor Performance Assessments. At the end of the project, our team delivered 40 releases of working software. Each two-week release included modifications and





enhancements of previously deployed releases. The software developed in this phase is now the baseline code for our current phase of NP2 development.

During this multi-year engagement with the Navy, Na Ali'i has made a concerted effort within our PeopleSoft practice to contribute to our corporate mission of increasing economic opportunities for the Native Hawaiian community. As the scale of our delivered code increased and we began to put select features live into production, our team identified a need to establish a new team dedicated to defect resolution and production support. Using the concept of "near-shoring" as justification, Na Ali'i was able to convince the government to allow us to establish this team at our headquarters office in Honolulu despite it not being an official place of performance for the contract. We now have a PeopleSoft team of nine located in Honolulu (approximately 10% of our entire team), many of whom were hired from the local community and trained by our more experienced functional and technical resources. This team has significantly extended the workday for our East Coast clients and been lauded for providing crucial fixes to software in use by sailors. Work with the State of Hawaii would be the next logical extension of our ongoing efforts to expand our PeopleSoft presence in the State.

In addition to having proven PeopleSoft experience on the scale of this effort and a team of local resources ready immediately, Na Ali'i also has an existing relationship with the State and an unmatched understanding of the needs for this project. Other PeopleSoft implementations for the State of Hawaii have been successfully adopted by the workforce so our solution would not require as extensive training and change management. Integration with existing systems will also carry less risk when dealing with the same software platform. Na Ali'i brings the knowledge and experience necessary to successfully implement this software while having the backing of a partner with the size, scale, and expertise of Oracle.

# Oracle

Over the last two decades, starting with DAGS original purchase of PeopleSoft in 1998, the State of Hawaii and Oracle have partnered in numerous successful modernization projects including:

- Implemented Oracle technology in 22 state departments, 11 of which are running Oracle Financials including Employee Retirement, Land and Natural Resources, and Department of Transportation Airports
- Statewide PeopleSoft payroll modernization project including implementation of HR and Time and Labor
- DHS' KOLEA project which was successfully implemented in less than 12 months in a sprint to make the CMS deadlines
- University wide implementation of PeopleSoft at University of Hawaii

The success of these projects has strengthened the partnership between Oracle and the State of Hawaii as a cloud first strategy has been adopted. Oracle has been working shoulder to shoulder with the State as the adoption of cloud has ramped up, providing a number of success stories including:





- DOT Airports Oracle Financials Move & Improve to Oracle Cloud Infrastructure (OCI)
- DOT Airports AIRFMIS Gate Fee Third Party Application Move & Improve to OCI
- DHS' KOLEA Non-Production Workloads on OCI
- East-West Center Custom Application on OCI
- City and County of Honolulu Integration Cloud Service
- DOT CSS Oracle Analytics Cloud

Success of these cloud projects in is part due to Oracle's constant investment in developing cloud tooling for these enterprise applications. In the example of PeopleSoft, the PeopleSoft Cloud Manager has been developed over the last 5 years and provides PeopleSoft to our customers in a SaaS-like form. This gives our customers both the flexibility of PeopleSoft and the benefits of SaaS including increasing the state's agility and efficiency by leveraging automated environment provisioning and PeopleSoft operations. Oracle's priority has been to support the State and will continue to do so with this statewide financials project.

Oracle Corporation (Oracle) was founded in June 1977, and provides products and services that address all aspects of corporate information technology (IT) environments. Since 2004, Oracle has invested more than \$58 billion in research and development.

Oracle is a leader in the core technologies of cloud IT environments, including database and middleware software as well as enterprise applications, virtualization, clustering, large-scale systems management and related infrastructure. Oracle offers a wide range of services in all three primary layers of the cloud: Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (laaS). Oracle Cloud offerings are designed to be rapidly deployable to enable customers shorter time to innovation; easily maintainable to reduce integration and testing work; and cost effective by requiring lower upfront customer investment.

With more than 430,000 customers in more than 175 countries, Oracle provides a complete technology stack. Oracle's industry-leading cloud-based and on-premises solutions give customers complete deployment flexibility and unmatched benefits including application integration, advanced security, high availability, scalability, energy efficiency, powerful performance, and low total cost of ownership.

Advanced Customer Services supports thousands of customers in the cloud and on premises with our advanced services and deployment methods.

Having one point of contact for the hosting and application issues reduces problem resolution time and provides that the customer always knows whom to call. Customers see tremendous value in being closely tied to Oracle's product development teams. ACS customers have access to the latest integration paths, newest releases and technologies. These are benefits that simply cannot be offered by a third-party but can facilitate huge financial and productivity gains for our customers.





ACS delivery teams are co-located with Oracle Development and Oracle Support. This synergy and collaboration between support organizations provides rapid issue resolution.

Oracle continues to make significant investments in technology and programs to support our customers that have chosen Oracle as their partner. Oracle understands how customers use our products and how to optimize them through infrastructure architecture, automation tools, and efficient processes that allow customers to maintain a competitive edge and support their customers.

In the links presented below, you will find compelling examples of our customers' successes from around the world. These successes have leveraged both the power of our technology and the insight of our services—across multiple industries. These overviews highlight how Oracle products and services have helped organizations of all sizes transform their Oracle software into powerful business solutions.

- Atlas Roofing https://video.oracle.com/detail/video/5992575555001
  - PeopleSoft HCM and FSCM
- Bellevue University <a href="https://www.oracle.com/customers/bellevue-university-1-mcs.html">https://www.oracle.com/customers/bellevue-university-1-mcs.html</a>
  - PeopleSoft Campus Solutions, Elastic Search
- City of Atlanta <a href="https://www.oracle.com/customers/city-of-atl-1-mng-cloud.html">https://www.oracle.com/customers/city-of-atl-1-mng-cloud.html</a>
  - o Siebel, OBIEE
- Arlington Public Schools <a href="https://www.oracle.com/customers/arlington-1-mcs.html">https://www.oracle.com/customers/arlington-1-mcs.html</a>
  - o EBS, IDM
- Arcor https://video.oracle.com/detail/video/5993514093001
  - EBS, OBIEE, JDE, Hyperion, WebCenter, Demantra, PeopleSoft, Retail, SOA
- Shelf Drilling <a href="https://www.oracle.com/ae/customers/shelf-drilling-1-payroll-cl.html">https://www.oracle.com/ae/customers/shelf-drilling-1-payroll-cl.html</a>
  - o JDE, Hyperion
- Grupo Aeromexico <a href="https://www.oracle.com/customers/viewpoints/grupo-aeromexico.html">https://www.oracle.com/customers/viewpoints/grupo-aeromexico.html</a>
  - o EBS, OBIEE, Fusion, Hyperion
- Zain Group https://www.oracle.com/kw/customers/zain-1-mcs.html
  - o EBS, GRC, Apex
- Instituto Nacional Electoral <a href="https://www.oracle.com/customers/ine-1-bi.html">https://www.oracle.com/customers/ine-1-bi.html</a>
  - EBS, Hyperion, Fusion Middleware





- Manheim https://www.oracle.com/customers/manheim-1-mcs.html
  - EBS, OBIEE, CMELI Management, EXA-systems, GRC, Functional Help Desk, Data Masking, Fusion Middleware
- Worthington Industries https://www.oracle.com/customers/worthington7engineeredsystems.html
  - EBS, ASCP, OBIEE
- National Oilwell Varco <a href="https://www.oracle.com/customers/nov-1-mng-cloud-serv.html">https://www.oracle.com/customers/nov-1-mng-cloud-serv.html</a>
  - EBS, GRC
- Western Sydney University <a href="https://www.oracle.com/au/customers/western-sydney-univ-1-mng-cl.html">https://www.oracle.com/au/customers/western-sydney-univ-1-mng-cl.html</a>
  - o EBS
- IAC/InterActiveCorp https://www.oracle.com/customers/iac-1-mng-cl.html
  - EBS, Hyperion
- TMEIC Corporation https://www.oracle.com/customers/tmeic-1-mcs.html
  - o EBS, OBI
- Minerals Technologies <a href="https://www.oracle.com/customers/minerals-tech-1-mcs.html">https://www.oracle.com/customers/minerals-tech-1-mcs.html</a>
  - EBS, OBI, FHD, FMW, CEMLI Management
- HomeServe <a href="https://www.oracle.com/customers/infrastructure/homeserve-spain/">https://www.oracle.com/customers/infrastructure/homeserve-spain/</a>
  - EBS, OBIEE, Hyperion, UPK
- Bausch & Lomb <a href="https://www.oracle.com/in/customers/bausch-lomb-1-ebs-mcs.html">https://www.oracle.com/in/customers/bausch-lomb-1-ebs-mcs.html</a>
  - o EBS
- Grupo Farmacos <a href="https://www.oracle.com/customers/viewpoints/grupo-farmacos.html#highlights">https://www.oracle.com/customers/viewpoints/grupo-farmacos.html#highlights</a>
  - o EBS, OBIEE, FMW, Hyperion
- MTN https://www.oracle.com/za/customers/mtn-1-ebs.html
  - EBS, FMW, OBIEE, Primavera, Hyperion
- Advantage Sales and Marketing - <a href="https://www.oracle.com/customers/advantage-sales-1-mcs.html">https://www.oracle.com/customers/advantage-sales-1-mcs.html</a>
  - o EBS, EXA-systems, Database Auditing, Database Encryption, IDM
- Bimbo https://www.oracle.com/mx/customers/bimbo-1-otm-es.html
  - EBS, FMW/SOA, OIC/ODI/UPK, Java aaS, DBaaS





For more information see oracle.com/search/customers

Oracle is very sensitive to the time and effort our existing and prospective customers expend in handling reference calls. Further, Oracle maintains contractual confidentiality and/or "no publicity" standards with all our customers that may prohibit our disclosing customer information.

Oracle would be happy to arrange the appropriate reference calls for you prior to your award decision or prior to the execution of the related contract.

We have provided specific customer cases in the requested attachments OF-1 and OF – 2a and 2b.





# 2 - Project Organization and Staffing

#### Please see Attachment 5 for organization and resumes.

Oracle has standardized methodologies for delivery of services and will utilize our experience, templates, standard operating procedures and best practices.

#### **Governance Model**

Oracle works within a customer's governance structure and proposes a governance meeting structure that includes:

- Annual executive forums to include Executive Sponsors and Business Managers. The focus is strategic (partnering, new products, and emerging strategies).
- Quarterly business reviews to include Executive Sponsors and Technology Managers. The focus is strategic (partnering, periodic performance evaluations).
- Monthly service delivery reviews to include Business Managers, Oracle and customer Delivery Managers, customer Service Line Managers and the focus is technical (performance, technical plan, business priorities).
- Daily and weekly service delivery and business office meetings to include Delivery Managers and business staff. The focus is operational (service management, change management)

#### Governance Model - Governance Structure



4: Governance Structure

The governance model considers each layer of the customer organization from strategic to the tactical delivery. As identified below:

- Program Manager
- Project Manager





- Integration Manager
- Technical Manager
- Functional Manager Phase 1
- Reporting Manager
- Organizational Change Manager
- Testing Manager

# Governance Model - Tactical to Strategic Layers



5: Layered Approach

At the beginning of the service Oracle will develop a communication plan with the customer to establish regular communication channels and escalation paths.

Meeting	Frequency	Agenda	Attendees
Weekly Status	Weekly	Review/resolution of issues Plan for the following week Issue/risk log discussion	Operations Manager Service Delivery Manager Customer Operations Manager
Operational Governance	Monthly / Quarterly	Project status SLA performance Ticket volume/entitlement status Review of major issues/concerns including budget Ongoing project review RCA status	Service Delivery Manager Operations Manager Governance Team Customer Governance Team Customer Operations Manager
Service Review	Quarterly / Half Yearly	Satisfaction review/survey Review of project metrics SLA performance Accomplishment/challenges/improvement areas Continual service improvement	Operations Manager Governance Team Executive Sponsors Service Delivery Manager Customer Executive sponsors

#### 6: Communications Structure





# Implementation support resources

Na Ali'i has an existing relationship with the Government of Hawaii and DAGS. The services delivery team has been able to map a solid approach to meeting business needs while designing a system to the State's needs. Building on the knowledge that Na Ali'i brings regarding the application functionality options and best practice options across similar complex institutions, the Team has established a solid approach to strategically delivering your implementation. It is to the State's advantage to leverage the relationship with Na Ali'i and the partnership between Na Ali'i and Oracle as a springboard to success.

The Team has an established bench of Functional Implementation resources to support the project implementation including project management as identified above. Our key resources have 6 to 10+ years of experience and are fully qualified to support your requirements.

We acknowledge the minimum qualifications for the Program Manager, Project Manager and Integration manager and confirm that our resources meet and exceed them.

# On-going support - Managed Services

The Service is based on a standard set of deliverables which are scaled out as required, therefore the resources used to manage the services are organized into teams specifically set up to cover the various aspects of the service. These teams vary based on the specific services in scope, they are:

Global Cloud Services Operations Delivery: comprising product specific, specially trained and skilled Oracle resources residing in hubs around the world in a follow the sun model.

**Software Operations:** providing critical support to the overall production management of our customer environments.

**Service Desk, Monitoring and Problem Management:** the interface between all teams assisting with work for Cloud Services customers.

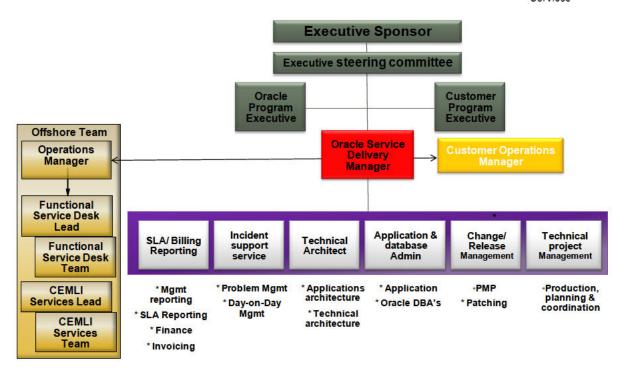
**Infrastructure and Automation Operations:** provide for the successful implementation of the certified configuration, products, and tooling to each customer's environment.

**Regional Service Center:** provides customer project, technical, and escalation services during implementation/transition stages of Cloud Services.

**Business Operations:** handles all project management for operational delivery, in addition to headcount tracking and allocations, finance and budgeting, operational reviews, metrics and reporting functions, and other business-related activities.

**Functional Services:** Offshore team to provide Functional Service Desk Support, CEMLI Management, Critical Process Management and Testing.





7: Sample Organization Structure

The Team has over 4500 DBAs, engineers, product focused, infrastructure focused, and customer services focused resources that deliver services. All roles are backfilled to meet demand across our customer base and provide an experienced and skilled resource at the right time to support your timeline, project phase, program lifecycle and support needs when you need them.

In addition to the team resources, some named resources may be identified with your services based on the specific solution, such as the Service Delivery Manager, Technical Account Manager, Production Manager, Operations Manager, Advanced Support Engineer, or Transition Manager. A sample of Oracle and customer resources is listed below with a responsibilities matrix.

All Oracle resources are certified in the technology and programs that they deliver. Oracle provides highly skilled and experienced personnel. Oracle hires the best resources available in Oracle Technologies. Our teams cover both Functional and Technical Expertise, with coverage for all Oracle applications.

The ACS support teams have access to and frequently receives training available to Oracle-only personnel in all areas of the Oracle technology and products they support. Formalized training plans and rotational assignments verify our resources are the most well-rounded and prepared technicians in the industry. The Oracle delivery approach identifies staff for the team specifically by the skills necessary to support our customers. The following Oracle roles may apply based on specific customer requirements and lifecycle phase.

Below is a table of Roles and Responsibilities that will support the Project and Run and Maintain Services.





# Service Delivery Manager

The Service Delivery Manager owns the Cloud Services from an Oracle perspective, and is the primary service, account and commercial management contact point for the customer. The Service Delivery Manager monitors service levels achieved for the customer against the Cloud Services contract and acts as an issue escalation point for key issues. In addition, the Service Delivery Manager will help educate the customer with the Cloud Services processes and procedures.

#### **Account Management**

- Drive long term planning including Oracles direction, customer business goals into high level strategies
- Manage Oracle
- team to meet contractual, customer satisfaction and service objectives
- Contract Management including change orders, invoicing.
- Solution ideas to drive increased benefit to customer (TCO/ROI) and Oracle.
- Complete Periodic Account (Business) reviews with customer Service Management
- Manage activities related for day to day system operations including: availability, incident, change and problem management including RCAs
- Drive capacity planning for next business cycles
- Planning, Scheduling, and Monitoring Tactical Business and Technology events
- Periodic Service Reviews detailing service levels achievements

#### Project Management

- Planning and meeting deliverables for Cloud Services projects
- Communicate project status, risk, issues;
- Manage project staffing
- Proactively drive standards, improved solutions and project cost savings





# Tactical - Monthly meetings - with customer/Implementer

- Performance Reviews
- Technical Plan
- Change Management Control Review
- · Business Priorities
- IT Plan of Record

# Operational meetings - Daily/Weekly – with Customer/Implementer

- Issue Management Reporting
- Change Management Reporting
- Project & Business Priorities Update Reporting
- PMP (Preventive Maintenance Patching)
- Weekly Initiative Reporting

The Service Delivery Manager can provide recommended practices and innovative ideas to align your IT infrastructure with your business goals and identify the business impact of issues and risks. In addition, they coordinate the support activities of your Advanced Customer Services team and act as your single point of contact for efficient, streamlined communication.

- Proactive guidance
- Recommended practices and knowledge transfer
- Oracle expertise across the product lifecycle and cloud options
- Comprehensive reviews and recommendations
- Assistance with typical project initiatives such as
  - Technology refresh
  - Cloud deployment
  - Consolidation
  - Virtualization
- Platform transformation / modernization
- Service delivery coordination



# Transition Manager

The Transition Manager provides the primary Cloud Services contact point during the customer's implementation transition phase, working with the customer and Implementer to facilitate the move to Cloud Services. The Transition Manager project manages all Cloud Services transition activities from hardware provisioning through to Production Assessment and go live. In addition, the Transition Manager will help educate the customer about Cloud Services' processes and procedures.

Develop detailed plan for Oracle Cloud Services tasks.

- Monitor and report progress against Cloud Services plan
- Cloud Services project issue and risk management
- Review test strategy / acceptance criteria, plan provided by Customer
- Co-ordination of Cloud Services Migration staff
- Making sure implementation is successful
- Cloud Services Transition Manager will disengage once the project has transitioned to Production support following Go-Live

#### **Transition**

#### DBA

- Responsible for the technical migration
- Perform any additional application & database patching
- Regular liaison with project team
- Run and ensuring PA progress is on track

## Functional Service Desk Team

Remote Team to provide Functional Service Desk Support which includes:

- Ticket Based Incident & Problem Management
- CEMLI Management
- Continual Service Improvement
- Regression Testing -Oracle Applications Testing Suite-based
- Critical Process Management

Resources include:



- Service Delivery Manager same role as listed above
- Operations Lead Manages staff, resource management, planning
- Functional Lead Specific to the program.
   Upgrades, implementation, patching, execution of test scripts UAT, QA patch testing
- Functional Resources Assessment & Impact Analysis, Gathering Customer Requirements, implementation, upgrade, configurations, business process reengineering, setups
- CEMLI Lead post-production support, Customization and Extensions, Fit gap analysis, Testing, Business and Technical Process Reengineering, Workflow, XML Publisher, Oracle Forms and Reports, Oracle Discoverer and PL/SQL, Applications Technical Components Development
- DBA installation of applications, sizing and configuration, patching and maintenance, architecture design

# CEMLI Management Services

To manage, from offshore all CEMLI objects required by the project team, under the guidance of either the functional leads or integration manager.

# Cloud Services Global Operations

The Cloud Operations teams underpin all of Oracle Cloud Services, and provides specialist teams supporting the Cloud Services infrastructure and systems, 24 x 7, using a follow the sun principle. Examples of some of the Cloud Services are as follows:

- Cloud Services Operations
- Monitor Operation Queues
- Change Management
- Monitoring tools
- Oracle DBA Technical Support
- Release Management
- Data Center Operations
- Server Management



- Service Engineering
- Network & Firewall

ACS and the Global Operations teams support these types of activities:

- Provisioning team manages the server inventory, installs and configures hardware, installation of Linux virtual machines and installation of the Cloud Services certification configuration software stacks.
- Backup and recovery of implementation and production environments.
- Cloning and refresh team.
- Cloud Services security team addressing any security related issues.
- Network infrastructure team.
- Monitoring team sets up monitoring for each instance and integrates this into central monitoring infrastructure.
- System Administrators manage the operating system level administration activities.
- The Command Center deals with any system outages, whose primary role is to get a system backup and running as quickly as possible in the unlikely event a Customer system experiences an outage.

## Cloud Services Service Desk

During implementation, in addition to the roles above the customer will have access 24x7 to the Oracle web application My Oracle Support to raise service requests, work requests and track progress. The ACS Service Desk with a person at the end of a telephone is also provided 24x7 to allow the customer to progress or find out the status of service requests or work requests, or to escalate issues.

# Cloud Services Project Database Implementation Services (Optional)

The Cloud Services project DBA services can cover implementation database administration of Oracle hosted environments (e.g. patching), input into environment planning, assistance with configuration management, and system performance tuning.





# Security Services Manager (SSM)

An SSM is assigned to each customer with additional security services. The SSM is responsible for the delivery of Security Services such as;

- Vulnerability Scanning
- Penetration Testing
- Web Application Firewall
- Data Masking





# 3 - Business Solution - Functional Requirements

Please see the following related to the Functional Requirements.

- Appendix A-1
- Appendix A-2
- Appendix B

# Phase 1 Core: Functional Solution Overview:

The foundation for the proposed functional solution is centered around PeopleSoft's latest Financial and Supply Chain version 9.2 Image 37 release combined with best-in-class Sass solutions from Oracle for Data Warehousing. The PeopleSoft Solution provides a modular yet highly integrated solution which will eliminate many of the legacy integration points.

The PeopleSoft financials solution provides the following advantages.

- Tightly integrates with the existing State PeopleSoft HCM platform
- Scalable solution allowing for development of multiple reporting/organizational structures
- Centralized Control/Master data storage and structure provide strong data consistency across the enterprise.
- Modern UI experience resulting is quicker access to information and transactions
- Robust transformative mobile solutions for critical business processes
- Lower cost of ownership due to PeopleSoft selective adoption model
- Highly configurable with delivered tools and frameworks

Based on the State's requirements, the following products/modules have been identified for implementation.

Phase	Product	Module	Purpose
		General Ledger	Financial statement reporting
	PeopleSoft FSCM	Commitment Control	Defines funds control rules and provides tracking



Phase	Product	Module	Purpose
Core Phase		Payables/e Supplier Connect	External portal for suppliers to view account info
		Receivables/ e Bill Payments	External portal for customers to view account info and make payments
		Billing	Enterprise Billing
		Purchasing	All Procurement functions including Requisitions, Pos, Receipts
		Treasury Cash/Financial Gateway	Payment transmission/clearing, Cash Management including Positions and Forecasting
	Oracle Autonomous Data Warehouse	N/A	Enterprise Data Warehousing
		Contracts	Enterprise contract management
	PeopleSoft FSCM	Projects	Project tracking
Expansion Phase		Travel and Expenses	Travel authorizations/Itinerary, Cash Advances, Expense Reports
		e Procurement	Mobile requisitioning, marketplace/punch out procurement
		Grants	Grant writing and Tracking
		Treasury Deal*	Security and Portfolio tracking



Phase	Product	Module	Purpose
	Oracle Planning/Budgeting Cloud Solution	N/A	Enterprise-wide planning and budgeting
Option Phase	PeopleSoft FSCM	Asset Management	Enterprise Asset Repository for tracking/calculating planning to disposal activity
		Maintenance Management	Tracking tool for Asset with maintenance requirements
		Treasury Deal*	Housing of Investment funds from various agencies

<sup>\*</sup>Treasury Deal will be used for both expansion phase Bonds and Option phase Investments

## General Ledger (GL) /Commitment Control-

The PeopleSoft General Ledger and Commitment Control modules will serve as the foundation of the financial system. The structure and valid data established in General Ledger emanate out to all other financial and HCM modules to provide system integrity across the enterprise. PeopleSoft General Ledger aggregates incoming transactional data and houses it into a standard ledger structure for financial reporting purposes. Commitment Control contains the established budget rules that are applied to proposed transactions, in real time, across the enterprise and maintains balances for budgetary reporting.

The success of the overall implementation revolves around sound General Ledger and Commitment Control structure, which are tightly coordinated.

#### **Chartfield Structure**

General Ledger will be configured by repurposing delivered ChartFields, enabling configurable ChartFields, and utilizing Chartfield attributes to fulfill the requirements for the Uniform Chart of Accounts standards defined by the State.

#### **Organizational Structure**

PeopleSoft provides the ability to create distinct business units within General Ledger each of which may have distinct attributes, security and processing options.

#### **Ledger Structures**

PeopleSoft General Ledger works in a tightly integrated manner with Commitment Control. Multiple Ledger Structures will be configured to house Recording, Reporting





and Budgetary information. Separate Plan, Budget, Pre-Encumbrance, Encumbrance and Expense Ledgers will be established to provide the structure for commitment accounting and reporting throughout the entire commitment cycle. Furthermore, Ledgers will be configured to support Interunit accounting and the automation of Interunit due to and due from transactions. GL Ledgers will be defined to balance based on the balancing ChartField(s) required by the State to produce a balanced set of books at the desired level.

## **Budgetary Structures and Rules**

Establish multiple budget levels with distinct rules to support the execution and reporting of the state's various budgets.

## **Transaction Processing**

General Ledger supports a variety of input/journal entry creation options. User may enter journals manually, use the journal entry spreadsheet upload, copy journals, create standard recurring journals, and define auto reversing journals.

The system will be setup with several different configurations to control transaction processing. Combination Editing rules will be established to control valid ChartField combinations at front end entry points including general ledger and subsystems. Configurable templates will drive automated journal generation processing for subsystem transactions to interface seamlessly into general ledger.

## **Transaction Inquiries**

General Ledger provides several inquiry pages for looing up journal activity or aggregated ledger activity based on a variety of criteria. Inquiries provide the ability to drill down to individual journal entries as well as drill down to subsystem level detail.

The system will also be configured with a General Ledger WorkCenter that allows quick access to reports, inquires entry pages, etc. specific to user roles. Instead of navigating throughout the system to perform various functions, users will have all the information and access required to perform their functions in a consolidated workspace.

#### Monthly and year end closing processing.

Accounting calendars work in conjunction with open periods to allow users to maintain which GL periods or subsystem periods are open for transaction processing. Allocations will be created and run in General Ledger to allocate monthly cost center pool, square footage costs and other costs as defined by the State. The allocation process creates journal entries which are posted to General Ledger.

The system is delivered with the ability to define year end close rules including the definition of rollforward accounts, retained earnings rules, business units to process and adjustment periods.

#### **Ledger and Budgetary Reporting**

Develop Ledger based reporting solution using nVision reporting tool. nVision is the primary reporting tool used for Ledger based reporting and can also be used for query-based reporting. The tool provides the following benefits.





- Real time solution
- Utilizes excel based templates that allow for any formatting, formulas, functions that can be performed in excel. Can include summary sections of text such as areas for financial statement footnotes that link to data in the reports, or graphs for summary analysis.
- Reports can be developed and maintained by non-technical power users.
- Works in conjunction with the PeopleSoft Trees, which store hierarchal reporting structures. PeopleSoft trees are effective dated, allowing for the preservation of historical reporting structures.
- Provides for the ability to Drilldown into additional ledger data or subledger detail
- Ability to utilize reporting scopes to generate multiple instances of the same report. For example, a P/L report run with a department scope defined for region A, could automatically generate a report for each department in that region.
- Utilizes reporting workbooks that can be used to run several reports at once
- Can secure reports based on users or roles and restrict data to specific business units

#### **Purchasing-**

PeopleSoft's purchasing module includes functionality for entering and approving requisitions and purchase orders. The module will be configured to work seamlessly with commitment control for budgeting checking requisitions against Pre-Encumbrance balances. Upon sourcing requisitions to Purchase orders budgetary balances are automatically updated to liquidate Pre-Encumbrances and record Encumbrances upon passing budget checks.

#### **Reporting and Inquiries**

The system is delivered with on-line inquiry pages with a variety of selectable search criteria. Inquiry results can be drilled on to obtain source and associated documents. In addition to delivered online inquiries, the PeopleSoft query tool supports the quick development of ad hoc and standard queries to fit any requirements.

The system will also be configured with a purchasing WorkCenter that allow quick access to reports, inquires entry pages, etc. specific to user roles. Instead of navigating throughout the system to perform various functions, users will have all the information and access required to perform their functions in a consolidated workspace.

#### **Mobile Approvals**

Mobile approvals will be enabled and configured to allow requisition and Purchase Orders (PO) approvers to approve on the go from any mobile device without the need for a native app on their device.





## **Procurement Card (P-Card)**

The system contains functionality for connecting to outside financial institutions for bi-directional P-Card information exchange. Key employee, organization and accounting code information can be sent to the credit card company and tagged onto incoming P-card transactions. Credit card statements will be transmitted via file or web service back to the PeopleSoft P-Card module where transactions are reconciled, approved, Encumbered, and sent to Accounts Payable for payment.

#### Receiving

The PeopleSoft solution allows for desktop receiving in a centralized environment and contains mobile receiving capabilities using any mobile device.

#### **Supplier Entry and Processing**

PeopleSoft utilizes a common supplier setup that is used across the entire procurement to payment chain. Suppliers may be selected from the common list in any phase, from requisition to Accounts Payable entry.

#### Accounts Payable-

PeopleSoft's Accounts Payable module provides the ability to enter, process, pay and report on vendor invoice activity. Payables interfaces with the Purchasing module to create a seamless procurement/payment platform. Payables also interfaces with Expenses for paying Cash advances and Expenses reports, Project Costing for recording project related expenses, Asset Management for recording incoming asset purchases as well as also General Ledger for recording accounting information.

#### **Supplier Portal**

The PeopleSoft solution includes an outward facing portal (e-Supplier connect) that enables suppliers to check on the status of payments, set payment advice, view account details, and update information.

#### **Invoice Processing**

Invoice Vouchers can be introduced into the system in a variety of ways. Users can enter invoices in control batches online using regular invoices and manually entering information, copy source information into a voucher using a copy worksheet, quick invoices (where similar invoices are entered in batch with default processing info), Template vouchers may be used for recurring invoices. Invoices may be imported from 3<sup>rd</sup> party systems electronically via EDI loads, xml web messaging invoices and spreadsheet uploads.

Accounting templates will be defined to create AP offset entries and options exist for inheriting additional transactional Chartfield information from distribution lines. The system supports separate freight and shipping charges payable to third parties. Vouchers may contain multiple lines each with multiple accounting distributions based on amount, quantity, or percentage.

As with the purchasing module, the Payables module is fully integrated with PeopleSoft commitment control. Vouchers sourced from a PO are budget checked





and will automatically liquidate encumbrance amounts and book expense entries for budgeting purposes.

Once vouchers are entered, they will be routed for electronic approval according to the prescribed workflow routing rules. Approvers can approve from any mobile device using the common mobile approval app.

## **Report and Inquiries**

The system is delivered with on-line inquiry pages with a variety of selectable search criteria. Inquiry results can be drilled on to obtain source and associated documents. In addition to delivered online inquiries, the PeopleSoft query tool supports the quick development of ad hoc and standard queries to fit any requirements.

The system will also be configured with a Payables WorkCenter that allows quick access to reports, inquires entry pages, etc. specific to user roles. Instead of navigating throughout the system to perform various functions, users will have all the information and access required to perform their functions in a consolidated workspace.

#### Matching

Define match engine to perform three-way match based on user defined tolerances and other match rules. Users will resolve match exceptions by viewing online in the match exception workbench which contains links to associated documents.

#### **Payments**

The system will utilize PayCycle manager functionality which is a one stop processing center for defining selection criteria (by pay groups if defined) including dates ranges, transaction sources, business units. The selection criteria page also defines the payment method (EFT, ACH, Check, Giro methods supported) as defined in banking rule setups.

The system is delivered with standard payment processing steps including payment selection, optional approval, payment creation and output processing (files or checks). The system may be configured to add additional step to the processes as needed.

In addition to pay cycle processing, the system supports payment requests ad hoc direct payment requests.

#### **Taxes**

The system will be configured with various excise tax codes for individual jurisdictions so that the GET is calculated on invoices.

#### Legal Compliance/1099s

The system will have the ability to generate year end 1009 reports and corrections for suppliers and transmit to the IRS.





## Accounts Receivable (AR), Billing and eBill Payments-

### **Customer Data and Processing**

The system will utilize PeopleSoft's master Customer setup to create, maintain and define customer processing options. The system will allow for the creation of customer hierarchies, definition of customer types, classifications, and setting of delivered and custom attributes. Customers may be defined as recurring or one-time customers and bilateral netting may be configured to net Receivable balances against Accounts Payable balances.

## **AR Inquiries**

The Receivables module has several inquiry pages available for users.

The PeopleSoft Receivables Collections Workbench is a central workspace that presents a complete, drillable view of each customer. Collectors can perform their day-to-day activities, including accessing and completing action items directly from the Collections Workbench, checking balances, updating correspondence info and much more.

#### **Cash Processing and Remittances**

Incoming remittances can be recorded and applied in a variety of ways:

- Deposit Standard method for online payment entry. Use regular deposit when you have customer information but lack item IDs.
- Express Deposit -If you have an item ID, use express deposit so that you can enter deposits and apply payments at the same time. You do not need customer information to use express deposit.
- Excel Spreadsheet Cash and remittance information can be entered into a preformatted Microsoft Excel spreadsheet and loaded into PeopleSoft Receivables.
- Lockbox Electronic payments that are deposited automatically in the background from a bank file.
- Electronic Data Interchange (EDI) -A process that receives payments in both the European and U.S. EDI formats
- Bank statement Bank statement deposits are a source of payments through the entry of reconciled deposits to the receivables system.
- Bilateral netting Netting deposits are the result of a net of payables and receivables transactions.
- Credit card -The PeopleSoft system provides a tool to obtain credit card authorization and to process credit card payments.

Deposits that have been recorded can be applied as payments to A/R invoices using manual payment worksheets or the Payment Predictor rules engine. The system comes delivered with a wide variety of payment predictor rules and can be configured to include custom rules.





#### Collections

The collection workbench within Accounts Receivables is a one stop area for managing customer account collections. The workbench contains the following features:

- Full transaction history for a customer and links to associated invoices and payments.
- Full Correspondence features initiating and archiving of dunning letters, account statements and aging reports.
- Customer conversation history
- Statistics on customer performance and credit scoring
- Views on Customer hierarchies

#### **Customer Portal**

The PeopleSoft eBill Payments solution will allow customers to access their accounts online and perform the following functions.

- Allows customers to monitor account status.
- Allows customers to view transactions, invoices, invoice history and make payments and enter future payment dates.
- Allows customers to manage their own address, contact and credit card information.

#### **Disputes**

Items may be placed in dispute status as of a particular date with a reason. During the dispute period, past due calculations will be suspended and can be excluded from aging reports.

## **Invoice Generation (Billing)**

Invoices are generated from PeopleSoft Billing using the common customers created in the customer component. Automated templates can be utilized to consumer billing data from outside sources or from PeopleSoft Order Management. Once invoices are created, the billing interface creates revenue entries based on revenue recognition rules defined for templates and passes them to General Ledger where they are aggregated as journal entries. The billing Interface also creates receivables entries and interfaces them to the A/R module where they are recorded as pending items and then posted to A/R.

#### Reporting

The system comes with delivered A/R reports for aging, overdue reporting that can be run using a variety of criteria. Additional ad hoc and reporting can be performed using the PS query tool.





#### Cash Management-

The PeopleSoft Enterprise Cash Management module enables organization to monitor and forecast cash requirements, perform automated bank reconciliations, distribute payments efficiently and securely, and automatically generate accounting entries. PeopleSoft Cash Management is at the heart of PeopleSoft's treasury management solution which offers a complete solution for addressing the critical planning, processing, and reporting requirements of global treasury units. Cash Management's straight-through payment processing feature, Financial Gateway provides a single platform for seamless communication between banks, financial institutions, and corporations to process all payments and receipts. PeopleSoft Enterprise Cash Management is integral to PeopleSoft's treasury management solution and is part Oracle's PeopleSoft Financial Management family of applications.

#### **Bank Reconciliations**

The Treasury Cash Management module connects to various financial institution via the Financial Gateway. Using the Import Bank Statements page, various the File Import methods are defined and managed the functionality can load data from a flat file or transmit file data including BAI2, SWIFT940 from an FTP or HTTP server by using PeopleSoft Integration Broker.

Once data is imported into PeopleSoft, the Cash Management positions can be managed via a robust workbench where exceptions are listed and can be reconciled. Predefined fee structure map to incoming bank fees and are automatically interfaced to General Ledger.

The system comes delivered with a variety of canned reconciliation reports. In addition, PeopleSoft query extends the reporting capability to easily retrieve and report on any desired data set.

## **Cash Projections**

In Treasury Management, a *position* is the total financial value of a particular set of transactions that are performed on behalf of an enterprise. A *cash position* analyzes cash flows to determine the amount of cash that is available at a particular time. Cash flow, or *cash forecasting* is the modeling of a company or asset's future financial liquidity over a specific time frame. Cash usually refers to a company's total bank balances, but cash forecasting captures your company's treasury position, which is cash plus short-term investments minus short-term debt. A treasury position can include non-cash flow data. Cash flow is the change in cash or treasury position from one period to the next.

PeopleSoft Cash Management provides a simplified worksheet tool for managing your treasury organization's cash forecasting. You can configure the cash forecast dimensions and forecast rules to meet your business needs, support drilling down to details to access more information about the cash forecast results, plug in multiple sources that affect cash forecast results, and support a CSV file interface or XML file interface to bring in cash forecast data from any source.

The cash forecasting worksheet functionality enables you to:

Manage position worksheets (rather than trees).





- Create intraday bank reporting worksheets.
- Create cash position worksheet (CPW) data manually.
- Generate Cash Management position reports.

#### **Forecasting**

The Cash Forecast Results enable cash managers to view the cash position in several dimensions, such as bank, bank account, currency, business unit, and several more that you can configure during setup. From any cash forecasting results view, you can click on a line item to drill down into details. Configured at the position source, drill down functionality can take you directly to the source transaction.

Saved searches provide an instant view of your cash forecast results in your preferred dimensions. The relative date option in the search criteria enables users to define saved searches once and use them daily.

The cash forecasting process in PeopleSoft Cash Management adds flexibility to maintenance and reporting. In addition to defining source sets and manual position entry, you can:

- Define variance and variance alerts with cues.
- Display non-cash flow data.
- Use a streamlined worksheet setup.
- · Select multiple position currencies.

## **Debt and Investment Management**

The integrated PeopleSoft Treasury solution provides the ability to maintain investment and loan information and incorporate this information into the overall Cash Position reporting and Forecasting. Activity from the investment and loan portfolios are automatically interfaced to the General Ledger.

#### **Interest Earnings Allocation**

Treasury Cash Management contains functionality for adding participants to investment pools. The pool earning may be allocated to the participants according to the percentage setup.

#### Interface

The foundation for interfacing the State's cash payments, receipts and statement information between institutions lies with the Financial Gateway. The Financial Gateway is a configurable integration framework which provides the layouts and functionality needed to process electronic payments and load electronic bank statements and payment acknowledgments. You can also edit and expand the delivered functionality to suit your organization's needs.

The implementation approach will include both the bank statement import and payment dispatch functionality. The system includes tools for importing a variety of bank formatted files by using:

A file transfer protocol (FTP) file server.





- PeopleSoft Integration Broker.
- Hypertext transfer protocol (HTTP) using a uniform resource locator (UR

#### Loans - Internal

PeopleSoft Treasury supports the definition of In-House Banking account structures to support the processing entries for borrowing and repayment of specified funds, based on user-defined criteria (e.g., specific funds are designated as available to borrow from).

## Data Warehousing-

The proposed data warehouse solution is Oracle Autonomous Data Warehouse (ADW). Oracle ADW complies with state and federal data security requirements surrounding financial data elements. Oracle has the capability to comply with all FedRamp security requirements as your definitions are solidified we can propose any changes as needed. The proposed solution meets the requirements for data access and security, data modeling, and connectivity to Oracle Analytics Cloud for data visualization and advanced reporting.

Autonomous management for Oracle ADW will enable customers to run a high-performance, highly available, and secure data warehouse while reducing administrative costs. For additional information regarding Oracle Autonomous Data Warehouse and associated management features can be found here: <a href="https://www.oracle.com/autonomous-database/autonomous-data-warehouse/">https://www.oracle.com/autonomous-database/autonomous-data-warehouse/</a>

## **Phase 2 Expansion: Functional Solution Overview:**

The functional solution for the expansionary phase will build upon the common COA structures, organization structure/rules and data edit rules established in Phase 1.

## Projects-

PeopleSoft Project Costing and Billing will be used to define, manage, track the State's various projects. Project Costing integrates with various cost collection sub modules including Payables, Time and Labor, Expenses and Asset Management. Incoming costs are burdened with applicable indirect rates and results are interfaced directly with PeopleSoft Billing.

## **Project Creation**

Project Costing provides project creation tools that eliminate the need to re-create key information for each new project. To create a new project, you can perform any of these actions:

- Add a new, blank project and enter the required information.
- Use a predefined project template or copy any existing project as a starting point for a new project.





- Receive projects from feeder systems such as PeopleSoft Program Management or PeopleSoft Proposal Management.
- Create a project from a Microsoft Project file

## **Billing**

Project Costing integrates with PeopleSoft Billing to send fully loaded project cost where the billing process applies template-based rules for revenue recognition and the generation of invoices.

## **Project Costing**

The project costing module contains functionality for creating multiple rate templates for the definition and application of various indirect rate structures.

#### Inquiries/Reporting

Users can track project progress and status using online inquiries including the drillable "my projects" lists, Project lookup pages and the project milestones page. In addition to the online inquires, and several canned reports come delivered with the system, such as the project status report. Additional reporting capabilities through PS query allow for additional reporting.

## **Budgeting-**

Oracle Planning and Budgeting Cloud Service is a planning, budgeting, and forecasting. solution used by many large, medium, and small companies worldwide to solve enterprise-wide business planning use cases. Oracle Planning and Budgeting Cloud Service provides a rich Web and Microsoft Office work environment that has solved a wide variety of financial, sales and operational planning use cases across multiple industries.

## **Budget Construction**

Oracle Planning and Budgeting Cloud Service facilitates both enterprise level and departmental level planning process by providing both Excel-based and web-based Excel-like modeling, planning and approval capabilities within one collaborative scalable solution. Sales, operational and strategic plans can be linked to long-term and near-term financial plans. Oracle Planning and Budgeting Cloud Service uses a powerful calculation engine that can be used to express a range of business logic with fast in-memory aggregation and instant analysis and reporting. Oracle Planning and Budgeting Cloud Service provides user defined task and navigation flows that can be customized based on usage needs of different groups of users.

#### **Budget Modeling**

Oracle Planning and Budgeting Cloud Service provides sophisticated modelling and predictive analytical capabilities that allow users to create multiple what-if versions and slice and dice data based on various what if assumptions. Oracle Planning and Budgeting Cloud Service also has a rolling forecast wizard which makes it simple to implement a drive- based rolling forecast process in which the forecasting time horizon rolls forwards across years with the passage of time.





#### **User Interface**

Oracle Planning and Budgeting Cloud Service uses modern html5- based browser interface to enable business users to easily view plans and reports on the web or on their mobile devices. The interface's capabilities are kept consistent with other Oracle Cloud Solutions to ensure a similar look and feel. Robust dashboard and report creation capabilities are provided to enable complete planning, analysis and reporting capabilities all within the same solution.

#### Reporting/Dashboards

Reports and dashboards that display plan, forecast and actual data can be created in minutes and any change made to the plans in Oracle Planning and Budgeting Cloud Service are instantaneously reflected in the content of the reports and dashboards. Using the web interface users can access user-friendly dashboards, interactive analytics, and richly formatted financial reports while interacting with the planning system.

#### **Integration Capabilities**

Oracle Planning and Budgeting Cloud Service includes integration capabilities that enable automated data imports from and extracts to on premise or cloud-based applications. Oracle Planning and Budgeting Cloud Service is integrated out of box with Oracle ERP Cloud Service to enforce closed-loop processes for planning, budgeting, transacting, and measuring results. The Service provides open interface REST based Web Services that can be used to customize connections with any third-party source or target system.

## Travel and Expenses-

The PeopleSoft Travel and Expenses is a flexible/highly configurable solution for travel and Expense reimbursement. The system can create travel authorizations and integrate with 3<sup>rd</sup> party travel vendors, create cash advances, and create expense reports for reimbursement. The module interfaces with HCM Payroll and Accounts Payable for payments of advance requests and expenses reports.

#### **Mobility**

- The fluid application allows for travelers to collect images of receipts into an
  electronic 'wallet' and submit into an expense report while on the go. This
  solution eliminates paper entirely from the expense report submission process
  and enhances the user's experience. Fluid is PeopleSoft architectural feature
  that does not necessitate the use of a native app on the user's device.
- Optional use of text messaging capabilities. PeopleSoft has delivered integration points with the Twilio mobile messaging service. This allows travelers who do not have PeopleSoft accounts to text message their expense information, including receipt images. This streamlines the expense processes by eliminating the need to a proxy user to enter expense report information on the traveler's behalf. This solution requires the state to subscribe to Twilio messaging services.





 Optional use of PS activity guides to streamline the travel authorization request. Activity guides are configurable step by step instruction that line up with the organization's business process. Activity guides allow users to perform transactions in a step-by-step manner with instruction.

## **Travel Requests**

The module provides a robust solution for initiating and booking travel. Self-service features allow for users to submit travel authorizations that fit into highly configurable workflows. Integration frameworks exist for sending information to travel partners for automated travel booking.

#### **Travel Management**

The system contains a highly configurable solution with different layers of rule sets possible. The system is designed to comply with state/Federal travel regulations. The integrated nature of the solution supports the entire lifecycle of a travel event, from travel booking with 3<sup>rd</sup> parties, itinerary management, expense capture and submission through reimbursement/payment. Each document in the lifecycle builds upon the previous to provide a streamlined experience.

## **Travel Completion**

Upon completing travel, users or proxies can submit expense reports for reimbursement. The system is highly configurable with a variety of rules. Approved per diem and travel rates can be maintained in the system and there are a variety of configuration options that drive allowable transactions. Completed expense reports are seamlessly integrated to General Ledger to record accounting and to either Payroll or through Accounts Payable for traveler payment or third-party payment.

#### **Taxes**

Since the Financials solution is integrated with PeopleSoft's HCM Payroll solution, taxable portions of travel, that are calculated/identified in the Travel module, can be integrated back to Payroll, and recorded against the traveler's taxable income.

#### Reporting

As with the other Financials modules, the integrated nature of the solution and the overarching reporting tools provide for easy reporting/data retrieval.

#### **Audit**

The module provides robust audit capabilities. The approval framework provides many options for configuring approval flows and audit roles resulting in an immutable record of transaction approval that links to detailed travel records. Supporting documents such as receipts are attached electronically to travel records. Delivered reports provide instant support for transactions across the entire lifecycle.

#### eProcurement Interface-

PeopleSoft's eProcurement module comes delivered with integration capabilities to outside vendors and marketplaces. This "punchout" will allow for the State's





procurement group to seamlessly connect to a multitude of vendor catalogs for a streamlined and efficient ordering process. Order data is automatically integrated back to the core procurement module where requisitions are automatically created.

#### Grants-

PeopleSoft Enterprise Grants Management supports the full life cycle of research administration, including proposal generation, transitioning proposals into awards, award tracking, facilities and administration processing, comprehensive bill generation, and flexible financial reporting.

#### **Grant Creation and Maintenance-**

PeopleSoft Grants supports the proposal preparation process, including the statement of work and proposal budget and administrative, personnel, and submission information that is required by funding agencies.

## **Budget Administration-**

PeopleSoft Grants enables users to define budget information, establish budget periods, and enter detailed budget information. When a proposal has been funded, you can send budget information to PeopleSoft Commitment Control and the Project Resource tables. The data that is entered in the Budget Detail page is the basis for generating budget journals for controlled budgets and for budget data that is stored in PeopleSoft Grants.

#### **Tracking Grant Transactions**

Since the Grants module is integrated with Project Costing, the system can track and record transactions applicable to individual grants at all levels of the account classification, by user-defined time period (e.g., month, YTD, inception to date), by organization level for all grants, based on user-defined criteria (e.g., expenditures vs. budgeted; expenditures vs. revenues; grant budget; grant amount per participant).

#### **Bonds-**

As part of its Treasury solution suite, PeopleSoft Treasury Deal Management provides functionality for tracking and reporting on its bond issuances. The Treasury Deal module interfaces with The Treasury Cash module to provide the mechanism for cash clearing and reporting as well feeding cash forecast information that results from portfolio activity.

#### **Bond Administration**

Treasury Deal is the repository for Deal information and attributes such as Deal Type, series, date of issuance, investment rates, maturity dates, original amount, and callability. Bonds can be organized into portfolios for reporting tacking and planning purposes.

#### **Bond Accounting**

Treasury Deal will provide the engine for calculating fixed income portfolio activity including accrued interest calculations, amortization of issuance costs and





discounts/premiums. Treasury Deal also integrates seamlessly with General Ledger to record all accounting activity related to Deals including recording of bond issuances, interest calculations, fees, amortization maturities, calls, etc.

## **Debt Management**

The foundation for managing the State's Debt portfolio lies with Treasury Deal. The module allows for the creation of multiple portfolios and schedules/calendars. The system comes delivered with a wide variety of reports as well as visual forecasts to provide a picture of current debt positions for the State and well as future forecasts.

#### Loans

Treasury Deal provides full functionality for recording, maintaining, and reporting on Loan Activity.

#### **Allocations**

The system allows for the creation of unique Funding Sources that can be tied to particular bond issuances. These funding sources can be comprised of various slices or percentages and are tied to transactions as they enter the system.

#### Reporting

Since the PeopleSoft solution is fully integrated and normalized, common reporting tools such as PeopleSoft query, that sit on top of the application, can tie activity together across the application. For instance, simple queries can be used to drill down from the General Ledger to Treasury Deal to see particular Deals that are generating Ledger activity, or a Deal or portfolio could be tied via simple reports to the particular Capital Plans they are funding. In addition to PeopleSoft query, the system comes delivered with a variety of canned reports.

## **Phase 3 Optional: Functional Solution Overview:**

## Please refer to Appendix B - Optional Phase Requirements

The functional solution for the optional phase will highly leverage the work performed in Phase 2, particularly around the Treasury Deal implementation.

#### Asset Management-

The PeopleSoft Asset Lifecycle Management suite provides full lifecycle functions from planning asset purchases, tracking asset purchases through the procurement cycle, interfacing asset purchases into a common asset repository, maintaining assets, and calculating impacts/activity, tacking assets for inventory, and disposing of assets.

## **Maintenance Management**

Maintenance Management provides functionality for defining maintenance requirements, schedule and workorder tracking for specified assets. Maintenance





Management integrates directly with the Asset Management repository thus reducing the need for redundant information. The latest PeopleSoft mobile technologies are imbedded in the application allowing for work orders to be viewed and updated real time on the go.

#### Inventory

PeopleSoft Asset Management contain functionality for defining and performing physical inventory activities. When coupled with 3<sup>rd</sup> party scanning equipment, the PeopleSoft mobile asset tracking application gives users the ability to conduct inventory with real time updates to the asset repository, eliminating the need to file uploads/downloads. Results from physical Inventory are compared to data in the repository and transaction business rules allowing for automated updates to the Asset repository based on the scanned data.

#### **Asset Lifecycle Processing**

The Asset Management module integrates tightly with procurement and accounts payable to automatically create assets based on incoming asset purchases. Purchases can be tied and limited to pre-established capital asset plans and then unitized or consolidated. Depreciation in Asset Management is controlled by configurable depreciation rules and results interface to General Ledger. The module contains robust reporting capabilities for reporting depreciation and book value and can support multiple reporting books. Asset adjustments can be performed within the module and resulting financial changes are booked and sent to General Ledger.

#### Leases

Asset Management supports full tracking, calculation and reporting functions for capitalized leases.

#### Investments-

PeopleSoft Treasury Cash Management will allow the State's agencies and organizations to use investment pools to collect and concentrate surplus funds from various departments and programs for investment purposes. The State's departments and programs that deposit their surplus funds into the investment pool will participants. Each participant is assigned an individual account number to track their fund transactions within the investment pool.

An investment pool administrator organizes the investment pool and manages the fund's investments like that of a portfolio manager. The funds in the investment pool are invested by either the pool administrator or by an external investment manager. The system stores only the investment manager's contact information.

Participants do not enter transactions into the investment pool system, but rather communicate their requests to deposit, withdraw, or transfer funds to the pool administrator. The pool administrator then enters the appropriate data—participant and transaction information—into the system. Participants may transfer funds from one account to another within the same investment pool but may not transfer funds from one account to an account belonging to another investment pool.





If the pool is set up using share accounts, then shares are distributed to the participants pool account. Share balances are then updated periodically for deposits, withdrawals, and transfers.

Interest and fees are periodically distributed among the participants of the pool.

The method used for transferring funds depends on the structure of the organization and pool's participants. Funds can be transferred by way of accounting book entries or between the participant's bank and the investment pool's bank through electronic wire transfers and Automated Clearing House (ACH) transactions.

Periodically, the investment pool transfers funds to an external investment manager (if applicable) or to the internal investment system. The investment manager provides the pool with reports containing the current market value, income, interest, and fees data. Using these data, the pool administrator updates the pool with this information by entering the market value information online and in turn updates the market value for the pool and each participant. The new share price (if applicable) is also computed based on the new market values and the number of shares in the pool.

Besides providing investment and fund management expertise to the participants, the pool administrator also provides accounting and financial reporting for each participant's funds as well as consolidated reporting for the entire investment pool.





# 4 - Business Solution - Technical Requirements

## Please refer to Appendix C – Technical Requirements.

The Team understands that the State is seeking to modernize its Enterprise Financial System (EFS) to provide improvements in financial business processes, how quickly those end to end processes are completed, consistency of processes and user experience, as well as the accuracy of financial transactions and the reporting while reducing the amount of paper used in the new business processes.

A strategy with risk management in mind that minimizes cost and maximizes business benefit while remaining flexible to policy and procedural changes are also key goals of the State.

We are very aware of the need for the system to improve transparency in government accounting and increase efficiency for all stakeholders, whether State employees or citizens and businesses.

The State is also looking for an EFS implementation with minimal disruption of ongoing business, reduced complexity in operations and support, and an efficient and reliable means of knowledge transfer to State staff to be able to operate the system with little support from consultants.

To achieve the State's goals, the Team proposes a robust implementation strategy using a hybrid of traditional waterfall and proven agile development methodologies as diagrammed in the DAGS Road Map below:

#### DAGS CORE PHASE HIGH LEVEL TIMELINE



8: Core Phase High Level Timeline





## **Core Phase**

As outlined in the State's RFP, the DAGS implementation will take place in 3 Phases; Core, Expansion, and Optional. Each phase will follow a similar sequence of wave iterations, with the following planned for the Core Phase:

## **Planning Wave:**

The planning wave will consist of the creation of State required project management deliverables which includes the Project Charter, Project Management Plan, Work Break Down Structure, Project Schedule, Scope Change Management Tool, and Issue/Risk Management Tool. We also propose an initial Test Management Plan, Organizational Change Management Plan, and Deployment Plan noting that each of these will continue to get regular updates as the project progresses. The Test Management Plan will include the testing scope and objectives for the DAGS project, the testing methodology used, and define roles and responsibilities for testing. The Deployment Plan will outline the scope, approach, and execution of deployment activities including the draft cutover plan to be updated as cutover activities are identified. The Organizational Change Management Plan will identify all relevant stakeholders for the DAGS system, identify how the change impacts each, and outline what communication methods and timing will be most effective for each stakeholder group.

Project management systems will also be set up and configured as part of this wave which would include the Atlassian Jira product, a best in industry tool for project organization, tracking, and reporting. The Risk Management plugin for Jira will be configured for tracking and assessment of project risks. Confluence, another Atlassian product that plugs into Jira and provides the ability to create real time dashboards from project metrics and spaces for project team collaboration. TestRail will be set up for test management and integrates with Jira for traceability directly to development work and defect management.

## Infrastructure & Application Installation/Setup Wave:

This will be a one-time wave as part of Phase 1 to complete the setup of the Oracle Cloud Infrastructure complete with installation of vanilla PeopleSoft environments, Phire version control software for PeopleSoft, Oracle Autonomous Data Warehouse, Oracle Analytics Cloud for reporting and forecasting, and DocuSign Document Management System. The Team will also provide DAGS Feature Map that is a PeopleSoft custom built tool provided for the automation of functional and technical design documentation at the Product and Feature level with effective dated version control included at no extra cost. Any other third-party development tools requiring hosting will also be installed and setup at this time.

#### Requirements Review/Fit-Gap Wave:

This wave will focus on the analysis of <u>Appendix A-1</u> Core Phase Requirements related to the specific financial areas to be implemented, the system technical requirements, and pertinent state laws, regulations, and policy. This analysis will include any lower-level breakdown of the requirement, identification of source data to be converted or interfaced, fleshing out of reporting needs, and identification of required key supporting documents for incorporation into the system or imaged and retained as part of the document management system. It will be necessary to meet





with State subject matter experts to gain an understanding of legacy business processes, perform the requirements drill down, and validate the analysis output which would include compliance of the new system to state laws and regulations. Once requirements have been analyzed a Fit-Gap will be performed against the delivered functionality offered by PeopleSoft FSCM modules, Oracle Autonomous Data Warehouse and Oracle Analytics Cloud, and DocuSign Document Management System with a focus on configuration and to limit customization of these systems as much as possible. The outputs of this wave will include a breakout of Products the team would expect to create and become essential inputs to the following User Story Design & Backlog Grooming Wave. Products and their related Features will be entered into the Feature Map and then maintained within that tool.

## **User Story Design & Backlog Grooming Wave:**

In this wave the DAGS project team will take the product identified in Requirements Review/Fit-Gap and break down into user stories and features to flesh out the end-to-end mapping of each product business process. Once all product user stories and features have been identified then necessary product backlog items can be created for development sprints. User Stories will be recorded in Jira and then imported into the Feature Map. In Feature Map, business process maps can be attached to the associated products and associated feature design documents created.

## **Configuration/Development & Sprint Testing Wave:**

This wave will contain the system configuration and development for each phase. For DAGS Core Phase, user stories and backlog items identified to meet **Appendix A-1** Core Phase Requirements will be addressed by configuration of the following PeopleSoft FSCM modules:

- General Ledger
- Commitment Control
- Purchasing
- Accounts Payable / eSupplier Connect
- Accounts Receivable / eBill Payments
- Cash Management

As well as through configuration and development for external system interfaces, integration with Oracle Autonomous Data Warehouse combined with Oracle Analytics Cloud, and the DocuSign Document Management System.

Configuration and development of these modules, interfaces, and integrated systems will be performed through agile methodology by two separate sprint teams concurrently with agile sprints lasting 4 weeks each. Each sprint will start with a Sprint Planning ritual to determine and prioritize which backlog tasks would be worked within the sprint. After planning, Daily Scrums will be held by the scrum master to get task commitments from each sprint team member, identify any roadblocks, and determine what they plan to work tomorrow. The Jira software tool is used by the team to track progress of configuration, development, and testing tasks. At the end of the 4-week sprint, a Sprint Review will be conducted with



identified stakeholders to provide live demonstration of work performed, collect any feedback that could be added to product backlog, and request approval from a designated Product Owner if the work was deemed acceptable. After the Sprint Review the scrum master will hold a Sprint Retrospective to determine what went well, what could be improved upon, and what can be committed to be improved upon in next sprint. The last sprint of the wave will be an Integration sprint that ensures all products within the Core Phase are working together and end to end business processes can be demonstrated within the final Sprint Review.

PeopleSoft FSCM Module	Expansion Phase Development Sprint Sample Breakdown	Sprint Duration Weeks (16 weeks total)
General Ledger (Team 1)	Dev Sprint 1	1-4
Commitment Control (Team 1)	Dev Sprint 1	1-4
Purchasing (Team 1)	Dev Sprint 1	1-4
	Dev Sprint 2	5-8
Report Development	Dev Sprint 1	9-12
Accounts Payable (Team 2)	Dev Sprint 1	1-4
	Dev Sprint 2	5-8
	Dev Sprint 3	9-12
Accounts Receivable (Team 2)	Dev Sprint 1	1-4
	Dev Sprint 2	5-8
	Dev Sprint 3	9-12
Cash Management (Team 2)	Dev Sprint 1	5-8
	Dev Sprint 2	9-12
Integration Sprint (All Teams)	Dev Sprint 1	13-16

<sup>\*</sup>For staffing information refer to Project Organization and Staffing section and Attachment 5

#### System Integration Test and Regression Test Wave:

In the Core Phase, System Integration Test wave can begin with the initial completion of development which would include portions of General Ledger, Commitment Control, and Purchasing. Therefore, there would be some overlap by having one sprint team continue to work the Configuration/Development & Sprint Testing wave while the other sprint team focuses on the System Integration Test wave.





During the System Integration Test wave, the focus will be on testing and verifying end to end business processes through the system, as well as the interface connections and data exchanges with external systems.

## **Training Wave:**

Training waves would occur in each phase beginning at the completion of Configuration/Development & Sprint Testing waves and lasting up until the go-live cutover for each phase. This wave would consist of training material creation such as user guides, training videos, and online self-guided training as well as incremental train-the-trainer live presentations.

#### **User Acceptance Test Wave:**

For each phase the User Acceptance Test wave would be performed using key State end users to validate and assess the end-to-end business processes with contractor provided test cases and scripts and any end user developed test cases and scripts to gauge impact of more one-off test scenarios.

#### **Production Cutover Wave:**

This wave begins at the conclusion of the User Acceptance Test wave where at such time a go-live decision is made which then sets in motion the production cutover based on a checklist of everything that needs to be accomplished according to the Deployment Plan. This is the same Deployment Plan started in the Planning wave and has continually been updated until the end of the User Acceptance Test wave to ensure all necessary items have been captured for a successful cutover to production.



9: Expansion Phase High Level Timeline





## **Expansion Phase**

## **Planning Wave:**

The Expansion planning wave will consist of updates to the project management plans according to the work defined in the phase and include any modifications to processes identified from lessons learned during the Core Phase.

## Requirements Review/Fit-Gap Wave:

For Expansion Phase this wave will focus on the analysis and break down of the requirements identified in Appendix A-2 Expansion Phase Requirements. The outputs of this wave will include a breakout of Products the team would expect to create and become essential inputs to the following User Story Design & Backlog Grooming Wave. Products and their related Features will be entered into the Feature Map and then maintained within that tool.

#### **User Story Design & Backlog Grooming Wave:**

This will be an identical wave process throughout each project phase, where we will take the product identified in Requirements Review/Fit-Gap and break down into user stories and features to flesh out the end-to-end mapping of each product business process. Once all product user stories and features have been identified then necessary product backlog items can be created for development sprints. User Stories will be recorded in Jira and then imported into the Feature Map. In Feature Map, business process maps can be attached to the associated products and associated feature design documents created.

#### **Configuration/Development & Sprint Testing Wave:**

The Expansion phase will focus on the users stories and backlog items identified to meet Appendix A-2 Expansion Phase Requirements which will be addressed by the following PeopleSoft FSCM modules:

- Grants
- Treasury Deal (Bonds)
- Projects
- eProcurement
- Travel
- Budget

The Expansion Phase being 4 months shorter than the Core Phase, we will plan to divide the development team into 3 slightly smaller sprint teams working concurrently in sprints that remain 4 weeks in length. The work would include ongoing system interface development, data warehouse and business intelligence updates, and document management system updates. The last sprint of the wave will be an Integration sprint that ensures all products within the Expansion Phase are working together and end to end business processes can be demonstrated within the final Sprint Review.



PeopleSoft FSCM Module	Expansion Phase Development Sprint Sample Breakdown	Sprint Duration Weeks (16 weeks total)	
Grants (Team 1)	Dev Sprint 1	1-4	
	Dev Sprint 2	5-8	
	Dev Sprint 3	9-12	
Treasury Deal (Team 1)	Dev Sprint 1	1-4	
	Dev Sprint 2	5-8	
	Dev Sprint 3	9-12	
Projects (Team 2)	Dev Sprint 1	1-4	
	Dev Sprint 2	5-8	
	Dev Sprint 3	9-12	
eProcurement (Team 2)	Dev Sprint 1	1-4	
	Dev Sprint 2	5-8	
	Dev Sprint 3	9-12	
Travel (Team 2)	Dev Sprint 1	1-4	
	Dev Sprint 2	5-8	
	Dev Sprint 3	9-12	
Budget (Team 3)	Dev Sprint 1	1-4	
	Dev Sprint 2	5-8	
	Dev Sprint 3	9-12	
Integration Sprint (All Teams)	Dev Sprint 1	13-16	

<sup>\*</sup>For staffing information refer to Project Organization and Staffing section and Attachment 5

#### System Integration and Regression Test Wave:

During the System Integration Test wave, the focus will be on testing and verifying end to end business processes through the system, as well as the interface connections and data exchanges with external systems. In the Expansion Phase, System Integration Test wave can begin with the initial completion of development which would include portions of Grants, Treasury Deal, Projects, and eProcurement. Therefore, there would be some overlap by having one sprint team continue to work





the Configuration/Development & Sprint Testing wave while the other sprint team focuses on the System Integration Test wave.

Regression testing would be performed on previously delivered Core Phase functionality for the Expansion Phase to ensure new configuration and development does not impact the existing production DAGS system.

## **Training Wave:**

Training waves would occur in each phase beginning at the completion of Configuration/Development & Sprint Testing waves and lasting up until the go-live cutover for each phase. This wave would consist of training material creation such as user guides, training videos, and online self-guided training as well as incremental train-the-trainer live presentations.

### **User Acceptance Test Wave:**

For each phase the User Acceptance Test wave would be performed using key State end users to validate and assess the end-to-end business processes with contractor provided test cases and scripts and any end user developed test cases and scripts to gauge impact of more one-off test scenarios.

#### **Production Cutover Wave:**

The Production Cutover Wave would occur at the end of each Phase. At the end of User Acceptance Test wave, a go-live decision is made which then sets in motion the production cutover based on a checklist of everything that needs to be accomplished according to the Deployment Plan. This is the same Deployment Plan started in the Planning wave and has continually been updated until the end of the User Acceptance Test wave to ensure all necessary items have been captured for a successful cutover to production.

#### **Operations & Maintenance Wave:**

This new wave begins at the end of the Core Phase and lasts through the length of Expansion Phase to ensure any production defects identified are tracked, prioritized, fixed, and released back to production. When new PeopleSoft Update Manager (PUM) releases are announced from Oracle, they will be assessed and selectively applied as needed. In this wave infrastructure patching and critical updates will also be managed.





#### Integration/ Regression Test - 8wks User Story Design & 1. Verify end to end business na – 4wks processes Planning – 2wks 1. Project Mgmt 1 PS FSCM Modules 2. Verify interface connections 2. Data Warehouse/Business and test data exchanges Deliverable Intelligence Updates 3. Regression test previously 2. Project Mat Systems 3. Document Management released production Cutover functionality System Updates 2023 JULY 2024 AUG SEPT OCT NOV DEC JAN MAR Configuration/Development & Sprint **Production Sustainment** User Acceptance Production Defect Management Testing 1. PS FSCM Modules 1. PS FSCM Modules Selective PUM Updates 1. End to end business 1. Asset Management 2. Data Warehouse/Business process testing with 2. Investments Intelligence key end users 3. Document Management 2. Data Warehouse/Business Intelligence System 3. Document Management System 1. Training Material 2. Incremental Training Ongoing Operations & · Production Defect Management Maintenance of Phase 1-2 • Selective PUM Updates Production Functionality • Infrastructure Patching

10: Optional Phase High Level Timeline

## **Optional Phase**

## **Planning Wave:**

The Optional Phase planning wave will consist of updates to the project management plans according to the work defined in the phase and include any modifications to processes identified from lessons learned during the Expansion Phase.

#### Requirements Review/Fit-Gap Wave:

DAGS **OPTIONAL** PHASE HIGH LEVEL TIMELINE

For Optional Phase this wave will focus on the analysis and break down of the requirements identified in Appendix B Optional Phase Requirements. The outputs of this wave will include a breakout of Products the team would expect to create and become essential inputs to the following User Story Design & Backlog Grooming Wave. Products and their related Features will be entered into the Feature Map and then maintained within that tool.

#### **User Story Design & Backlog Grooming Wave:**

This will be an identical wave process throughout each project phase, where we will take the product identified in Requirements Review/Fit-Gap and break down into user stories and features to flesh out the end-to-end mapping of each product business process. Once all product user stories and features have been identified then necessary product backlog items can be created for development sprints. User Stories will be recorded in Jira and then imported into the Feature Map. In Feature Map, business process maps can be attached to the associated products and associated feature design documents created.

#### **Configuration/Development & Sprint Testing Wave:**

The Optional Phase is defined by the requirements identified in Appendix B Optional Phase Requirements which will be met by the following PeopleSoft FSCM modules:





- Asset Management
- Investments

Due the smaller scope of the Optional Phase versus the Core or Expansion Phases, only 1 sprint team would be needed to complete configuration and development with ongoing system interface development, data warehouse and business intelligence updates, and document management system updates. An integration sprint would not be required in this phase as we will roll this work into the System Integration and Regression Test wave.

PeopleSoft FSCM Module	Optional Phase Development Sprint Sample Breakdown	Sprint Review Week (8 weeks total)
Asset Management	Dev Sprint 1	Week 4
	Dev Sprint 2	Week 8
Investments	Dev Sprint 1	Week 4
	Dev Sprint 2	Week 8

<sup>\*</sup>For staffing information refer to Project Organization and Staffing section and Attachment 5

## System Integration and Regression Test Wave:

During the System Integration Test wave, the focus will be on testing and verifying end to end business processes through the system, as well as the interface connections and data exchanges with external systems. In the Expansion Phase, System Integration Test wave can begin with the initial completion of development which would include initial configuration and development delivered as part of the first Asset Management and Investments sprints. Therefore, there would be some overlap by having one sprint team continue to work the Configuration/Development & Sprint Testing wave while the other sprint team focuses on the System Integration Test wave.

Regression testing would be performed on previously delivered Core and Expansion Phase functionality for the Optional Phase to ensure new configuration and development does not impact the existing production DAGS system.

#### **Training Wave:**

Training waves would occur in each phase beginning at the completion of Configuration/Development & Sprint Testing waves and lasting up until the go-live cutover for each phase. This wave would consist of training material creation such as user guides, training videos, and online self-guided training as well as incremental train-the-trainer live presentations.





#### **User Acceptance Test Wave:**

For each phase the User Acceptance Test wave would be performed using key State end users to validate and assess the end to end business processes with contractor provided test cases and scripts and any end user developed test cases and scripts to gauge impact of more one-off test scenarios.

#### **Production Cutover Wave:**

The Production Cutover Wave would occur at the end of each Phase. At the end of User Acceptance Test wave a go-live decision is made which then sets in motion the production cutover based on a checklist of everything that needs to be accomplished according to the Deployment Plan. This is the same Deployment Plan started in the Planning wave and has continually been updated until the end of the User Acceptance Test wave to ensure all necessary items have been captured for a successful cutover to production.

## **Operations & Maintenance Wave:**

This wave continues from the Expansion Phase and lasts through the length of Optional Phase to ensure any production defects identified are tracked, prioritized, fixed, and released back to production. When new PeopleSoft Update Manager (PUM) releases are announced from Oracle, they will be assessed and selectively applied as needed. In this wave infrastructure patching and critical updates will also be managed.

This wave would continue through the end of the Optional Phase where upon it would be replaced by Production Sustainment.

#### **Risk Management:**

Preventing or mitigating negative, outcomes is vital to DAGS project success. Proper risk management to identify, prioritize, communicate, and address risks leads to successful execution of a project. While identifying risks requires input from all team members and the State, it is the responsibility of the Project Manager to foster an environment in which project staff and stakeholders openly discuss their concerns. Ultimately, it is the responsibility of the Project Manager to identify, document, and manage project risks to ensure achievement of successful project outcomes.

The Project Manager will maintain detailed knowledge of the risk profile on the DAGS project and ensure that both company and State leadership are aware of overall risk status, especially for urgent issues. The identification and communication of risks, and their impact on overall project risk, is also one of the most effective ways to garner required resources and provide a compelling need for action. Risk identification is an iterative process and is done throughout the lifecycle of the project given the potential for new risks or the evolution of the scope and complexity of existing issues. Risks should be identified as early as possible to ensure they are effectively monitored and that appropriate responses can be planned and implemented. The Team leadership will be informed of any risks to achieving contract deliverables. At the start of the project, the Project Manager will develop a risk register within Jira using the Risk Management plugin. The risk register acts as a log of all known risks, their likelihood of occurrence, impact, mitigation, and contingency plans. By routinely reviewing the risk register, the project manager will ensure necessary metrics are captured to monitor project performance, mitigate



risks, and implement contingency plans proactively. If a known risk suddenly occurs, the risk register provides an initial get-well plan. Additionally, it is important to keep and maintain a date-based log of all actions taken to address identified risks. This log will be part of the risk register and will inform project status reports and other forms of project reporting to provide the State with documentation concerning our proactive approach to managing risks.

The project manager will not rely exclusively on a risk register. It is important to engage staff and stakeholders to continually assess project success. An over-reliance on risk registers, and their mitigation and contingency plans, tends to lead to ritualistic decision-making and encourages the illusion of control. A risk register only covers known risks based on known factors in a situation and cannot provide insight into the unknown.

#### Risk Analysis:

Risk is often described as the uncertainty that matters. Risk Analysis is the documentation of what could happen based on ambiguous future events. Therefore, when considering risks, a best practice is to evaluate each risk based on its uncertainty and significance. The uncertainty describes a probability, frequency, or likelihood of an event occurrence while the significance articulates the impact, effect, or consequence this event could have on the project. This qualitative approach to individual risks is illustrated in the example Probability-Impact Matrix shown in the figure below.

		IMPACT				
		Very Low	Low	Moderate	High	Very High
PROBABILITY	Very High	Low	Medium	High	High	High
	High	Low	Medium	Medium	High	High
	Moderate	Low	Medium	Medium	Medium	High
	Low	Low	Low	Medium	Medium	Medium
	Very Low	Low	Low	Low	Low	Low

11: Sample Probability-Impact Matrix

#### Responses to Risk:

Once the project manager has identified and evaluated project risks, they must also consider what actions are appropriate to the occurrence of each potential issue. These response strategies can, depending on the risk, include opportunities to reduce the impact of an issue (negative) as well as opportunities to take advantage of the outcome (positive). The figure below illustrates positive and negative response strategies.







## Negative Risk Response Strategies:

- Avoid actions to prevent or reduce the likelihood of a risk occurring.
   Contract scope may sometimes preclude this response.
- Transfer reassigning responsibility and accountability for a risk to a third party, with an upfront cost associated with the transfer. This can mean either partners involved in the contract or outside mechanisms such as insurance policies.
- Mitigate measures that diminish the impact of an outcome. This can sometimes mean exploring an alternate path or plan if a risk occurs.
- Positive Risk Response Strategies:
- Exploit actions to take advantage of an event occurring. This is useful when an identified risk would benefit the project and/or company.
- Share partnering with third parties to assume joint responsibility and accountability for a risk. The parties involved will jointly accept risk while benefiting from the potential reward of the partnership.
- Enhance measures that increase the benefits associated with a risk occurring. This often means leveraging additional opportunities that become available if the risk occurs.





#### **Neutral Risk Response Strategy – Accept:**

### **Quality Control Plan**

The Solutions Quality Control Plan establishes an integrated quality system to monitor contract performance and overall technical quality. We use this system to ensure services are performed in an accurate, complete, and timely fashion, and to affirm that work products comply with contract requirements. For this engagement, our quality system is broken into quality planning, quality assurance, quality control and reporting, and continuous quality improvement. Ultimately, this plan ensures that all services performed under each Task Area are of the highest quality and consistent with best industry practices to assure timely provision of service and HUD satisfaction.

### Quality Approach, Quality Control, and Quality Standards

To obtain the level of quality that is consistent with the requirements specified in this contract, the Team utilizes an approach in alignment with ISO 9001:2015 and tailored to the PIH requirements. As outlined in the figure below, our quality system includes:

- Quality Planning: Quality Planning identifies which quality standards, measures, and metrics are relevant to the project and how to satisfy them. Planning establishes the policies, practices, and procedures for achieving high-quality results and complying with HUD standards. In quality planning, the Team establishes a shared set of expectations and objectives for all stakeholders that we will collectively work together to achieve.
- Quality Assurance: Quality Assurance encompasses the processes and activities implemented to validate that the requirements and objectives for the CARES Act Program will be fulfilled. It is the systematic measurement of quality, comparison with an agreed upon standard, monitoring of processes, and an associated feedback loop focused on error prevention.
- Quality Control and Reporting: Quality Control and Reporting focuses on products and outcomes. It is the set of procedures intended to ensure that the services performed adhere to an agreed upon set of quality criteria. These criteria must meet the requirements of the HUD and minimize re-work which can be costly and time consuming.
- Quality Improvement: Quality Improvement includes a suite of processes and automated tools used to incorporate lessons learned and improve operational performance. Through this step the Team identifies risks, issues, action items, and decisions through project closure.





QUALITY CONTROL PLAN				
QUALITY PLANNING	QUALITY ASSURANCE	QUALITY CONTROL AND REPORTING	QUALITY IMPROVEMENT 1	
Initiate	Evaluate	Control	Improve	
<ul> <li>Develop an inspection system covering all services required by the contract</li> <li>Develop a method to identify deficiencies at the earliest opportunity</li> <li>Develop a method of documenting and enforcing quality control measures</li> <li>Develop a customer complaint program</li> <li>Develop quality control plan in accordance with PWS and QASP</li> <li>Establish performance measures for deliverables and program</li> <li>Develop specification checklists and inventory reports</li> </ul>	Conduct ongoing quality reviews Confirm quality meets performance standards Audit results of quality control measurements Identify necessary process corrective actions	Inspect project schedules and status report reviews Independent peer-level and senior management deliverable previews Project reviews by senior management Internal quality audits Monitor / Record results of quality activities Monthly Status Reports Monthly Synopsis of deficiencies and corrective actions Monthly performance review discussions with the customer	Maintain lessons-learned register     Regular feedback to project team as mechanism for continuous improvement     Encourage and recognize product/service and process improvements     Track execution of improvement initiatives     Leverage proven change management techniques	

13: Quality Control Plan

## **Technical Architecture**

#### General

In the PeopleSoft deployment we offer you a SaaS-like model that provides the exceptional performance of the Oracle Cloud Infrastructure with the flexibility to customize the program to support your specific business needs and completely managed with end-to-end lifecycle services.

The framework for deployment is focused on security and best practices that offer optimal conditions for programs with the entire Oracle development and support teams as an extension of the services.

#### **User Interface**

PeopleSoft FSCM is a completely web-based user interface that provides access to all end user screens, reports, and transactions through a supported browser whether through Microsoft Windows or MacOS operating systems.

The deployment will provide the same type of accessibility as is currently utilized for the State's users.

## **Application Architecture**

Deployment of new software would be instantly available to new users once migrated to the production environment with possible exception of updates to web browsers which typically are handled by an organization's IT department, no new software related to PeopleSoft FSCM would have to be pushed to workstations as the application would be accessed by end users completely from the web. Changes to the user interface can be made in multiple ways by the user directly through the application, for instance the user can select what tiles are available on their homepage and the order of the tiles. If the user is working on a page with a grid, the





grid columns can be moved as preferred or data within the columns sorted as desired.

PeopleSoft's Query Manager provides a user the capability of creating, modifying, and deleting reports as needed directly from the web-based user interface. Workflows can be configured in PeopleSoft FSCM using Approval Workflow Engine (AWE). This application framework allows users to modify worklist routings & roles, defaults & messages, notifications, approvals, and worklist monitoring all from the user interface. Some delivered worklist reports are provided out of the box, but there is a tremendous amount of flexibility to be able to build whatever reports are required from any workflow data captured in the database, e.g., timeframes for transaction approvals, number of items in users' worklists, transaction completion metrics, etc.

Automatic job scheduling is handled by PeopleSoft Process Scheduler which allows authorized users to queue and run processes directly from a web browser. This functionality also provides configurable distribution options through the web in different format (HTML, PDF, Excel, etc.) to specified roles or user ID in application or via email as reports. Notifications can also be configured to be sent based on specific process activity, for example if a process were to fail a notification could be sent to an administrator role indicating action needs to be taken.

PeopleSoft FSCM transactions or approvals can be configured for document attachments with only specified file formats allowed. For transactions on mobile devices, a picture can be taken of a document and then saved as an attachment, e.g., picture of a travel receipt attached to a travel reimbursement report.

Through our experiences with other customers, the Team has found the best way to do mass changes to a defined group of data using appropriate selection criteria to be through constructed grids. This is an extension of the PeopleSoft delivered grid framework but developed in such a way as to not impact delivered pages and avoid issues with future application updates.

#### **Data Architecture**

Standard formatted data from external parties can be uploaded via spreadsheet or other defined file type to PeopleSoft FSCM and processed to tables as desired. Typically this type of capability would need to be developed through Application Designer based on the business requirements.

#### **Deployment Architecture**

PeopleSoft's development tool, Application Designer, does not have built in version control or the ability to rollback changes, however, can be paired with third party software like Phire or Stat to provide that extended configuration management capability. The Team proposes Phire for this solution.

#### Infrastructure

#### **Oracle Cloud Data Centers**

Oracle Cloud services are deployed across 19 data centers around the globe. Service may be provided out of Oracle owned/operated data centers or collocation data centers. All data centers are rated as at least Tier 3 based on the Uptime Institute scale. In collocation data centers, Oracle infrastructure is in locked cages that are exclusive to Oracle.





Generators are present in all our data center facilities with access restrictions and CCTV Coverage. Fuel supply is on site to ensure uninterrupted service and can at last for 48 hours. Environmental conditions are maintained to meet manufacturer recommended specifications for operating temperature, relative humidity, and power management.

Both Oracle's data centers and co-location facilities have specific schedules for maintenance of environmental controls as specified by the manufacturer and keep regularly maintained logs of all maintenance and repairs on environmental control equipment. The maintenance logs are audited as part of SSAE 16 audits (in the case of Oracle' data centers) and any ISO 27001 audits (where applicable in the case of co-location facilities).

#### Security

Oracle Global Physical Security assesses and implements physical security controls at all Oracle locations world-wide. For example, Oracle Physical Security controls include:

- Authorization is required to enter Oracle facilities and access is monitored.
- Official identification must be worn while onsite.
- Visitors must sign a visitor's register and be escorted when on the premises.
- Possession of keys/access cards and the ability to access locations is managed based upon role requirements. Staff leaving Oracle employment must return keys/cards.

Additional Physical Security controls are in place at all Oracle Cloud Data Centers. For example, some of these include:

- Continuous monitoring by CCTV.
- Physical barriers are designed to prevent persons and vehicles from unauthorized entry.
- Entrances are manned 24 hours a day, 365 days a year by security guards who perform visual identity recognition and visitor escort management.

#### Connectivity

There are a variety of connectivity options to the Oracle clouds. Oracle offers our FastConnect service at 10Gbps. FastConnect can be delivered as a fully redundant service with two physical connections from your network edge to Oracle network edge either directly or through a partner to ensure the high level of availability that you expect from Oracle Cloud services.

https://www.oracle.com/cloud/networking/fastconnect.html

The customer can choose the region in which service is established for PaaS, with some limitations and restrictions. Oracle provides multiple connectivity options for Oracle Public Cloud services including a private network connection through FastConnect which would govern the physical path and route enabling tenants to allow a customer to define how their data is transported.





#### **Integration Architecture**

PeopleSoft FSCM can support integrations from external systems using the delivered Integration Broker capability for modern web service messaging via XML over HTTPS or utilize more traditional flat file data exchanges built via Application Engine process. Either one of these integration methods can be combined with Approval Workflow Engine for approval workflows and approval audits. For more transactional level auditing, log files are created for the interface process and can be combined with audit triggers/records to see exactly when and how the interface process updated specific transaction tables. For reconciliation procedures, users can be automatically notified of interface process success or fail, and the Team has developed an Interface Exception Dashboard for other customers as a one stop shop for all defined exceptions for each interface.

#### **Security**

PeopleSoft FSCM can encrypt data in tables by column or row utilizing the PeopleSoft Encryption Technology framework. This can be done by invoking code to apply preferred encryption algorithms based on a particular vendor's cryptographic library.

The features of PeopleSoft Encryption Technology include:

- Access to a robust set of algorithms (symmetric and asymmetric ciphers, password-based encryption, hashes, MACs, signatures, enveloping, encoding, and writing/processing secured messages).
- The ability to encrypt, decrypt, sign, and verify fields in a database.
- The ability to encrypt, decrypt, sign, and verify external files.
- A secure keystore for encryption keys of widely varying types.
- The ability to convert data from one encryption scheme to another.

User security and authentication can be defined at multiple levels in PeopleSoft via configured Security Trees. Dynamic Role Queries also can be scheduled to run to automatically validate and remove, update, or add roles to users based on a defined set of criteria. The delivered PeopleSoft Audit Framework allows for audit triggers to be defined for systems transactions and stored in audit records that reports can be built from that clearly show what user made the transaction, the actions the user took on specific fields (add/modify/delete), and the date and timestamp of the change.

PeopleSoft Role and Permission list functionality is the basis of user security within the system and support row level security and page level access down to specified actions a user can take, whether it be allowing the user to only view the page, modify the page, or perform corrections to historical data rows.

## **System Administration Toolkit**

System administration tools are part of the PeopleTools application development suite for PeopleSoft which allows the developers to create new features in the system or customize existing features. Much of the application configuration however can be done directly from the web-based application. Configuration management features are somewhat limited in the delivered PeopleTools suite, however if version control and rollback capabilities are required, third party





applications like Phire or Stat can be partnered with PeopleTools to provide extended configuration management features.

As part of the PeopleTools suite, PeopleSoft Test Framework can be implemented to provide automated regression testing for applicable test scenarios. For overall test management and support, the Team recommends a third-party testing solution such as TestRail or Zephyr that also integrates well with Atlassian Jira for agile development management.

Process Scheduler is a tool used for automated batch process scheduling and configuration, including notification to roles or users based on process status. Performance Monitor is an administration tool to monitor performance of web and application servers and provides the following capabilities:

## PeopleSoft Performance Monitor reports:

- Durations and key metrics of PeopleTools runtime execution, such as SQL statements and PeopleCode events.
- Key resource metrics, such as host CPU utilization and web server execution threads.

The metrics provided by PeopleSoft Performance Monitor enable system administrators to:

- Monitor real-time system performance.
- Identify poorly performing tiers, hosts, domains, servers, application code, and SQL in a PeopleSoft environment.
- Identify performance trends.
- Address and isolate performance bottlenecks.

PeopleSoft Application Designer is the core tool used by developers to build and modify applications in the system and enables the building of a variety of definitions, including fields, records, pages, components, menus, PoepleCode, and SQL. Using Application Designer, Fluid user interface would be utilized to provide users with mobile ready responsive screens that adapt to small form factor devices like phones and tables or large form factor like desktops and laptops.

For all PeopleSoft functionality, Oracle provides online software manuals called PeopleBooks that provide context and language-sensitive help for PeopleSoft application users. PeopleBooks can be fully searched by product and capability via an expandable table of contents, a keyword index, and full text searching. People Online Help is HTML based context-sensitive help that is hosted through Oracle Help Center, or can be installed locally. Messages through Online Help can be configured for customized pages if vendor provided help would not apply or exist for those pages.

Regarding configuration and support tools for requirements traceability management, the Team would recommend utilizing the Atlassian Jira product which is a top industry product for agile development user story and acceptance criteria creation and tracking as well as overall project and issue management. User Stories are the





equivalent of requirements in agile development methodology and Jira allows you to associate the user stories with Features and then Features to Products, i.e. System> Products> Features> User Stories. The user stories created in Jira then feed directly into the product development backlogs where progress can be tracked through the course of a development sprint. Jira also provides robust and flexible reporting capabilities for project metrics and dashboarding capabilities using Confluence that pulls data directly from Jira real time.

PeopleSoft auditing and logging features include login auditing, navigation auditing at page level, field auditing, and database auditing. As delivered these features are relatively basic but can be expanded as desired through the PeopleSoft Audit Framework by configuring audit triggers for desired datasets and corresponding audit tables which can then be reported from. At the database level, Oracle Database auditing and system logging features can be used to audit SQL statements, privileges, schemas, objects, network and multitier activity. Given the volume of data collected an archiving and purging strategy also needs to be implemented as part of the system. Oracle Syslog is a standard database feature that provides log data to the operating system Syslog facility and in turn be sent to a centralized Syslog server or collector.

Extract, Transform, and Load (ETL) tools within the PeopleSoft system are Integration Broker, Application Engine, and PeopleCode. Integration Broker provides a method to move from source to target system via synchronous or asynchronous messaging through a configured gateway and nodes. Data from the messages received are processed through an Application Engine developed with PeopleCode that extract the data, transform the data based on defined logic, and then load the data into PeopleSoft transactional tables.

Report distribution is handled in PeopleSoft via the Report Manager which is part of the Process Scheduler. Reports are placed in report folders and can be viewed by configuration of specific user ID or role. As part of Process Scheduler, reports can also be distributed directly to users or roles via email or system notification.

Software license tracking can be handled within the PeopleSoft FSCM IT Asset Management module which is intended to inventory hardware and software assets to ensure improved productivity of the asset base, improve software license compliance, and streamline provisioning of assets. This product also has configurable alerts to notify asset managers on relevant end dates as well as providing reliable asset data for business reporting.

Incident and Problem Management System support and configuration would best be handled as part of PeopleSoft Customer Relationship Management (CRM) which is a separate platform from PeopleSoft FSCM, or via a third-party system such as SalesForce or ServiceNow. Atlassian Jira has some capabilities in performing this function and would be used for system defect tracking, however, would not be as robust as other third party systems designed specifically for incident and problem management.

The PeopleSoft presentation layer can be configured through PeopleTools Branding which manages the overall look and feel of the system. Style sheets, images, and other objects are maintained in this module and can be configured from the online user interface or by using Application Designer.





Workflow transactional re-routing can be performed as part of the PeopleSoft Approval Workflow Engine. This is done by assigning alternate approvers who would receive email and worklist notifications when the primary approver is unavailable. Date ranges can also be set for when the alternate approvers will be in effect.

PeopleSoft Query Manager is the system's ad hoc query tool that allows export of results into excel, html, or xml file formats. If results are imported to excel they can then easily be saved into csv file format. Once a query is created it can then be scheduled via the Schedule Query component which allows the user to define when the query should be run, how to distribute the results, and to who (User ID or Role).

The PeopleSoft Events and Notifications Framework feature provides robust alert and notification capabilities to the system. The framework involves two primary features that can be configured based on situations or errors within a process or table, these being Events, and Notifications and Alerts. Events provide the ability to define, implement, and run business logic for specific business events. Notifications and Alerts are messages that can be sent via email or Notification Dashboard based on the defined events.

Inter module connectivity in PeopleSoft FSCM is all one integrated system utilizing the same database and, in many cases, sharing the same tables. If connectivity was required with a module external to PeopleSoft FSCM then Integration Broker would be used to send messages to and from that external module along with the ongoing administration.

# **Solution Architecture**

# **Scalability**

Oracle built the OCI Gen2 Infrastructure (OCI) to deliver the performance, scalability and services needed to run the most demanding enterprise workloads and the most modern cloud native applications. Oracle Cloud Infrastructure offers of variety of virtual compute shapes, dedicated bare metal, and Exadata Engineered machines for superior performance.

Scalable, compute instances on demand with autoscaling allows customers to automatically adjust the number of compute instances in a pool to accommodate unexpected demand or save costs when fewer resources are required. Oracle provides multiple access methods for customers via console, command line interface (CLI), or application programming interface (API). Oracle Gen2 Infrastructure Cloud was designed for rapid scalability.

Autoscaling lets you automatically adjust the number of Compute instances in an instance pool. This helps you provide consistent performance for your end users during periods of high demand, and helps you reduce your costs during periods of low demand. Autoscaling is supported for virtual machine (VM) and bare metal instance pools that use Standard, DenselO, and GPU shapes..

 Autoscaling enables large scale deployment of VMs from a single gold image with automatic configuration





- Referred to as scale-out or scale-in, If one VMs fails in the Autoscaling group, others will keep working
- Match traffic demand by adding or removing VMs automatically (supports auto scaling based on metrics – CPU or Memory utilization

You can apply the following types of autoscaling to an instance pool:

- Metric-based autoscaling: An autoscaling action is triggered when a performance metric meets or exceeds a threshold.
- <u>Schedule-based autoscaling</u>: Autoscaling events take place at the specific times that you schedule.

More information on Autoscaling, <u>click here</u>. You can also reference the Oracle Best Practices for OCI Framework here.

# Scalability - PaaS

Fast provisioning of single-node virtual machine database systems for Oracle Database with logical volume manager increases developer productivity. Oracle Database Cloud Services (DBCS) with Oracle Real Application Cluster allows for high availability for supporting mission critical applications. Built-in Oracle Cloud Infrastructure automation increases DBA productivity by simplifying database lifecycle management. Oracle databases on OCI PaaS provide the end user with vertical scaling capabilities with a click of the button. After you provision a virtual machine DB system, you can change the shape at any time to adapt to changes in performance needs. For example, you might require a system with a higher number of OCPUs, or you might want to reduce costs by reducing the number of OCPU's. Click here for more information regarding Oracle DBCS.

Oracle Autonomous Data Warehouse (ADW) is self-driving, whereby the data warehouse service provisions highly available databases, configures and tunes for specific workloads, and scales compute resources when needed, all done automatically. The ADW is also self-repairing, whereby the service detects and protects from system failures and user errors automatically and provides failover to standby databases with zero data loss. For more information on Autonomous Data Warehouse, click here.

# **System Flexibility**

The proposed PeopleSoft FSCM solution provides system flexibility through a wide array of delivered capabilities and frameworks. PeopleSoft Drop Zones allow the additions of customizations to pages and fields that are then treated as configurations that save time and effort by not having to re-apply those customizations after a PUM update. Business rules can be configured into delivered PeopleSoft frameworks like Approval Workflow Engine (AWE) for approvals or Combination Editing to set and enforce criteria to filter unwanted journal entry lines to ledgers based on combinations of ChartFields and their values, e.g. For operating unit xyz I can only use department 123.





# **Security & Authentication**

PeopleSoft FSCM has the ability to link to additional employee or contractor information that includes existing identification numbers from other systems that can then be associated with assigned locations and other data.

Access to the PeopleSoft FSCM system is captured within the application access logs. This data is captured in a system table and there are canned access log queries that can be viewed, or custom queries can be created for the data that can then be combined with a scheduled query to distribute the data to specified user IDs or roles. The user IDs, client IP addresses, sign in times, and sign out times are all captured within the access log table.

Date sensitive security permissions can be handled by PeopleSoft Dynamic Role Query functionality. This can be done by building specific time duration criteria into a query which can then be run ad hoc or scheduled as necessary and will automatically add or remove user role access based on that criteria specified.

Authorized users with the PeopleSoft security administration role are able to inactive users manually as needed. User access can also be suspended based on defined criteria by employing PeopleSoft Dynamic Role query. This feature provides the ability to add or remove user roles based on table driven criteria. For example, if an employee's status were to change to terminated, a dynamic role query could be defined to strip all user roles from that employee when it was run.

PeopleSoft FSCM provides delivered message integration with PeopleSoft HCM through the Integration Broker feature that can provide data to update employee access and security profiles.

PeopleSoft Password Controls stores all password encrypted without requiring them to be unencrypted as well as supporting the use of tokens or passwords for user logons. This same feature can be configured to force users to change passwords based on time duration, or suspend user access based on inactivity per a defined time duration. Accounts can also be configured to be locked after a configured number of failed password attempts, after which a security administrator would need to unlock the account. Passwords can be configured for minimum length, required to use contain numbers/alpha numerics/special characters, and require the number of minuscule ('q') or majuscule ('Q') letters. All of these controls in combination help to prevent the use of trivial passwords. The number of passwords to retain can be configured to prevent password reuse. In order to require the system to use nondictionary-based passwords, a customization would be required as they system would need to be able to ping against a database of dictionary words noting that the scope of dictionary words do change over time. The date and timestamp of password changes are captured by the system, and if an administrator changes a password for the user, the system can be configured to change that password upon login. If a user does not remember their password, they can utilize the Forgotten Password feature that forces the user to answer a set of standard questions to verify the user's authenticity.

A security administrator can update user security information via the online user interface in real time upon save of the page. Security profile change history can also be captured by configuring audit triggers and corresponding audit table which can then be reported from.





# **Identity Cloud Services (IDCS)**

The Team proposes Identity Cloud Services (IDCS) as a solution for authentication, single sign on (SSO) and group permissions. This enables the State to use advanced authentication measures such as multi-factor and single sign-on, by a world class solution. IDCS enhances PeopleSoft and Oracle Cloud Security including Adaptive Security and Authentication services:

<u>Two-factor authentication (2FA):</u> This is an authentication method that requires users to use more than one way of verifying their identity, providing a second layer of security to their accounts. The factors include, SMS, Email, Mobile App that support Time-based One Time Pin and Push Notifications, Security Questions and Passwordless Authentication mechanism supporting FIDO authentication devices.

Adaptive Security: This feature provides strong authentication capabilities for users, based on their behavior within Oracle Identity Cloud Service, and across multiple heterogeneous on-premises applications and cloud services. Adaptive Security is used to analyze a user's risk profile within Oracle Identity Cloud Service, based on their historical behavior, such as too many unsuccessful login attempts and too many unsuccessful MFA attempts, and real-time device context, such as impossible travel between locations, and logins from unknown devices, unfamiliar locations, and suspicious IP addresses. With this enriched context and risk information, Adaptive Security risk profiles each user, and arrives at its own risk score and an overall consolidated risk level (High, Medium, Low) that can be used with Oracle Identity Cloud Service policies to enforce a remediation action, such as allowing or denying the user from accessing Oracle Identity Cloud Service and its protected applications and resources, requiring the user to provide a second factor to authenticate into Oracle Identity Cloud Service, and so on.

In addition, integration with PeopleTools helps our customers <u>manage PeopleSoft Tools-based user profiles</u>, records in PeopleSoft applications including Role and Permission, with the help of Oracle Identity Cloud Service. After integrating Oracle PeopleSoft and Oracle Identity Cloud Service, administrators can use the Identity Cloud Service console to: Assign and revoke user access to the Oracle PeopleSoft Tool, and Manage users, user roles and permission lists. (Optional).

# **Security**

Oracle understands that security is of critical importance to customers and has invested significantly to support their needs. Oracle has world-class security and best practice regulatory compliance. Data is protected by the latest Oracle products for data privacy, while protecting against unwanted threats from both within and outside the enterprise. Security processes and technology are infused into the Oracle Cloud Services delivery model. Oracle Cloud Infrastructure's security approach is based on seven core pillars. Each pillar has multiple solutions designed to maximize the security and compliance of the platform.

 Customer Isolation: Allow customers to deploy their application and data assets in an environment that commits full isolation from other tenants and Oracle's staff.



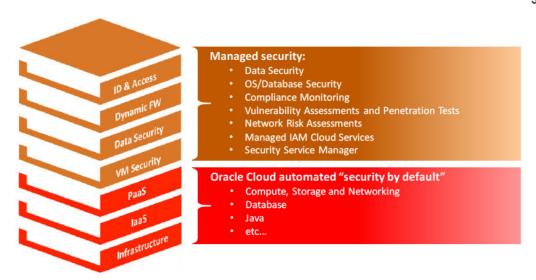
- Data Encryption: Protect customer data at-rest and in-transit in a way that allows customers to meet their security and compliance requirements with respect to cryptographic algorithms and key management.
- Security Controls: Offer customers effective and easy-to-use security
  management solutions that allow them to constrain access to their services
  and segregate operational responsibilities to reduce risk associated with
  malicious and accidental user actions.
- Visibility: Offer customers comprehensive log data and security analytics that they can use to audit and monitor actions on their resources, allowing them to meet their audit requirements and reduce security and operational risk.
- Secure Hybrid Cloud: Enable customers to use their existing security assets, such as user accounts and policies, as well as third-party security solutions, when accessing their cloud resources and securing their data and application assets in the cloud.
- High Availability: Offer fault-independent data centers that enable high availability scale-out architectures and are resilient against network attacks, ensuring constant uptime in the face of disaster and security attack.
- Verifiably Secure Infrastructure: Follow rigorous processes and use effective security controls in all phases of cloud service development and operation. Demonstrate adherence to Oracle's strict security standards through thirdparty audits, certifications, and attestations. Help customers demonstrate compliance readiness to internal security and compliance teams, their customers, auditors, and regulators.

Additionally, Oracle employs some of the world's foremost security experts in information, database, application, infrastructure, and network security. By using Oracle Cloud Infrastructure, our customers directly benefit from Oracle's deep expertise and continuous investments in security.

Integral to Oracle services, based on deployment model is:

- Physical data center security
- Customer network isolation and segmentation
- Encryption of data in transit
- Segregation of duty
- Least Privilege, granular access
- Incident Response
- Audit/Compliance Reports (SOC, ISO, etc.)Managed Security Services for Oracle IaaS and PaaS





Managed Security Services (MSS) for Cloud Deployments

For customers with regulatory or industry requirements that exceed the integral services protection Oracle offers Managed Security Services (MSS) such as scanning, reporting, encryption, auditing, and masking services to enhance security at all layers of the technology stack (additional fees apply).

- Vulnerability Assessment Services Quarterly or monthly Internal and External Vulnerability Assessment services. Customer is provided with the raw scan report, technical, and executive summary reports. (This has been included in the proposed service.)
- Penetration Testing Service Application and Network Penetration Test performed by Oracle ethical hacking team. Detailed test report is provided. (This has been included in the proposed service.)
- Database Security Risk Assessment In-depth security assessment of the Oracle database, including a risk based report of findings, remediation recommendations.
- Database Encryption Service Encrypt customer's sensitive data in the Oracle database; secure key management, reporting, and monitoring. (This has been included in the proposed service.)
- Database Vault Service Design, implement and manage database vault to restrict access to customer's data. Oracle Database Vault (This has been included in the proposed service.)
- Data Masking Service Design, implement and manage data obfuscation service. Oracle EM Data Masking Pack (This has been included in the proposed service.)
- Database Auditing Service Design and implement database security monitoring, provide service reports. Oracle Audit Vault (This has been included in the proposed service.)
- Web Application Firewall Design, implement, manage, and monitor Web Application Firewall service for Customer's Internet facing applications.



- Oracle Identity Cloud Service "White Glove" management of Oracle Identity Cloud Service to securely provision the users of applications based on their on-premises identities across clouds. (This has been included in the proposed service.)
- Oracle Cloud Access Security Broker (CASB) Management of the Oracle CASB cloud enforces security policies and extends user entitlements to the cloud. It builds a baseline of normal, white-listed activities, and then sends alerts when a system or user defies accepted usage patterns

#### **Audit**

Application audit capabilities are provided through PeopleSoft Financials Audit Framework. This framework can be configured to audit specific transactions by source, action and user. Audit logs are fully searchable through the delivered Search Audit Logs page, or custom queries can be configured to supplement this functionality. Audit logs can also be archived or purged as needed through this delivered framework.

PeopleSoft Data Archive Manager is a tool that provides the ability to archive transactional data to ensure database size does not become unmanageable. This tool uses predefined templates to select queries or objects necessary to meet archiving requirements. Archive auditing data is captured to know what process was executed, what user ran the process, when the process was executed, the record impacted, and SQL statement used. Data can also be restored from the archive to transactional tables through defined jobs ran through the process scheduler.

# **Data Storage & Archiving**

PeopleSoft Data Archive Manager is a framework tool with the ability to archive and purge transactional data in a consistent method to keep database size at manageable levels. The framework utilizes a predefined template where the user can select queries and multiple objects to meet archiving requirements and restore archived data as needed. Archive jobs can be set up that can be run on an ad hoc basis by a user or scheduled to run automatically on a regular recurrence. Archived data can be restored to transactional tables using defined jobs ran through process scheduler. Data entered into a component in error can by corrected using "Correct History" access which can be defined to specific roles or permission lists.

The Team can work with the State to determine archiving and retention requirements and propose Oracle Cloud Infrastructure storage options.

#### **System Capacity & Performance**

Oracle will architect the environment to support the needs of the programs. The Oracle Cloud Infrastructure is flexible and offers unlimited expansion.

Universal Cloud Credits (UCC) is a mechanism for flexibility. Whatever UCCs that are purchased can be moved around to best support capacity planning for the needed resources. If the Capacity or Performance requirements exceed the credits purchased, additional can be purchased.

Managed Services Capacity Management and Performance Advisory services are designed to enable and support joint Performance Management of the Oracle





Programs, Required Software, and Co-resident Third Party Programs by resolving and preventing performance-related Incidents and Problems.

For the Services, the Team will:

- 1. Provide general architecture and sizing guidelines for the Oracle Programs and Required Software for Your use to determine the appropriate amount of OCI to achieve desired performance of the Services.
- 2. Analyze performance-related Incidents to identify factors adversely impacting performance and provide You with recommendations, as needed, for review of architecture configuration and capacity.
- 3. Resolve performance-related Incidents where possible through configuration changes to the Oracle Programs and Required Software or CEMLI code deactivation.
- 4. Provide performance advisory guidance specific to the Services as part of a capacity management plan updated periodically on a mutually agreed schedule.

# **Business Continuity and Disaster Recovery**

# Service Continuity

Service continuity measures for the Managed Software in the Services are required in an effort to ensure the Services can be recovered in the event of hardware failure or human error.

For the Services, the Team will:

- 1. Configure the Services for automated backup, including configuration of OCI components.
- 2. Assist You to recover database and application functionality from backups as required.

# Disaster Recovery

ACS Enhanced Recovery Disaster Recovery (DR) Services include 12 hour RPO and 12 hour RTO. Oracle will work with the State to create a Disaster Recovery Plan (DRP) for the services. The Production environment will be regularly synched with a DR environment in a different data center to support best practice DR architecture. The plan will be tested annually. Oracle and the State will remediate any issues resulting from the test and will update documentation of the plan.

# **Solution Technology**

# **Workflow Processing**

PeopleSoft Approval Workflow Engine (AWE) is a framework providing the capability to configure approval workflows by defining the approval process, routing rules and steps, and the users who would view and or approve the transaction.

Using workflow approval processes, you can:





- Approve or deny individual line items in a transaction, such as a change request.
- Approve and deny multiple transactions one at a time.
- Include multiple approvers for individual steps.
- Assign additional approvers and reviewers during the approval process.
- Escalate approvals.
- Self-Approval based on defined criteria, e.g., transaction amounts
- Approve, deny, push back, and delegate approvals.
- Reassign approval tasks to another approver.
- Use Worklist and email notifications.
- Attach documents to approval transactions.

Secondary approvers can be set up as Alternate Approvers when the primary approver is unavailable. Each step of the workflow process can be configured to send email notifications to users and those emails can be configured with any verbiage required. Checklist functionality can be included by combining AWE with Activity Guides that walk a user through a step-by-step process, or if simpler checklist desired, a custom page can be incorporated into the workflow process.

All approval and related metadata is captured in PeopleSoft tables and can be queried or have structured reports built. A wide array of metrics can be captured including workflow item time to approve or complete, workflow durations based on user ID, specific workflow items that tend to take more time, etc.

# Reporting, Business Intelligence, & Data Warehouse

PeopleSoft provides a wide array of reporting and business intelligence capabilities. These tools include Query, Query Scheduler and Process Scheduler, Report Manager, BI Publisher and Kibana Report Visualizer. For more extensive forecasting and trend analysis, Oracle Analytics Cloud utilizing Oracle Autonomous Data Warehouse is recommended.

PeopleSoft Query is a flexible and powerful tool allowing users to create new queries, modify existing queries, download and print query results, and provide view only access to specified queries. Access to specific queries and the ability to modify or view queries is all configurable by role or permission list. For those users with the ability to create or modify queries, access to specific tables or records can be set using Query Trees and the data a user can see if further restricted by their row level security. Queries can be presented as links within the online application for quick reports and users can download their results into HTML, excel, or XML formats. Queries are also extensively used in other PeopleSoft features or frameworks to define certain criteria or data that the feature would use or act upon.

Query Scheduler is a way to run queries through the PeopleSoft Process Scheduler so that query can be run at a certain time or recurrence and then distributed through email or to the Report Manager. The Report Manager organizes queries into





hierarchical report folders and provides a way to view the reports a user has access to.

BI Publisher for PeopleSoft is a tool that integrates with Query and provides the ability to create structured reports using templates that integrate with common desktop application like Microsoft Word or Adobe Acrobat and then renders XML data using those defined templates. Reports can be generated in many formats (PDF, RTF, EXCEL, HTML, etc.) using the same template. BI Publisher can be combined with batch processes to create and distribute mass printable reports, e.g., annual IRS forms for tax reporting.

Kibana is a fairly recent reporting tool that has been integrated with PeopleSoft as of PeopleTools 8.57. Kibana is an open-source analytic tool that utilizes Elasticsearch indexes as the data source and used to create report visualizations and dashboards. Kibana has an intuitive user interface and works with PeopleSoft role-based security. Kibana works best for large volumes of data within PeopleSoft as it can quickly retrieve the data through the underlying Elastic indexing.

For more in depth forecasting and trend analysis that can combine external data sets, the Team recommends Oracle Analytics Cloud integrated with Oracle Autonomous Data Warehouse.

Autonomous Data Warehouse intelligently automates provisioning, configuring, securing, tuning, and scaling a data warehouse. This eliminates nearly all the manual and complex tasks that can introduce human error. Autonomous management enables a high-performance, highly available, and secure data warehouse.

The Team has many options to provide the depth of analytics that the State will require. Clear requirements will drive the correct solution.

# **Content/Document Management & Imagine**

The Team is proposing that the State include the Docusign CLM platform alongside of PeopleSoft FSCM to meet the various document management requirements requested. The Team has considerable expert in-house Document and Content Management staff who approach electronic content holistically to include designing and developing for electronic records retention, metadata and object integration fully alongside of business process configuration.

Docusign CLM can meet the full suite of State electronic content library service requirements to include version control, check-in/checkout and by extension, rollback to previous versions and collaborative functionality and markup. It supports configurable metadata extensions, and depending on a deeper dive into State requirements, metadata for a given document or document type may be either shared or synchronized with PeopleSoft objects. DocuSign's user interface can be embedded in-situ in the PeopleSoft UI for specific content referencing or enabled stand alone for content or metadata based searching or records management operational control.

DocuSign's available API and web services enables a wide range of integration points, which the Team will expose when developing PeopleSoft functionality to store rendered PDF documents, maintaining links for ongoing reference and data to document associations. With this link-based paradigm, the Team can support





attaching documents in emails via link or as attachments generated within the various business processes being developed in PeopleSoft. The Team will persist authentication to not require re-login when coming from PeopleSoft. Also, in the context of integration, Docusign CLM can be used without enabling its eSignature capabilities if required, and instead use the state's Adobe eSignature platform for electronic signatures with DocuSign's content management storage functionality.

With this platform, integration capability and iterative approach, the Team will be able to design document management features alongside of the various AP, AR and other business process workflows requiring electronic document generation, storage, and reference developed in the core PeopleSoft FSCM application. The state can continue to use its existing scanning hardware and localized OCR generation before importing to PeopleSoft and through integration and linking on to Docusign or import through PeopleSoft directly in the case of native electronic files including any PII or HIPPA password protected requirements, or finally directly to Docusign for pure Document/Content Management (non-PeopleSoft process) requirements.

#### **End-User Interface**

PeopleSoft's overall look and feel is configured through Branding using various style sheets, images, and other objects and also apply various branding definitions to difference users by role or permission list. The PeopleSoft end-user experience has evolved over the years and now features Fluid User Interface for most user transactions. Fluid is a modern and flexible way to create online PeopleSoft pages that gracefully scale from large screen devices such as desktops to the smaller screens of tablets and smartphones. This is a similar technology that many commercial websites use today to dynamically conform to the dimensions of a user's device. The Fluid homepage for a user consists of a collection of tiles that are clickable or finger tappable and can dynamically display a limited amount of data related to the tile content, e.g., in progress status for the number of work items currently assigned to the user. The approach of the Team with customers such as the U.S. Navy, is to use Fluid for all user facing pages to ensure mobile readiness.

Fluid User Interface can be combined with PeopleSoft Grids functionality to create a simple method for users to look at and interact with data through the application. Users can sort data within Grids, adjust column order as desired, or divide related data into multiple tabs of one grid. Data within Grids can be view only or allow for editing of existing rows or adding new rows. Bulk actions can be taken on data or more customized application specific buttons can be created through Application Designer to perform more complex functions.

PeopleSoft Activity Guides are a feature that provides configurable templates to define step by step workflow processes that walk a user through a business process in the system with defined business rules that can be added. A good example would be creating an activity guide to a walk a user through all the actions needed for a period end closing. PeopleSoft Related Content Framework is yet another feature that allows users to link application pages with other related pages, thereby creating a way to drill down into associated data as necessary. Related Content Framework can tie in content such as other PeopleSoft components, queries, discussion threads, or business intelligence analytics.

PeopleSoft WorkCenters can be implemented for users assigned to specific roles as an alternative to the classic menu. A WorkCenter provides a central area for all





access related to the tasks they perform daily including access to components, worklists, reports, and processes. The Team has created many WorkCenters for the U.S. Navy, an example being one used by administrators for setup table maintenance.

PeopleSoft out of the box supports multiple languages which can be selected as options by the user. New languages can be added however fields, pages, and menu items would also need to be updated with the translations for that language and then tied to the new language code.

# **Data Entry Support & On-Line Help**

PeopleSoft provides data entry support and on-line help in a variety of ways. The on-line help is primarily performed through PeopleBooks which can also be customized for more context specific help as needed which can include links to user guides or training materials. Mouse over functionality can also be added to fields to provide related information or definitions. For user instructions, text can be added to pages and then updated online via Text Catalog configuration. Autofill can also be configured for fields where the user can type a few characters into a field and the system will automatically bring up a list of all values that start with those characters. Last Entry defaults are a delivered function for effective dated records. Drop down lists to restrict free form entry are a standard feature in PeopleSoft where applicable. Spell check also comes standard in many free form text fields or can be added through Application Designer development.

User input validation is in many cases built into the PeopleSoft application through the component interfaces, however further validation can also be added to fields or pages through custom code if required. If a user enters data that creates an error, e.g., does not select a valid value from a drop-down list, the system has delivered or customizable error messages of which the verbiage can be configured and managed through the Message Catalog.

Mass data entry from external sources can be handled through PeopleSoft Integration Broker via messaging if available, or spreadsheet upload pages can be created with a process to automatically load the data into transaction tables.





# 5 - Business Solution – Implementation Services Requirements

# Please see Appendix D - Implementation Services.

The Oracle ERP deployment team will utilize a hybrid staffing approach for this project. We plan to combine the experience of Oracle PeopleSoft mainland subject matter experts with our Hawaii based PeopleSoft implementation team. This combination of experience will create a well-rounded team that has deep government ERP experience coupled with a culturally aligned local workforce.

Our implementation team is local—as residents we are mindful of, sensitive to, and aligned with the local corporate culture. We have successfully delivered projects in Hawaii by fostering strong working relationships based on mutual trust, respect, and open communication. Our local workforce is mindful of the need to be sensitive around the ways of our island culture and will strive to create a harmonious and productive working relationship with the State of Hawaii's work force. This approach enhances the spirit and intentions of both parties to create a public private partnership between the State's project team and Oracle. This critical success factor cannot be minimized, as experience shows ineffective communications has a negative impact on successful project execution. The Oracle team brings to the table both experience and professionalism delivered with a local style.

The Oracle team's local Hawaii office is located at 3375 Koapaka Street, within 4 miles radius t from the Hawaii State capitol. Should the Oracle team be awarded this contract, we are able to open a satellite office within the downtown Honolulu corridor specifically for the purpose of hosting project-based meetings and presentations if required.

# **Implementation Services**

# 1. Project Planning

Our implementation plan will begin immediately upon contract award with the scheduling of a kickoff meeting to connect our implementation team with the State's project team. Our existing presence in Hawaii allows us to undertake this initial action without delay. Our implementation Project Manager (PM) will be the lead for this event and will use the opportunity to resolve questions not answered during the proposal process and to set expectations. This will also be an opportunity to create a Project Charter to formally initiate the project.

Once the project is initiated our implementation PM will establish a program management office (PMO) to complete the project planning that was not finalized during bid planning. As a Project Management Professional (PMP), our implementation PM will ensure that the PMO follows best practices established by the Project Management Institute to certify that the project is adequately planned prior to beginning the execution phase.

Our implementation team has extensive experience in the application of agile methodology to large enterprise resource planning (ERP) projects for the public sector. With this experience has come insight into best practices for staying true to



the key principles of agile while making accommodations for the nature of ERP software configuration and the needs of government clients. The team, beginning with the PM and PMO, will use the flexibility of an agile approach to rapidly generate value for the State while being mindful of the need for structure and documentation, more typical of waterfall implementations, to adequately track project progress.

The following deliverables will be generated during the planning phase and updated as necessary through the life cycle of the project:

# Project Charter

As the project sponsor, the State PM is responsible for the issuance of this
deliverable to formally authorize the project and apply resources to project
activities. Much of the information for the charter has already been laid out
in the RFP and our implementation team will help bring this information
together into a document that covers business needs, assumptions,
constraints, and high-level requirements. This document will be an output
of the project kick-off

# Project Schedule

Our implementation team is well versed in developing and delivering Integrated Master Schedules (IMS) for complex projects involving multiple workstreams. Based upon the constraints and expectations laid out in the RFP and Project Charter, our team will create an IMS to cover the seven segments of our implementation from Planning through Warranty Services. As shown in the previous section, our team has already developed a rough product roadmap to show the overall plan. Upon project initiation this roadmap will be expanded into a more formal IMS that lays out each planned release and relevant features to meet the State's timeline for implementation. Since agile projects embrace change, this IMS will be a living document subject to change as the project evolves and customer value is constantly being prioritized.

#### Project Management Plan

Our implementation team will leverage previously developed project management plans from similar projects while tailoring to the specific needs of the State of Hawaii and this project. The plan will cover all items outlined in the request for proposal (RFP). We will use the Atlassian Jira tool to manage all project work including issue tracking and risk management. Additionally, our proposal for change management will be minimal as agile projects embrace change to maximize customer value.

# Project Team Training Plan

This plan will likely be the most in depth of our initial documentation to ensure adequate understanding of the agile process and terminology. Our implementation team has experience working with organizations unaccustomed to agile project management. We will leverage existing plans and training that have been proven effective on previous projects. Only with a solid foundation in agile software development on the part of the project team and customer organization can initial analysis and design begin.





 Our implementation team will utilize existing Project Team Training that is tailored to this project to ensure adequate buy-in and readiness to move to the next phase of the project.

# Communication Strategy

Good communication is essential to any successful project, but agile projects especially value individuals and interactions as well as high-bandwidth communication. This requires a prioritization of in-person communication, co-location of teams, and extensive collaboration throughout the project lifecycle. Our communication strategy will embody these agile principles which align well with the hybrid approach of the Oracle team emphasizing local implementation. As agile also requires high performing teams and values self-organization, our communication strategy will cover standard items like kickoffs and milestones but focus on items critical to team-building and stakeholder feedback. The Stakeholder Register is one of the few project artifacts that carries high importance to both waterfall and agile methodologies. The cornerstone of our communication strategy will be identifying and analyzing all key project stakeholders.

# Business Process Organizational Change Management Strategy

Our implementation team will follow a similar approach to business process change that they have employed on previous projects. Our strategy is to first identify ways that the delivered PeopleSoft software can be configured to work with the as-is process. If business process change is required to avoid customization or to modernize the process (data vs. paper) then it will be documented and communicated in accordance with the Change Management Strategy. The high level of customer engagement in agile development and rapid feedback cycles should limit the requirement for a broad change management effort at system adoption, but our team will prepare a detailed plan to cover all contingencies.

#### Configured Environments

While our Implementation PMO team is conducting project planning and developing the required deliverables to move into the next phase of the project, the Oracle team will be configuring all necessary environments, laid out in our Technical Plan, in the Oracle Cloud.

# 1. Initial Analysis and Design

In a fully agile project this phase would be limited in scope and time. While traditional project management spends a great deal of time creating a detailed plan that lays out all work to be done, agile projects embrace change and do just the amount of analysis required to prioritize the work and begin development. This is not to say that agile teams do not perform analysis or planning. Agile analysis is all about understanding the problem and the underlying need. Instead of poring over complex requirements and legacy system specifications, agile analysis focuses on going directly to the customer to get firsthand information. A high level of engagement by





the State's stakeholders and subject matter experts (SMEs) will be required throughout this phase.

Our approach to design is a collaborative effort between the development team, the State's designated Product Owner, and other essential SMEs. We will first gather additional information on as-is processes and requirements that were not included in this RFP. Next, we will create draft User Stories and a draft Business Process Model. We then conduct Conference Room Pilots (CRPs) to ask specific questions about scope and refine design. This event provides some initial demonstration of functionality and focuses on specific areas that require clarification for the development team. Coming out of the CRP our team should have enough information to conclude design and proceed to the next phase. Expected outputs of a successful CRP include:

- Initial User Stories & Tasks
- Refined (or defined) scope
- General requirements
- As-Is process and To-Be process
- Opportunities to streamline process
- Questions for SMEs and POs to follow up on to further product design and research
- Discussion of potential interfaces inbound/outbound, as necessary
- Answers to questions the team has identified
- All user roles
- All customer groups (SMEs) needed for the product creation
- Information to finalize BPMs, design, and features
- Discussion of what constitutes a minimal viable product (MVP)
- Design ideas are discussed as solutions
- Open dialogue between SMEs and development team

We also recognize that several of the functionalities required in this project do not lend themselves well to agile analysis and design. Our proven process accommodates for this and will set aside a parallel process for components such as General Ledger and Commitment Control. Our aim in this phase of the project is to provide maximum flexibility while ensuring the appropriate level of planning is accomplished to ensure project success.

# 2. Final Analysis and Design

Since we follow agile practices to the maximum extent possible, our final analysis and design will not be conducted as a separate phase of the project. For components of the solution where it is feasible, our implementation team will proceed directly from initial analysis and design into configuration and development iterations. Because agile embraces change to maximize customer value the design will be





refined through the development process. As more information is gathered and a greater understanding of the organization, system, and processes is developed the team will adjust as necessary.

For components which require a more traditional approach the design will be finalized before proceeding to configuration. However, our analysis and design process for all components, whether more traditional or pure agile, puts an emphasis on customer collaboration to maximize the effectiveness of the end product.

# 3. Configuration and Development

 Deliver training, test and release documentation (UPK's, SVD's)

Our implementation team will design, configure, and release PeopleSoft Commercial Off the Shelf (COTS) capabilities to meet the requirements of this project.

To enable delivery of a large scope of configuration and code, we will use a scaled agile methodology with work occurring in parallel. The implementation team will be divided into design, development, and release teams, each with defined deliverables.

: Team

14: Scaled Sprint Delivery

Each theme will consist of multiple staggered design, development and release sprints that will result in the delivery of release packages in the form of software configuration, code, and documentation on a rolling 2-week release schedule. The figure below, shows a sample timeline. These 2-week release packages will be submitted to State for review and feedback. Feedback will be incorporated into subsequent sprints and rereleased as necessary.



#### Sample Theme Timeline

One Month	One Month	One Month	One Month	One Month
Design		•	•	
esign Sprint Theme 1	Design Sprint Theme 1	Design Sprint Theme 1		
esign Sprint Theme 2	Design Sprint Theme 2	Design Sprint Theme 2		
esign Sprint Theme 3	Design Sprint Theme 3	Design Sprint Theme 3		
Develop	Dev Sprint 2.1	Dev Sprint 2.3	Dev Sprint 2.5	
	Dev Sprint 2.2	Dev Sprint 2.4	Dev Sprint 2.6	
	Dev Sprint 3.1	Dev Sprint 3.3	Dev Sprint 3.5	
	Dev Sprint 3.2	Dev Sprint 3.4	Dev Sprint 3.6	
	Dev Sprint 4.1	Dev Sprint 4.3	Dev Sprint 4.5	
	Dev Sprint 4.2	Dev Sprint 4.4	Dev Sprint 4.6	
Delivery				
		Release 1	Release 2	Release 3
		1000000	1,0,000	

15: Sample Bi-Weekly Release Schedule

A high-level description of our process for analyzing requirements and putting together a design are described in the sections above. Since we incorporate the detailed design process into our scaled agile process when possible, additional detail is provided here. During design sprints our team will review higher level, systemagnostic requirements provided by the State and decomposing them into system-specific requirements. Our implementation team will produce and maintain a design for the system using the results of the requirements analysis. This will be accomplished in an agile methodology using Design Sprints. Design Sprint activities will include daily scrum meetings, design meetings, user story grooming, and other activities that will feed backlog tasking for subsequent development sprints. These activities are shown in *Error! Reference source not found.*, below.

16: Design Sprint Activities

Our implementation team will use these requirements to determine the best COTS capability to configure. These decomposed requirements will take the form of User



Stories and Acceptance Criteria and will be documented in each feature Functional Design Document for each capability (or feature) in PeopleSoft that will be designed. The user stories and acceptance criteria will include a traceability mapping to the higher-level requirements provided by the State. These user stories will be provided to the State in periodic releases for review and acceptance. We will also provide a summary traceability document.

The design sprint team will include members from the implementation team and the State. The State will name a product owner and requirements SMEs, and we will provide design team members including product managers and solution architects. This team will be responsible for documenting designs and adding development tasks to the Development Sprint backlog lists.

The outputs of the design sprints will include user stories, feature identification, and a design documented in Business Process Models and an initial version of the Software Design Document. The outputs of the design process are described below.

#### ▶ USER STORIES & ACCEPTANCE CRITERIA

- ► AS A... I WANT TO... SO THAT
- Maps to Operational Activities
- ► Defines User Access Roles

#### ► FEATURE IDENTIFICATION

- ▶ PS COTS based closest matching capabilities
- · Sprint unit of release

#### Business Process Maps (BPM)

- Maps to A/B/C/D Requirements
- Identifies manual tasks and data quality assurance requirements

#### SPRINT BACKLOG TASKS

- User stories and features from BPM
- Tasks representing PS capabilities

#### ▶ CONFERENCE ROOM PILOTS

- Iterative demonstration of functionality
- Slide deck, BPM & other preparatory materials
- GoToMeeting recording of demonstrations
- CRM Comment Resolution Matrix to capture feedback

As an output of the design Sprints, the implementation team will conduct CRPs explaining the functions, configurations, and other design details to functional SMEs designated by the State. These will be conducted either in person or through virtual presentation of designed functionality in PeopleSoft in the form of mockups, live demonstrations, and walkthroughs of the Software Design Document and Business Process Model. Feedback will be collected from the CRPs and documented in a comment resolution matrix (CRM) which will be used to add tasks to the development sprint backlog lists.

Our team will leverage COTS products or business process reengineering to the maximum extent practicable before recommending customizations. During the design process, if it is determined a customization may be advantageous to the State, the implementation team will assist the Product Owner in creating a customization request form containing impact analysis and criteria needed for a State decision on whether to develop the customization.

Our team will also define a software development approach in the Software Development Plan (SDP) that will contain a methodology for delivering customizations and configurations and related documentation.

The Team intends to use a scaled agile methodology to deliver design and development of this system as much as possible. The advantage of using an agile methodology is to provide continuous feedback mechanisms for stakeholders and SMEs to influence the design of the system throughout the software lifecycle process. This methodology has proven useful when there are potential gaps in detailed requirements and a quick delivery is required. The table below, lists the





various feedback mechanisms that our team will leverage through our agile methodology.

Feedback Mechanism	Purpose	Facilitator	Participant s	Cadence, Duration	Outputs
User Story Grooming	Refine requirements into user stories & acceptance criteria	Product Manager	PDM, SA, PDO	Ad hoc	User Stories, Acceptan ce Criteria
Release Planning	Order backlog, Plan release schedule and coordinate backlog user stories across all themes. Confirm high level design with product owner.	Agile PM / Release Manager	PM / RM, PDM, PDO	Every 2 weeks	Backlog updates and ordering
Conference Room Pilots	Discussion and mock-ups of proposed designs to capture feedback from stakeholders and additional requirements	Solution Architect	PDM, SA, PDO Stakeholder s, SM	Every 2 weeks	Slide deck of presentati on, Recording of CRP, Feedback CRM document
Sprint Planning / Pointing	Identify tasks to be completed in sprint. Point the tasks by complexity	Scrum Master	Sprint Team, Product Owner	Every 2 weeks	Sprint backlog tasks & points
Scrum	Daily standup of team to gain their commitment and accountability for tasks	Scrum Master	Sprint Team	Daily, 15'	Daily task assignme nts, List of blockers
Scrum of Scrums	Resolve blockers, Identify & work cross-sprint dependencies & issues	Agile PM / Release Manager	All SMs, RM, PM, PDM, Config. Manager	Weekly, 30-45'	Issues, Risks

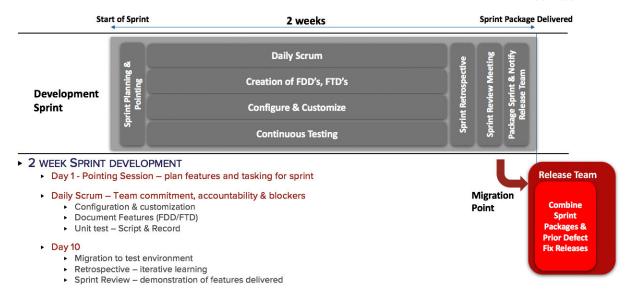


Feedback Mechanism	Purpose	Facilitator	Participant s	Cadence, Duration	Outputs
Retrospective	Post-mortem review of sprint	Scrum Master	Sprint Team	Every 2 weeks	List of recomme nded changes to sprints
Sprint Review	Review and demonstrate functionality delivered in sprint	Scrum Master	Stakeholder s, Product Owner, Sprint Team, PDM, SA, Sprint Team	Every 2 weeks	Recording of demo, Slide deck, CRM for feedback
Defect Review	Status, prioritize, assign, and schedule defects from release testing team	Testing Manager	Release Team, Sprint Team	Daily	Bugs logged in Jira
Release Review	Review all contents of release, ensure all materials are completed and gain approvals from PDM, TM, SM and PM	Release Manager / Agile PM	PDM, CDM, Scrum Masters, PM, Testing Manager, RM	Every 2 weeks	SVD, Approvals of document s and code for release

The development will be accomplished utilizing multiple sprint teams working in 2-week development sprints. The activities in these sprints are below.







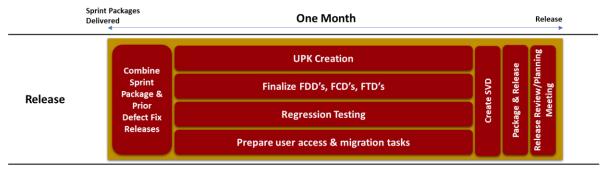
17: Sprint Development Activities

The development sprint team will include members of the implementation team and SME(s) designated by the State. Our team will provide development team members including analysts and developers. These teams will be responsible for developing configurations and customizations from the backlog list.

The outputs from the development sprints will be initial versions of Functional Design Documents, Foundational Testing Documents, and software objects. Since there will be outputs from multiple simultaneous sprints, these outputs will be combined into an initial release package and migrated into a release testing environment for development testing which will include validation of acceptance criteria, testing of integrated functionality and regression testing. Additionally, during this 2-week Release Sprint, all documentation will be refined into finalized deliverables. The activities of the release sprints and sprint participants are outlined below.







- Packaging of sprint releases
  - Combine all sprint releases
  - Include defect fixes & any hot fixes already delivered
  - Delivered on Wednesday COB
- Testing
  - Functional testing of test cases in FDD
  - Regression Testing

- · Artifacts delivered every release
  - PS objects, scripts & data files
  - ▶ BPM Business Process Models
  - FDD, FCD, FID Functional Design/Conversion/Integration Documents
  - ► FTD Foundation Table Designs
  - SVD Software Version Description
  - Installation Instructions, summary lists and other supporting documents
  - ▶ UPK -- Training materials and User Guides
  - Unit test scripts (manual & automated)

18: Release Activities - Sprint Hardening

# 4. Testing and Training

Our implementation test team provides high quality management and testing services and will ensure the overall software and documentation delivered to the State have been adequately tested and meets quality and compliance standards. Our test team constantly works on improving quality and leveraging best practices and testing standards throughout delivery.

We will develop a Software Test Plan (STP) that defines the strategy and coverage of testing performed during sprints and the overall release prior to the delivery to the State. This STP will explain the testing purpose, scope, test approach, test coverage, testing phases, entry-exit criteria, defects management process, testing tools and environments.

Our implementation team will utilize agile and scrum methodologies to design, develop, test, and deliver software to the State using the design and development sprint cycles. The test team will be integrated within the scrum teams and will deliver test cases, test execution results in accordance with the Software Test Report for each feature developed in every sprint. Test Execution results reports will consist of a summary of the test results, open and deferred defects, and the features in every sprint.

As part of this effort, we will develop a Requirements Traceability Matrix (RTM) to cover the traceability between test cases, acceptance criteria defined in user stories for the requirements provided by the State. This RTM will ensure the tests conducted cover all requirements to be tested and will also define the method of testing performed for testable and non-testable requirements. We will use a test tracking tool that documents and tracks the test cases, test execution during sprints, and the issues found during testing. Test cases would cover the pre-requisite conditions as well as pass and fail criteria.



Our implementation team will conduct unit testing (development testing) during sprint cycles and regression testing during and between sprints to ensure, as the software is being developed, it would not inadvertently introduce new issues. We will use JIRA for requirements tracking, maintaining the test case repository, and building a regression suite of test cases. Our team will automate the regression suite and conduct automated regression tests during sprint cycles, using either a PeopleSoft Test Framework (PTF) or another approved tool that is compatible with the PeopleSoft application.

The implementation team will submit, for all software developed under this contract, deliverables to support training personnel on those features and components. These materials will describe the business processes that are suggested to leverage the software as well as guidance for end users. Where possible, training will be delivered through the PeopleSoft User Productivity Kit capability and Oracle's training capacity through Oracle University. Training will also take the form of Business Process Models, Software Design Document, and delivered Training Documentation.

Our implementation team has used the delivered Oracle/PeopleSoft software product UPK to develop easy-to-use and comprehensive end user training content on similar projects. UPKs have the following features and benefits:

8088 5000	****
Features and Benefits	Descriptions
Increase Productivity	<ul> <li>Drive higher user effectiveness by disseminating critical process knowledge through multiple learning methods</li> <li>Increase knowledge retention and achieve faster time to competency with conceptual-based assessments</li> <li>Live, in-application support increases user competency, reduces onboarding and help desk support costs</li> </ul>
Streamline Upgrade/Implementation and Reduce Costs	Maximize alignment of RRP/RFP software products with Navy business processes through collaboration of current and future state business processes as well as best practices     Jumpstart projects using "Getting Started" content as well as pre-built content for Oracle/PeopleSoft applications     Reduce content development time and costs by 40% with single source authoring
Reduce Project Timelines	<ul> <li>Improve communication, enforce participation, and gain buy-in of best practices</li> <li>Save hundreds of hours with greater visibility into the process and early access to solutions</li> <li>Create paradigm shift by eliminating countless hours writing and reading project assets to recording and hearing</li> </ul>



Features and Benefits	Descriptions
Manage Change and Minimize Risk	Embed new system processes in everyday behaviour to effectively train new hires or new users
	Enable user community to embrace change through engagement early in the project
	Document key process information

# 5. Deployment and Go-Live Support

Deployment and Go-Live Support will be provided by the implementation team for a specified period to stabilize the system after each Phase and minimize the impact of any early system issues. Our support team will closely monitor the newly deployed system and user activity; assign appropriate resources to resolve issues; rapidly detect and escalate issues as required; and quickly resolve and communicate resolution. Production support issues will be triaged and treated based on priority. Our team will provide availability and usability metrics for all aspects of the system that is developed. All existing defects will be reviewed prior to Go-Live and any categorized as Severity 1 or 2 will be addressed and retested before deployment. Due to the regular involvement of the State throughout our agile development process the likelihood of significant deployment issues is reduced. As opposed to a waterfall project where a plan is produced early on and then nothing is seen or heard by the customer for months or years, our progress will be obvious throughout. Biweekly releases also reduces the risk of major issues at the end of a yearlong development process for each phase of this project.

#### 6. Warranty Services

The implementation team will repair defects that are discovered within twelve months of a system component or enhancement being accepted by the State in the production environment at no additional cost to the State. A root cause analysis will be performed to determine if the problem is caused by configured or customized COTS software or hardware component not meeting requirements or a defect in the configuration or code created by the implementation team. If this is the case, full correction of the system defect will be performed, and the corrected code will be appropriately tested to verify that no regression errors are introduced. Our team will also provide monthly reports detailing any warranty work.





# 6 - Business Solution – On Going Services

# Please Refer to Appendix E and Appendix F.

Managed Services provides end to end services to support your end-to-end lifecycle services with a complete portfolio of managed application services for administering, managing, and maintaining your Oracle applications and technology.

# **Application Managed Services (AMS)**

- SLA driven lifecycle management including application-level targets
- Reduced vulnerability and enhanced security through best-in-class base security services
- Easy journey to cloud with cloud transition services and new lift and shift tooling
- Lower total cost of ownership through expert support 24x7 from a global delivery team
- Choice of Extended Services (Functional Services, Managed Security Services)
- Key transaction monitoring ties delivery quality to business process execution



19: Application Management Services

Managed Services on Oracle Cloud Infrastructure consists of the following Please see the *Oracle Managed Cloud Services Service Descriptions for the details of your services*.

- Security management for Oracle Programs and Co-Resident Third Party Software
- Access management consisting of management of Applications
   Administrator privileges, and access to the operating system and database
- Change management consisting of (a) installation and/or configuration of Oracle Programs; (b) software patches which repair or modify existing functionality or maintain currency alignment with legislative requirements; and (c) Co-resident Third-Party Software, CEMLIs, operating system printer queues and data fixes
- Configuration management
- Release management consisting of planning of deployment of updates to the Oracle Programs that are intended to improve performance, security, availability, stability, manageability or regulatory compliance



- Incident and Problem Management consisting of response and resolution of individual incidents, associated Service Request (SR) tracking, problem identification, and Root Cause Analysis
- Service monitoring
- Service level and availability management including the following:
  - Service Level Target. The level of performance under the applicable Service Level that Oracle endeavors to achieve on a monthly basis
  - Credit Criteria. If the monthly performance measured for a Service Level is below the Service Level Target, then the credit criteria are used to determine the applicable Service Level Credit
  - Service Level Credit %. The percentage of monthly recurring fees to be paid based on the credit criteria

# Managed Applications Service Levels:

Oracle is committed to providing our Cloud Services customers a top-quality cloud service, backed by solid service levels. Oracle's base service levels reflect the industry-standard metrics by which Oracle's service to you can be measured.

- Application Availability: Oracle's service level commitments feature
  application availability, that is, the percentage of time when the Oracle
  application is available for use by your employees. The application is intended
  to be available on a 24x7 basis with certain exclusions, such as periodic
  maintenance.
- Resolution Time: Oracle's service level commitments also feature a
  resolution close time, which is the length of time it takes to resolve and close
  a Severity 1 Service Request, or to create a work-around that allows the
  Service Request to be downgraded to a lower level of impact. This
  commitment applies only to the most important outages, and it excludes
  outages involving customizations or bug fixes to the base application code.
- Performance against Statement of Work service level allows customers to receive a credit if Oracle fails to perform the services in accordance with the Advanced Customer Services specifications in the schedules.

Service Level	Service Level Target	Credit Criteria	Credit %
High Complexity Application Availability	99.7%	>= 99.0% and < 99.7%	2%
		< 99.0%	5%



Service Level	Service Level Target	Credit Criteria	Credit %
Low Complexity and Minimum Complexity Application Availability	99.5%	>= 99.0% and < 99.5%	2%
Approacion / trained may		< 99.0%	5%
Service Request Resolution Time Severity Level 1	<ul> <li>4 hours         (Unplanned         Outage caused         by Infrastructure         and/or         component)</li> <li>24 hours (Service         Interruption         (functional         failure))</li> </ul>	90% of SRs resolved within target	3%
Service Request Resolution Time Severity Level 2	96 hours	90% of SRs resolved within target	2%
Performance Against Delivery Policies	Performance of Managed Cloud Services in accordance with the Oracle Managed Cloud Service Delivery Policies for Oracle Public Cloud	As described in tapplicable sched	20 (20 (C)

Oracle believes these service levels will deliver exceptionally reliable service to you. ACS has high standard service levels for our managed services and commits to helping you reduce your closure time issues.

# Backup, Refresh and Disaster Recovery

Oracle will make operation backups regularly to support the management of the system. For the Services, Oracle will:

- 1. Configure the Services for automated backup, including configuration of OCI components.
- 2. Assist You to recover database and application functionality from backups as required.

Backups typically include:

Database and code tree





- Daily backups retained for one week
- Semiweekly backups retained for four weeks
- Archive logs
  - Daily backups retained for one day
  - Semiweekly backups retained for four weeks

Refreshes are provided once per month of data from the Production Environment

Enhanced Recovery Services include RPO of 1 hour (24 hours for Oracle Hyperion or OBIEE with Essbase) and 12 hour RTP (24 hours for Oracle Hyperion or OBIEE with Essbase). Oracle will work with you to create your Disaster Recovery Plan (DRP) for these services and will test the plan with you annually. After remediation the plan documentation will be updated.

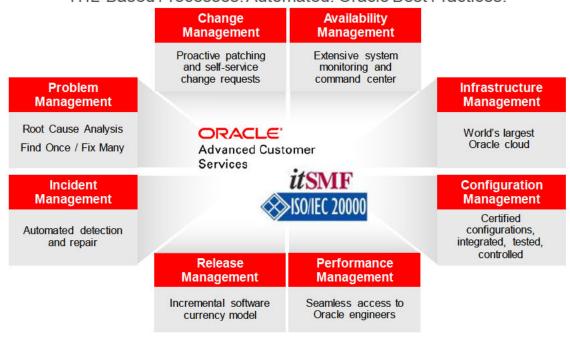
#### Standards & Best Practices

One of Oracle's key differentiators is that we utilize a standards-based lifecycle throughout our organization. This allows our customers to benefit from repeatable processes, a healthy environment, and proactive issue resolution.

No one understands Oracle's Enterprise application technology better than Oracle; and no one implements, upgrades, hosts and manages these applications better than Oracle. ACS operations delivers consistent, repeatable, high quality services based on Information Technology Infrastructure Library (ITIL) industry best practices and standards—optimized software management processes, efficient process automation, deployed on Oracle's available, scalable grid computing architecture.

# **Advanced Customer Services Delivery Excellence**

ITIL-Based Processes. Automated. Oracle Best Practices.



20: ACS ITIL Based Services

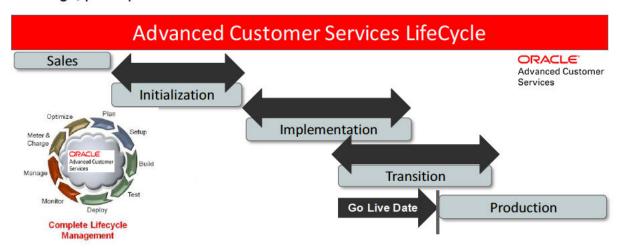




# **ACS Lifecycle**

Advanced Customer Services' strongest approach to standardization and risk management lies within the Oracle services lifecycle --- a standardized process that begins with the engagement of a customer during the Sales Phase and continues into the Production Phase. The purpose of the lifecycle is to provide a framework with repeatable, scalable, and predictable processes that facilitate the efficient implementation of Oracle Cloud Services.

Lifecycle Milestones consists of well-defined milestones within each phase of the services lifecycle. Each milestone has entry and exit criteria, and follow-on milestones cannot be undertaken until the exit criteria from the previous milestone are met. Included in the milestone definitions are the recommended documentation, meetings, participants and deliverables.



21: Lifecycle Services

#### **Production Assessment**

One of the most important activities within this lifecycle is the "Production Assessment," a standard testing methodology that consists of a series of configuration, supportability, and performance checklists. Oracle requires the completion of the production assessment and the completion of all required actions that have been identified during the production assessment before a system is granted Production Ready (PR) status. The primary purpose of the production assessment is to confirm that the customers' systems environments are compliant with Oracle standards prior to commencing production operations (or "going live"). Through this assessment, Oracle may identify and fix key issues that may have a negative impact on the system during transition to production or on performance once in production. Standards compliance is the foundation of the Oracle operations strategy for delivering consistent service levels to customers. Consequently, the production assessment process is rigorously enforced for all customers.





# Production Assessment (PA) - Compliance Areas & Goals

Compliance Area	PA Objective
	Validate key configuration parameters in the OS, tech stack, support infrastructure and network against predefined values.
Configuration And	Validate key static setup parameters and patch levels for implemented Application modules.
Supportability	Validate back ups, restores, and refreshes are properly scheduled. Ensure that system monitoring is enabled.
	Confirm that the above run properly.
Functionality	Confirm basic functionality of major system components (e.g. Network) trough tests and test plan reviews.
Performance	Review the anticipated performance characterizations of all customizations.

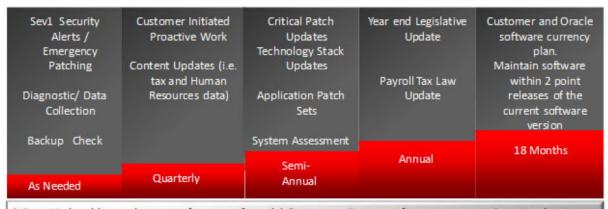
22: Production Assessment

#### **Periodic Maintenance Plan**

The Cloud Services Periodic Maintenance Plan (PMP) is a periodic and proactive approach for performing maintenance on all hosted customer environments. The PMP's primary purpose is to maximize the stability and supportability of customer systems. The PMP is a necessary component in the successful completion of the production lifecycle phase and also for the ongoing operation and upgrade of the environment. PMP's are conducted periodically and serve as a best practice to ensure that the services environment continues to function at maximum capability.

# Service Delivery Periodic Maintenance Plan

The PMP is a Proactive Approach for performing maintenance on all managed environments



Proactively addresses known performance & availability issues - Ensures software currency - Capacity planning Ensures supported versions - Predictive maintenance windows
 52 week plan (Month End Code Freeze, CPU, Refreshes)

23: Periodic Maintenance Plan

# A PMP schedule may consist of:

- Weekly
  - Mandatory or emergency patching





- Quarterly
  - Legislative updates
- Annual
  - Critical Patch Updates
  - Technology Stack updates
  - Application patch sets that do not affect functionality
  - Implementation of system assessment recommendations

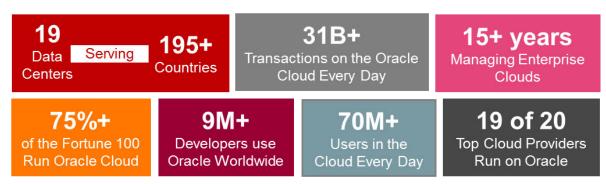
#### **Customization Framework**

While most organizations strive to use base application functionality, Oracle understands that our customers may need to customize the Oracle applications to meet their unique business needs. To help minimize issues and risks regarding Configurations, Extensions, Modifications, Localizations, and Integrations (CEMLI), ACS has developed a set of CEMLI coding standards, and a customization framework for ease of CEMLI management.

ACS segregates customizations from Oracle software through a customization framework. This separation results in faster and more consistent upgrades, better isolation of performance issues, and better change management. We view customization as a critical part of system management and have engineered assessments and processes to control them.

# Managed Security in the PaaS/laaS Deployment

Backed by 19 worldwide data centers, an army of Oracle-badged cloud security experts, and around-the-clock monitoring and support, qualified Oracle experts look after the security of your data. Secure data isolation and unified access controls backed by the leader in cloud security mean you can rest easy when your public cloud is Oracle Cloud.



24: Security Qualifications

Oracle understands that security is of critical importance to customers and has invested significantly to support their needs. Oracle has world-class security and best practice regulatory compliance. Data is protected by the latest Oracle products for data privacy, while protecting against unwanted threats from both within and





outside the enterprise. Security processes and technology are infused into the Oracle Cloud Services delivery model. Oracle Cloud Infrastructure's security approach is based on seven core pillars. Each pillar has multiple solutions designed to maximize the security and compliance of the platform.

- **Customer Isolation:** Allow customers to deploy their application and data assets in an environment that commits full isolation from other tenants and Oracle's staff.
- Data Encryption: Protect customer data at-rest and in-transit in a way that allows customers to meet their security and compliance requirements with respect to cryptographic algorithms and key management.
- Security Controls: Offer customers effective and easy-to-use security
  management solutions that allow them to constrain access to their services
  and segregate operational responsibilities to reduce risk associated with
  malicious and accidental user actions.
- **Visibility:** Offer customers comprehensive log data and security analytics that they can use to audit and monitor actions on their resources, allowing them to meet their audit requirements and reduce security and operational risk.
- **Secure Hybrid Cloud:** Enable customers to use their existing security assets, such as user accounts and policies, as well as third-party security solutions, when accessing their cloud resources and securing their data and application assets in the cloud.
- **High Availability:** Offer fault-independent data centers that enable high availability scale-out architectures and are resilient against network attacks, ensuring constant uptime in the face of disaster and security attack.
- Verifiably Secure Infrastructure: Follow rigorous processes and use
  effective security controls in all phases of cloud service development and
  operation. Demonstrate adherence to Oracle's strict security standards
  through third-party audits, certifications, and attestations. Help customers
  demonstrate compliance readiness to internal security and compliance teams,
  their customers, auditors, and regulators.

Additionally, Oracle employs some of the world's foremost security experts in information, database, application, infrastructure, and network security. By using Oracle Cloud Infrastructure, our customers directly benefit from Oracle's deep expertise and continuous investments in security.

Integral to Oracle services, based on deployment model is:

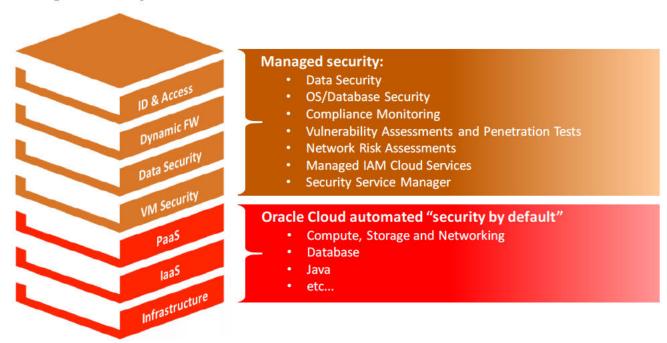
- Physical data center security
- Customer network isolation and segmentation
- Encryption of data in transit
- Segregation of duty
- Least Privilege, granular access
- Incident Response





Audit/Compliance Reports (SOC, ISO, etc.)

# Managed Security Services for Oracle laaS and PaaS



25: Security in the Stack

# Managed Security Services (MSS) for Cloud Deployments

For customers with regulatory or industry requirements that exceed the integral services protection Oracle offers Managed Security Services (MSS) such as scanning, reporting, encryption, auditing, and masking services to enhance security at all layers of the technology stack (additional fees apply).

- Vulnerability Assessment Services Quarterly or monthly Internal and External Vulnerability Assessment services. Customer is provided with the raw scan report, technical, and executive summary reports.
- Penetration Testing Service Application and Network Penetration Test performed by Oracle ethical hacking team. Detailed test report is provided.
- Database Security Risk Assessment In-depth security assessment of the Oracle database, including a risk based report of findings, remediation recommendations.
- Database Encryption Service Encrypt customer's sensitive data in the Oracle database (\* laaS only); secure key management, reporting, and monitoring. \* Oracle ASO TDE
- Database Vault Service Design, implement and manage database vault to restrict access to customer's data. Oracle Database Vault
- Data Masking Service Design, implement and manage data obfuscation service. Oracle EM Data Masking Pack
- Database Auditing Service Design and implement database security monitoring, provide service reports. Oracle Audit Vault



- **Web Application Firewall** Design, implement, manage, and monitor Web Application Firewall service for Customer's Internet facing applications.
- Oracle Identity Cloud Service "White Glove" management of Oracle Identity Cloud Service to securely provision the users of applications based on their on-premises identities across clouds.
- Oracle Cloud Access Security Broker (CASB) Management of the Oracle CASB cloud enforces security policies and extends user entitlements to the cloud. It builds a baseline of normal, white-listed activities, and then sends alerts when a system or user defies accepted usage patterns

#### SOC 1 and SOC2 - SSAE 16

Oracle uses the independently audited SOC assertions to demonstrate, in part, the compliance of internal controls with requirements for regulatory compliance. Security controls are implemented as described in the SOC reports.

This certification offers a layer of confidence, in addition to the best practices, that Oracle is working to manage and minimize risk, create and run controlled and standardized operations and offer consistent operational output for all Cloud Services customers.

The SSAE 16 SOC1 and SOC2 reports are available to customers upon request.

For certification please see: <a href="https://www.oracle.com/cloud/cloud-infrastructure-compliance/">https://www.oracle.com/cloud/cloud-infrastructure-compliance/</a>

# **Monitoring and Transparency**

Understanding the current state of the entire customer environment is key to both preventing problems before they occur and responding to issues when they arise. Oracle provides predictive 24 x 365 remote monitoring & restoration services, leveraging proprietary Oracle technologies and providing coverage for complex Oracle products, hardware and third-party systems. These service elements provide consistent uptime, proactive notification of potential issues and drive remote incident resolution. They are globally scaled services utilizing mature, ITIL-based, processes, deep technological expertise and globally pooled knowledge.

# **Cloud Automation Platform (CAP)**

The Cloud Automation Platform is a proprietary tool developed by Cloud Services that drives delivery transparency and forms a platform for innovation. End-to-end lifecycle management is a key differentiator as it relies on incisive real-time and historical analytics of services and environments. The Cloud Automation Platform infrastructure and tools combine to provide best of breed analytics generation and reporting.

CAP increases visibility into the lifecycle of the customer and provides content in a way that is meaningful, actionable, and timely based on the context of the user's role. Customers have access to self-service functionality to drive automation and real-time analytics that support business decisions and enhance the capabilities of the solutions we manage for them. This is accomplished through composite applications / "Mash up's" delivered through a traditional web browser as well as





mobile devices like the iPad and smartphones that provide our customers and staff with a single, holistic user experience for all interaction with Cloud Services.

What is my overall service experience?



26: Cloud Metrics in the Portal

# Single Pane of Glass

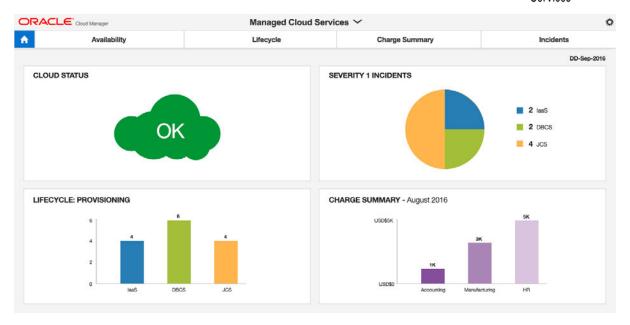
Oracle® Pulse is available for Oracle Cloud and Cloud at Customer deployments. Only Oracle gives you a combined view across your Oracle services in one place. The single pane-of-glass, Oracle Pulse, provides a high-level health overview, where a job status can be quickly and easily interrogated, from a service perspective to the exacting job specifics when required. Available anytime, anywhere, the analyst can confidently monitor the overall health of the system at all times.

With Oracle® Pulse customers get access to:

- Service usage entitlements vs. consumption
- Business transaction monitoring results
- Custom reports with key performance indicators
- Recommendations for changes to their environment
- Incidents and changes
- Self-service refreshes and system restarts

Customers can use Oracle® Pulse, with their My Oracle Support (MOS) user name and password, from their desktop or take it on the go as it is available for download in the App Store for iOS devices.





27: Managed Services Metrics in the Portal

Oracle Cloud customers can truly take the pulse of their business with insight and a greater sense of control over their services and environments extending the data transparency capabilities of the Oracle Cloud Automation Platform (CAP) monitoring with a complete, interactive view of their services.

Download Oracle Pulse from the Apple iStore to your iPad or access Oracle Pulse on your desktop or mobile device using this Web link: https://docs.oracle.com/cd/E52702\_01/index.htm.



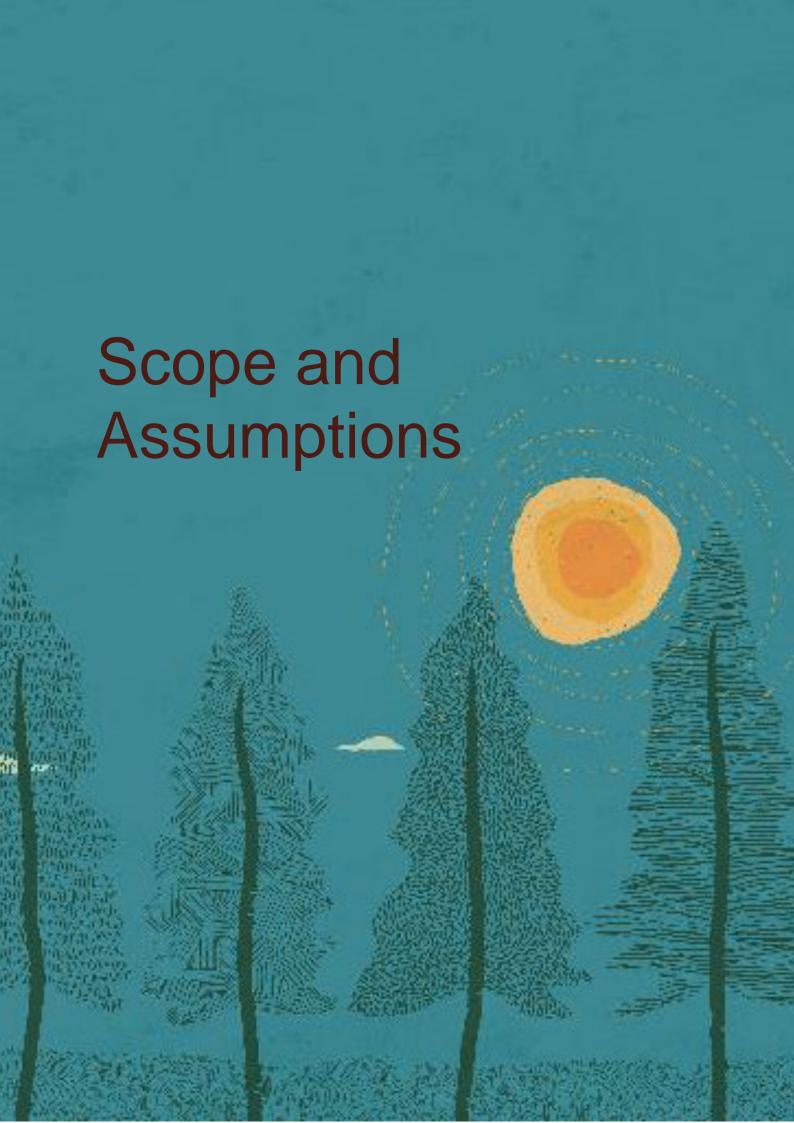


## 7 - Price

## Oracle has completed the Appendix L Cost Workbook.

The pricing in Appendix L Cost Workbook is based on the following scope and assumptions section of this document.







# **Scope and Assumptions**

The pricing in Workbook L is based on the following assumptions.

## **Implementation Assumptions**

## Implementation Services

- The Team assumes core implementation will take 14 months (2,194 hours per FTE)
- The Team assumes expansion implementation will take 12 months (1,880 hours per FTE)
- The Team assumes optional implementation will take 6 months (940 hours per FTE)
- The Team's core implementation is based off of 27 FTEs
- The Team's expansion implementation is based off of 30 FTEs
- The Team's optional implementation is based off of 19 FTEs

### State Assumptions

- Assume the State will have subject matter experts (SMEs) available during each
  Phase's Requirements Review & Fit Gap and User Story Design & Backlog
  Grooming waves. The SMEs should have deep knowledge and understanding of
  current State processes related to the financial business areas being worked in
  that Phase, for example in Core Phase will need a SME with State General
  Ledger expertise. The knowledge of these resources will be critical in further
  breaking down requirements and then creating and validating User Stories that
  will be applied in the new system.
- Assume the State will provide a Product Owner and make them available for each financial business area being worked in a Phase. It will be very important for the Product Owner to review and approve User Story designs for the new system, participate in development reviews, and approve of configuration and development of the new system if satisfactory after each sprint.

## **Run and maintain Assumptions**

Service Components	Entitlement
Applications Unlimited Managed Service with Disaster Recovery Remote Delivery	PeopleSoft  1 hour RPO / 12 hour RTO Annual Testing



Service Components	Entitlement
	Environments - Prod, Prod Support, Demo - plus 7 non prods
Refreshes	Once per month
SLA	99.7% Availability
Cloud	Universal Cloud Credits sized to support the deployment
Patching - Weekly Patching - Quarterly Patching - Semi-Annual	Legislative Updates
Annual Cloud Services Units	2,500
Delivery	Remote
Security Services	Data Masking
Security Services	Database Encryption
Security Services	Database Audit Service
Security Services	Database Vault Service
Security Services	Penetration Testing
Security Services	Vulnerability Scanning / 4 times per year
Security Services	File Integrity Monitoring
Managed Identity Cloud Services w/DR	2 environments - Prod and Prod Support 1 hour RPO / 12 hour RTO Annual Testing
Managed Analytics Cloud Service	99.5% Availability





Service Components	Entitlement
Account and Service Reviews	Monthly
Operational Reporting	Weekly
Helpdesk for Applications Unlimited	24x7 Service
Critical business processes	20 processes covered, additional with CSUs
Extensions / Integrations covered	200
Ticketing System	My Oracle Support
Language	English
Initiation Phase	2 Month
<b>Annual Cloud Services Units</b>	500

## **Commercial Assumptions**

### **Commercial Assumptions**

- In the best interest of the State, the Team is proposing two (2) contracts, one
  with Na Ali'i and one with Oracle. This model offers pricing efficiencies for
  each company and keeps costs down to the State. We are committed to
  delivering as partners with a cohesive solution.
- This Request for Proposal response is for budgetary purposes and is nonbinding. Oracle will work with the State to conduct a detailed Discovery and prepare a final price estimate and scope of services.
- Oracle has assumed metric counts based on the information provided to them at this time. Any change to scope, service components or software environments, final project plan or time frame may result in a change to the fees.
- Travel Expenses have not been included and will be invoiced at standard state per diem rates.
- Is subject to Oracle Corporation internal governance and management approval process



## **Commercial Assumptions**

#### Licenses

- Standard disclosure agreement
  - Pricing provided is a budgetary quote. HI DAGS must confirm Operating Budget for accurate pricing.
    - "All numbers are for budgetary purposes only until Oracle Ordering Document Signature. Prices subject to Approval by Oracle Senior Management."
- Expansion clause language
  - HI DAGS will need to purchase additional licenses and support to cover any additional growth in Operating Budget. Costs are explained in a separate table.
  - You acknowledge and agree that the rights granted herein shall only be applicable for the end user specified herein. You shall ensure that the order between you and the end user includes the following terms:
    - a. If you exceed the licensed quantity you must order the Programs (and first year Software License Update & Support for the Programs) at the appropriate license and support fees specified on the attached Expansion Exhibit A. The number of additional Program licenses to be ordered shall be equal to the actual dollar amount of Enterprise \$M in Operating Budget as of the date of the expansion order less the total number of licensed quantity (under this order or other orders) rounded up to the next increment on the attached Expansion Exhibit A.
    - b. Oracle has no delivery obligation for Program licenses ordered pursuant to this section.
    - c. The license definitions and program specific terms applicable to this order will apply to Program licenses ordered pursuant to this section."

## **Cloud Service Units**

Customers have a simple way to add services through the Cloud Services Unit (CSU).

Flexible Support Consumption with Cloud Services for Applications Unlimited or Helpdesk Support is through the Oracle Cloud Service Unit (CSU). It is a common unit for service execution by the Managed Cloud Services team for service options.

CSUs allow for quick contracting, easier budgeting with a pre-defined service catalog, and transparent request execution tracking and unit consumption reporting.





Below is a sample of how the CSUs are utilized by the customer.

## Cloud Service Units (CSU)

The Oracle Cloud Service Unit service options ranging from Apps DBA support during implementation through extra backups and help desk services.

### Cloud Service Units apply to a variety of services and samples are in the table:

Example Service Request Type/Effort Level	Example Activities included by Type Category	Example CSUs per Type
Applications: Type 1/ Low	Simple refresh, additional legislative data update	1
Applications: Type 2/ Moderate	Complex refresh, SIT assistance, manual code promotion	5
PaaS: Type 1/ Low	Simple refresh	1
PaaS: Type 2/ Moderate	Complex refresh, DB security assessment, add'l DR test	5
PaaS: Type 3/ Complex	Custom code testing support	20

Please review this link for an overview of the benefits of CSUs.

### https://www.oracle.com/assets/cloud-service-units-ds-4308460.pdf.

Oracle Cloud Service Units (CSUs) may be used to obtain a wide variety of Managed Cloud Services as described in the Oracle Cloud Service Unit Catalog which may be viewed at available at https://support.oracle.com by searching on Document ID 784630.1.

## **Example CSU Consumption Flow**



28: CSU Consumption





## **Service Descriptions**

The following documents will be included in your contract for the proposed solution.

Service Descriptions for ACS Managed Cloud Services and Oracle Cloud Infrastructure

Oracle ACS Managed Cloud Services Delivery Policies is here:

- Oracle Managed Cloud Services Service Descriptions
- Oracle Cloud Service Unit Catalog which may be viewed at https://support.oracle.com by searching on Document ID 780129.5

Oracle Cloud Hosting and Delivery Policies is here:

Oracle Cloud Hosting and Delivery Policies

Oracle PaaS and laaS Policies is here:

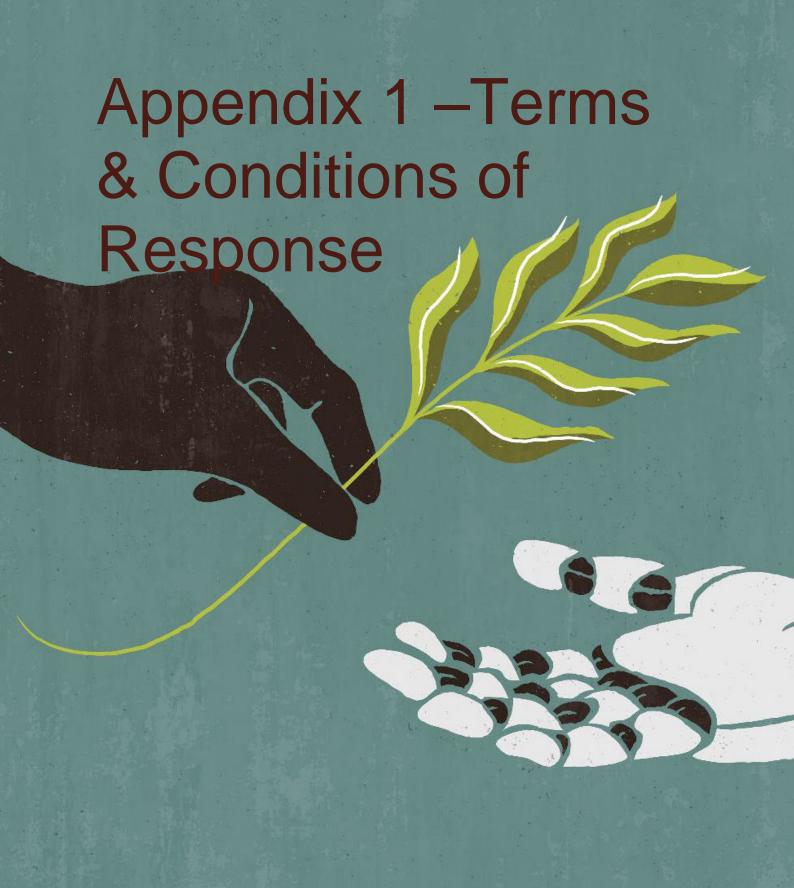
• Oracle PaaS/laaS Public Cloud Services Pillar Document

Oracle PaaS and laaS Service Descriptions is here:

 Oracle Platform as a Service (PaaS) and Infrastructure as a Service (laaS) (Tech Cloud) - Service Descriptions

Contracts for Oracle Cloud Services are located here: http://www.oracle.com/contracts







# **Terms & Conditions of Response**

Oracle America, Inc. ("Oracle") is pleased to have the opportunity to provide The State of Hawaii Department of Accounting ("you") with a response to the **Request for Proposals** "Solicitation # RFP-ERP-2020 An Enterprise Financial Solution", released November 16, 2020 ("the proposal").

The proposal is subject to the following general terms and conditions:

The proposal is provided to you as confidential information and must be held in strict confidence. Your use of the information in the proposal shall be limited to your use solely in connection with evaluating the proposal. You may however share the proposal with your external advisors on condition that the use remains limited to said purpose and subject to such advisors' confidential treatment of the proposal. You do not acquire any intellectual property rights in Oracle property under the proposal and you agree to comply with all applicable export control laws and regulations to ensure that no information is used or exported in violation of such laws and regulations. If you do not agree with these terms you are requested not to open the proposal and return it to Oracle as soon as possible.

The proposal is based upon information that you have provided to Oracle and is intended for your evaluation purposes only. It is not for execution or incorporation into a contract that may result between you and Oracle. Neither you nor Oracle shall be obligated in any way until such time as we have agreed upon the terms and conditions and executed a final agreement.

Any Oracle technical support services, consulting services, software as a service or other services (collectively "services") will be provided in accordance with the existing Oracle Master Agreement, US-GMA-1301562, ("GMA"), as may be amended by you and Oracle following award of the contract to Oracle (the "agreement") and one or more Oracle ordering document(s). Accordingly, Oracle takes exception to any provisions or requirements, which purport to establish any other terms and conditions for the provision of the Oracle programs, hardware and/or services. The ordering document(s) will be governed by the terms and conditions of the agreement specified above. The agreement and the ordering document(s) shall exclusively govern the terms and conditions under which the proposed programs, hardware and/or services will be provided. The final agreement and ordering document(s) will be executed within thirty (30) days after notification of award, or such other reasonable time period as may be agreed by you and Oracle.

The prices set forth in the proposal are exclusive of any sales, value-added or other similar taxes imposed by applicable law that Oracle must pay based on the programs, hardware and/or services, except for taxes based on Oracle's income. The prices are also exclusive of shipping and media charges. Shipping terms will be as specified in the agreement/ordering document. Documentation is provided in the form/format which is commercially available/industry standard for all customers. All fees payable to Oracle are due within 30 days from the invoice date.

If the proposal includes programs, only those programs proposed in the proposal and included in a resultant contract shipment summary issued by Oracle in the applicable ordering document are available in production release on the computer hardware operating system combination(s) designated by you. Not all programs are available on all computer hardware/operating system combinations and Oracle is under no obligation to make available any program(s) or program/computer hardware/operating system combination except for the program(s) listed on a shipment summary issued by Oracle in an ordering document, executed by you and Oracle. You may not rely on any future availability of any program(s) or program/computer hardware/operating system combination in evaluating





Oracle's proposal or awarding a contract to Oracle. Furthermore, the future availability of any program(s) or program/computer hardware/operating system combination shall not affect your payment obligations under any resultant agreement or relevant ordering document(s).

Unless agreed otherwise at the time of contracting, any Oracle consulting services are proposed on a time and materials basis. In the event that you and Oracle agree in writing on a fixed price engagement, and any changes or modifications are requested to the consulting services described herein, the fees quoted in the proposal will be adjusted to reflect the changes or modifications.

The purchase of (a) hardware and/or related hardware support, (b) programs and/or related technical support, or (c) other services are all separate offers and separate from any other order for (i) hardware and/or related hardware support, (ii) programs and/or related technical support, or (iii) other services you may receive or have received from Oracle. You understand that you may purchase (x) hardware and/or related hardware support, (y) programs and/or related technical support, or (z) other services independently of any other product or service. Your obligation to pay for (i) hardware and/or related hardware support is not contingent on performance of any other service or delivery of programs, (ii) programs and/or related technical support is not contingent on delivery of hardware or performance of any other service, or (iii) other services is not contingent on delivery of hardware, delivery of programs or performance of any additional/other service.

No statement made by Oracle in the proposal shall be construed as a representation or warranty including, but not limited to, implied warranties of fitness for a particular purpose, satisfactory quality or merchantability, representations or warranties as to performance, product or service availability, or any other representation or warranty. Any such provisions shall be in accordance with the agreement and applicable ordering document(s) only.

Oracle contemplates that you will contract directly with third parties for any third party products or services desired by you. Oracle assumes no responsibility for systems integration work or responsibility to act in the capacity as a prime or general contractor with respect to any third party products provided or services set forth in the proposal. Oracle makes no warranty as to the performance or suitability of any such third party products or services.

Oracle's proposal is valid for 180 days from submission, unless otherwise mutually agreed in writing by you and Oracle.

In the event of any inconsistencies between the text in other sections of Oracle's proposal and the text of this general terms and conditions document, the text of this document best clarifies Oracle's position and shall govern Oracle's entire proposal.







**Appendix A-1 – Core Phase Requirements** RFP-ERP-2020

### Requirements Matrix | Instructions

This requirements matrix is comprised of multiple tabs, and together they contain the full set of requirements for which SOH requires vendor responses.

Please respond to each and every requirement (even ones that appear redundant) as follows:

- 1. Indicate your response to each line item with an "X" in the appropriate "One Response per Requirement" column, according to the following labels and definitions:
- Y = Yes, we meet this requirement out-of-the-box or with configuration capabilities provided within the software.
- C = We can meet this requirement via customization/extension-- i.e., for a SaaS solution, the functionality would be provided by building an extension using platform as a service (PaaS) capabilities provided either by the vendor or a third party. (If this column is indicated, please provide an indication of High, Medium, or Low development complexity in the "Customization Complexity" column. Costs of all extensions/customizations by process/functional area should also be noted separately in your Pricing Response.)
- 3 = We can meet this requirement by partnering with another third party solution. (If this column is indicated, please provide the name of the third party product in the "Comments" column.)
- F = We can meet this requirement with a future release of our software. (If this column is indicated, please provide the version and timing of the release in the "Comments" column.)
- N = No, we cannot meet this requirement.
- 2. For each line item, note the name of the module that will handle the required functionality in the "Module/Solution" column, so that SOH can align your module pricing to the requirements.

APPENDIX A-1 2 Instructions - 2 RFP-ERP-2020

Core Requirements	
Tab	Topic
General Ledger	Allocations
General Ledger	Budget Control
General Ledger	Budget Control Reporting
General Ledger	Chart of Accounts
General Ledger	Commitment Accounting
General Ledger	Funds Control Communication Control Communication Control Communication Control Contro
General Ledger General Ledger	General GL Calendar
General Ledger	GL Consolidation
General Ledger	GL Data Types
General Ledger	GL Reporting
General Ledger	GL Reporting: Year End Reports
General Ledger	GL Reporting: Year End Reports - CAFR
General Ledger	GL Structure
General Ledger	GL: Period End/ Year End
General Ledger General Ledger	Inquiries
General Ledger	Inter/Intracompany Journal Entry
General Ledger	Journal Entry/ Other GL Transactions
General Ledger	Multiple Ledger Structure
General Ledger	Other
General Ledger	Period End
General Ledger	Reconciliation
General Ledger	Trust and Agency Reporting
Encumbrances Accounts Payable	Encumbrance Accounting AP Inquiries
Accounts Payable	AP Inquiries  AP Reports
Accounts Payable	Checks
Accounts Payable	Interface
Accounts Payable	Invoice Matching
Accounts Payable	Invoice Processing
Accounts Payable	Legal Compliance
Accounts Payable	Payments
Accounts Payable Accounts Payable	Taxes Vendor Portal
Accounts Payable	Vendor Processing
Accounts Receivable	Customer Data
Accounts Receivable	AR Inquiries
Accounts Receivable	AR Reports
Accounts Receivable	Cash Processing and Remittances
Accounts Receivable Accounts Receivable	Collections
Accounts Receivable	Customer Portal Customer Processing
Accounts Receivable	Disputes
Accounts Receivable	General
Accounts Receivable	Interface
Accounts Receivable	Invoice Generation
Accounts Receivable	Invoice/Journal Processing
Accounts Receivable Accounts Receivable	Management of AR
Cash Management	Reporting Bank Reconciliation
Cash Management	Cash Book
Cash Management	Cash Deposits/ Receipts
Cash Management	Cash Forecasting
Cash Management	Cash Management
Cash Management	Cash Projections
Cash Management	Compliance
Cash Management Cash Management	Debt and Investment Management  Donations
Cash Management	Forecasting
Cash Management	General
Cash Management	Interest Earnings Allocation
Cash Management	Interface
Cash Management	Loans - Internal
Cash Management	Reporting Parations Department of the Parations of the Pa
Cash Management	Reporting - Donations
Purchasing Purchasing	Inquiries Policy & Compliance
Purchasing	Purchase Order Processing
Purchasing	Purchasing Card (pCard)
Purchasing	Reports
Purchasing	Requisition Processing
Purchasing	Vendor Master

General	Ledger			Red	espo quirer or Us	nent		Module / Solution	
ID#	Requirements	Topic	Υ	С	3	F	N		
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations	
2	Allocation of GL account balances based on balances in other accounts or account groups	Allocations	х					PS General Ledger/Allocations	
3	Allocations may include weighting factors/driver data (for example, units sold) held as statistical data	Allocations	х					PS General Ledger/Allocations	
4	Allocations may be chained together into linked routines	Allocations	Х					PS General Ledger/Allocations	
5	Allocations may be run in "what if" mode to view results before creating postings	Allocations	х					PS General Ledger, PS Allocations	
6	Allocations create journals and audit trail	Allocations	Х					PS General Ledger/Allocations	
7	Allocation functionality that supports activity-based costing principles by creating cost pools that can be allocated to other cost objects or revenue sources based on cost drivers	Allocations	х					PS General Ledger/Allocations	
8	Ability to store allocation results as a different data type	Allocations	Х					PS General Ledger/Allocations	
9	The system shall provide the ability to control budgets (e.g., allotments) or spending plans at the lowest organizational level, based on user-defined criteria.	Budget Control	х					PS Commitment Control	
10	The system shall provide the ability to establish multiple levels of budget expenditure and allotment control, based on user-defined criteria (e.g., at any level of the organization structure, at any level of the program structure, setup to sequentially check multiple criteria), with the ability to override based on user-defined authorization.	Budget Control	х					PS Commitment Control	
11	The system shall provide the ability to submit, track, and process allocation adjustments, by adjustment type, with required supporting documentation, based on user-defined authority and other user-defined criteria.	Budget Control	х					PS Allocations, PS General Ledger	
12	The system shall provide the ability to develop, modify, and reconcile allocations, by any level of the accounting code structures (e.g., organization, program, object, fund/appropriation), with annotations/comments, at any point in time.	Budget Control	х					PS Allocations, PS General Ledger	

General L	Ledger		One Response per Requirement (Offeror Use Only)			Requirement Module / Solution		Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
13	The system shall provide the ability to track allocations, actual versus budgeted, for any point in time (e.g., month, quarter, year-to-date), based on user-defined criteria.	Budget Control	х					PS Allocations, PS General Ledger
14	The system shall provide the ability to identify types of allocations based on user-defined criteria (e.g., one-time, limited term, ongoing).	Budget Control	х					PS Allocations, PS General Ledger
15	The system shall provide the ability to perform budget adjustments and transfers to an approved budget, affecting multiple fiscal year budgets, and to distinguish the amounts from the original budget/revised budget iterations.	Budget Control	х					
16	The system shall provide the ability to identify pending budget revisions, based on user-defined criteria.	Budget Control	х					PS Commitment Control
17	The system shall provide the ability for real-time comparison of	Budget Control	Х					PS General Ledger
18	The system shall provide the ability for online budgetary controls of expenditures and revenues, based on funds availability, appropriation availability and cash balances, based on user-defined criteria (e.g., multi-year appropriations).	Budget Control	х					PS Commitment Control
19	The system shall provide the ability for automated warnings or blocks when users approach budget thresholds, based on user-defined criteria.	Budget Control	х					PS Commitment Control
20	The system shall provide the ability to prepare a budget analysis based on any user-defined period (e.g., calendar year, accounting fiscal year, budget fiscal year, grant/project year).	Budget Control	х					PS General Ledger, nVision Reporting, Query
21	The system shall provide the ability to establish user-defined budgetary and cash controls based on user-defined criteria.	Budget Control	х					PS Commitment Control
22	<u> </u>	Budget Control	x					PS Commitment Control, nVision Reporting
23	The system shall provide the ability to track appropriation details including, but not limited to, fund, fiscal year, and encumbrance availability.	Budget Control	х					PS Commitment Control, nVision Reporting

General I	Ledger		One Response per Requirement (Offeror Use Only)				Requirement Module / Solution		
ID#	Requirements	Topic	Υ	С	3	F	N		
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations	
24	The system shall provide the ability to automatically update fund and cash balances, based on revenues and expenditures and other user-defined criteria.	Budget Control	х					PS General Ledger, PS Commitment Control	
25	The system shall provide the ability to track, maintain and report on expenditure, pre-encumbrance/encumbrance, receipt/revenue transactions, and fund balances, based on user-defined criteria.	Budget Control	х					PS Commitment Control, nVision Reporting	
26	The system shall provide the ability to identify cash balances, based on user-defined criteria (e.g., monthly time period).	Budget Control	х					PS General Ledger, nVision Reporting, Query	
27	The system shall provide the ability to prevent negative cash balances at the fund level unless negative cash balances are properly authorized.	Budget Control	х					PS Commitment Control	
28	The system shall provide the ability to prevent negative appropriation balances at any user-defined appropriation level, unless negative appropriation balances are properly authorized.	Budget Control	х					PS Commitment Control	
29		Budget Control	х					PeopleSoft Commitment Control	
30	The system shall provide the ability to track multi-year appropriations during the fiscal year, and at year-end to roll the appropriation balances forward.	Budget Control	х					PS Commitment Control	
31	The system shall provide the ability to override budget controls during processing, based on user-defined criteria.	Budget Control	х					PS Commitment Control	
32	The system shall provide the ability to access/view the current available balance for appropriations and unrealized receipts/revenues.	Budget Control	х					PS Commitment Control	
33	The system shall provide the ability to classify and track budgets based on user-defined criteria.	Budget Control	х					PS Commitment Control	
34	The system shall provide the ability to select multiple alternative approaches to the disposition of encumbrances outstanding at the end of the budget period, based on user-defined criteria, including but not limited to:	Budget Control	х					PS Commitment Control	
35	Reestablish prior-period encumbrances	Budget Control	Х					PS Commitment Control	
36	Extend budget for encumbrance	Budget Control	Х					PS Commitment Control	
37	Maintain open encumbrance for liquidation (in accordance with legal provisions)	Budget Control	х					PS Commitment Control	

General	Ledger			Red	quire	nse p ment se On		Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
38	The system shall provide the ability to select a specific account or range of accounts/segments (contiguous and noncontiguous) and report account activity by user-defined categories and parameters.	Budget Control Reporting	х					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query
39	The system shall provide the ability to generate the following reports, based on user-defined time period (e.g., point in time, monthly, quarterly, fiscal year end, inception to date), by user-defined criteria, by user-defined formats, including but not limited to:	Budget Control Reporting	x					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query
40	Expenditure/Expense Summary - by fund, by appropriation, by any level in organization structure (e.g. department, office, district), by any level in the program structure, activity, function, object (including original budget, revised budget, percentage of revised budget used and actual expenses for MTD and YTD), inception to date, budget category, and other user-defined parameters.	Budget Control Reporting	x					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query
41	Revenue Recap Summary by fund, by source, by any level in the organization structure (e.g. department, office, district), by any level in the program structure, function and object (including totals), MTD and YTD, original budget, revised budget and percent of annual budget realized and other user-defined criteria, including time frames.		x					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query
42	Revenue Accounts Transaction Report (including revenue budget and receipts for MTD and YTD) and other user-defined criteria, including time frames.	Budget Control Reporting	х					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query
43	The system shall provide the ability to generate reports on revenue and expenditure (actuals and budgeted), encumbrances and preencumbrances, for all appropriations and funds, based on user-defined criteria (e.g., organization structure, program structure, project structure).	Budget Control Reporting	х					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query
44	The system shall provide the ability to generate detail budget reports, by individual budget adjustments (iterations), by total budget adjustments, by any level within the organizational structure (e.g. department, office, district) or program structure, based on user-defined criteria.	Budget Control Reporting	х					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query

General	Ledger			Red	espoi quiren or Us	nent		Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
45	The system shall provide the ability to generate reports on revenue and expenditures/expenses, by fund, by appropriation, by any level in the organizational structure, by any level in the program structure, by account, and by any other user-defined criteria.	Budget Control Reporting	х					PS Commitment Control, PS General Ledger, nVision Reporting, PS Query
46	The system shall provide the ability to generate a report on outstanding pre-encumbrances and encumbrances, based on user-defined criteria (e.g., by Appropriation).	Budget Control Reporting	х					PS Commitment Control, nVision Reporting, PS Query
47	The system shall provide the ability to meet the requirements of the State Uniform Accounting Code and the State departments/ agencies.	Chart of Accounts	x					PS General Ledger, PS Chartfield Designer, PS Query, Data Warehouse
48	The system shall provide the ability to accumulate budgets, revenues or expenditures at any attribute associated with the organizational structure or program structure, project structure, GL account, or other classification structure.	Chart of Accounts	х					PS General Ledger, PS Commitment Control
49	The system shall provide the ability to define a GL account number structure and rules (segments), which includes user-defined hierarchies (e.g., summary, statistical, and suspense accounts) and a roll-up feature that allows multiple levels of hierarchy, based on user-defined criteria.	Chart of Accounts	х					PS General Ledger, PS Tree Manager
50	The system shall provide the ability to capture user-defined attributes for chart of account codes.	Chart of Accounts	х					PS Chartfield Designer
51	The system shall provide the ability for accounts to roll up into subtotals in sub-account levels.	Chart of Accounts	х					PS General Ledger, PS Tree Manager
52	The system shall provide the ability to block any entries into user- defined sub-accounts (e.g., object of expenditure) that have been defined as inactive.	Chart of Accounts	х					PS Chartfield Designer
53	The system shall provide the ability to validate the account code combinations at the time of data entry.	Chart of Accounts	х					PS Combo Editing

General I	-edger		One Response per Requirement (Offeror Use Only)				Requirement Module / Solution	
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
54	The system shall provide the ability to define alphanumeric account segments and codes.	Chart of Accounts	х					PS Chartfield Designer
55	The system shall provide the ability to define account summarization across non-standard hierarchy (e.g., multiple attributes on codes, such as object of expenditure, so that detail can be summarized with multiple groupings).	Chart of Accounts	х					PS Tree Manager
56	The system shall provide the ability to make Chart of Account codes active or inactive, as of specified/effective dates (including future years), with the ability to reopen closed accounts based on user-defined security and parameters.	Chart of Accounts	х					PS Chartfield Designer
57	The system shall provide the ability to reserve blocks of coding fields for specified uses.	Chart of Accounts	х					PS Chartfield Designer
58	The system shall provide the ability to report consolidated organizational or functional values based on user specifications (e.g., summarize values for multiple agencies in one report, drill on originating journal entry and subledger transactions).	Chart of Accounts	х					PS General Ledger, PS Query, PS nVision
59	The system shall provide the ability to allow for configuration of organization segments with the flexibility that allows for other user defined configurations	Chart of Accounts	x					PS Tree Manager
60	The system shall provide the ability to make Chart of Account codes active, as of specified dates (including future years) for budgetary purposes, while leaving the codes inactive for accounting and financial reporting purposes.	Chart of Accounts	х					PS Chartfield Designer
61	The system shall provide the ability to group or consolidate account activity by fund, appropriation, revenues, expense and expenditure type for GAAP reporting, budget reporting, or ad hoc reporting.	Chart of Accounts	х					PS General Ledger, PS Tree Manager
62	The system shall provide the ability to re-open an inactive account with appropriate security.	Chart of Accounts	х					PS Chartfield Designer
63	The system shall provide ability to copy or re-create accounts (e.g., rollover accounts from old to new year) including the ability to exclude specific accounts.	Chart of Accounts	х					General Ledger
64	The system shall provide the ability to flag closed accounts for identification.	Chart of Accounts	х					PS Chartfield Designer, Combo Editing, PS Query

General	Ledger			One R Red Offer	quire	ment		Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
65	The system shall provide the ability to restrict posting to certain active accounts.	Chart of Accounts	х					PS Chartfield Designer
66	The system shall provide the ability to add, delete (e.g., with no transactions; no pending transactions) or deactivate accounts including accounts by fund and/or organization, based on user-defined criteria.	Chart of Accounts		х				PS Chartfield Designer
67	The system shall provide the ability to view the account balance at the time of transaction entry.	Chart of Accounts	х					General Ledger Options
68	The system shall provide online help that includes but is not limited to: displays data field definitions for user-entered fields, including chart of accounts; and provides ability to view coding previously used for similar transactions.	Chart of Accounts	х					General Ledger
69	System identifies approved accounts payable (AP) invoices as commitments	Commitment Accounting	х					PS Payables, PS Commitment Control
70	System identifies approved purchase orders (POs; if purchasing module is provided) as separate commitments from AP invoices	Commitment Accounting	х					PS Purchasing, PS Commitment Control
71	System identifies approved requisitions (if purchasing module is provided) as separate commitments from AP invoices and approved POs	Commitment Accounting	х					PS Purchasing, PS Commitment Control
72	Ability to generate accrual journals from committed items	Commitment Accounting	х					PS General Ledger, PS Commitment Control, Allocations
73	Allow multiple general ledger account distributions throughout all transaction processing	Commitment Accounting	х					PS Commitment Control, Entry Events
74	Ability to hold approved budget amounts against hierarchy node values	Funds Control	х					PS Commitment Control
75	Ability to hold approved budget amounts against GL accounts	Funds Control	х					PS Commitment Control
76	Ability to hold approved budget amounts against user-defined groups of GL accounts	Funds Control	х					PS Commitment Control
77	Budget funds may be transferred between accounts/account groups/summary values with appropriate audit trail (for example, budget transfer journals)	Funds Control	х					PS Commitment Control

General	Ledger		One Response per Requirement (Offeror Use Only)				Module / Solution	
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	x					PS General Ledger/Allocations
78	Online available funds checking for GL journal entry and AP invoice entry	Funds Control	х					PS Commitment Control
79	User-defined journal/invoice warning/rejection tolerances	Funds Control	х					PS Commitment Control
80	Available funds checking performed against remaining annual budget	Funds Control	х					PS Commitment Control
81	Available funds checking at multiple levels (check at account level first, then at user-defined summary level)	Funds Control	х					PS Commitment Control
82	Ability to roll forward unused budgets into next budget year	Funds Control	х					PS Commitment Control
83	The system shall provide the ability for fund, appropriation and encumbrance accounting.	General	х					PS Commitment Control, PS General Ledger
84	The system shall provide the ability to concurrently support multiple accounting bases including cash, budgetary accounting, modified accrual, and full accrual, based on user-defined parameters and instantaneously upon demand by the end user	General	х					PS Commitment Control, PS General Ledger
85	The system shall provide the ability to configure the fund structure and the ability to categorize funds by classification, type and fund source, as required to meet Generally Accepted Accounting Principles (GAAP) and Government Accounting Standards Board (GASB), State of Hawaii departments/ agencies, and other user-defined criteria.	General	х					PS Commitment Control, PS General Ledger, PS Tree Manager
86	The system shall provide the ability to classify transactions and events based on user-defined criteria, including but not limited to:	General	х					PS General Ledger, Entry Events
87	Basis of accounting (cash vs. modified accrual vs. full accrual)	General	х					PS General Ledger, Entry Events
88	Financial reporting entity (primary government vs. component unit)	General	х					PS General Ledger, Entry Events
89	Fund Basis vs. Government-wide	General	х					PS General Ledger, Entry Events
90	GAAP/GASB	General	х					PS General Ledger, Entry Events
91	Other user-defined criteria	General	х					PS General Ledger, Entry Events

General	Ledger		One Response per Requirement (Offeror Use Only)				Module / Solution	
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
92	The system shall provide the ability to flexibly reorganize organizational structure (e.g. department, office, district, location), program structure, project structure, object of expenditure, and other structures.	General	х					PS General Ledger, PS Tree Manager
93	The system shall provide the ability to classify account type based on user-defined criteria (e.g., asset, liability, fund balance, revenue, expenditure, reimbursement).	General	х					PS General Ledger, PS Tree Manager
94	The system shall provide the ability to update and maintain the accounting classification structure (e.g., organizational structure, program structure, project structure, object of expenditure, or any other user-defined classification structure) based on effective date.	General	х					PS General Ledger, PS Tree Manager
95	The system shall provide the flexibility to add/modify fields to the existing accounting classification structure without programming (e.g., organizational structure, program structure, project structure, object of expenditure, or any other user-defined classification structure).	General	х					PS General Ledger, PS Tree Manager
96	The system shall provide the ability to establish system validation rules, which will provide validation of accounting classification structures (e.g., organizational structure, program structure, project structure, object of expenditure, or any other user-defined classification structure).	General	х					Comb Editing
97	The system shall provide the ability to drill up or down on-line, on any transaction, account or batch within the system, to view various levels of detail, based on user-defined criteria (e.g., any level of the program or organization structure; from GL to source document in originating module).	General	х					General Ledger, PS Query
98	The system shall provide the ability to query accounts, history and related transactions, and other pertinent information (e.g., source documents, such as journal and payment vouchers), based on user defined criteria.		х					PS Query
99	The system shall provide the ability to export the results of all queries, drill downs/ups and reports to MS Excel and to save in user-defined formats (e.g., pdf).	General	х					PS Query

General	Ledger		One Response per Requirement (Offeror Use Only)			Requirement Module / Solution		Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
100	The system shall provide the ability to track transactions, based on user-defined criteria (e.g., accounting period, accounting fiscal year, calendar year, grant/fund year, fund, appropriation, program structure, organization structure, project/project period, receipt date, posting date, multiple calendars).	General	х					PS General Ledger, PS Commitment Control, PS Query
101	The system shall provide the ability to identify transactions by originator, by unique grant identifier, by unique project identifier, and by other unique user defined identifiers.	General	х					PS General Ledger, PS Commitment Control, PS Query
102	The system shall provide the ability to track type and source of revenues based on user-defined criteria (e.g., by program structure, by organization structure, by receipt code).		х					PS General Ledger, PS Commitment Control, PS Query
103	The system shall provide the ability to access and display the account and appropriation balances on-line for all open expenditure years (e.g., current year; prior year) in summary and all detail.	General	x					PS General Ledger, PS Commitment Control, PS Query
104	The system shall provide the ability to maintain expenditure clearing account(s) and distribute the detailed transactions to applicable funds, appropriations and programs on a user-defined basis (e.g., daily, weekly, monthly).	General	х					PS Allocations
105	The system shall provide the ability to automatically distribute expenditures from clearing account to multiple accounts based on predefined criteria, with ability to override, subject to required approvals.	General	x					PS Allocations
106	The system shall provide the ability to display and report GL data at various levels of detail in support of mandated reports (e.g., fund, appropriation, organization levels, revenue, expenditure, grant source, project, program, and GL codes).	General	х					PS General Ledger, PS nVision
107	The system shall provide the ability to display the variance between actual and budgeted expenditures (e.g., salaries).	General	х					PS General Ledger, PS nVision
108	The system shall provide the ability to track actuals versus accruals, based on user-defined criteria.	General	х					PS General Ledger, PS nVision
109	The system shall provide the ability to process sub-system transactions with automatic postings to the GL detail and control accounts.	General	х					PS General Ledger

General L	-edger		One Response per Requirement (Offeror Use Only)				Requirement Module / Soluti		
ID#	Requirements	Topic	Υ	С	3	F	N		
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations	
110	The system shall provide the ability to identify all subsystem entries posted to the GL.	General	х					PS General Ledger	
111	The system shall provide the ability to track and report on the costs associated with programs or projects based on user-defined activities (i.e., Activity-Based-Costing) and other user-defined criteria (e.g., goals).	General	х					PS General Ledger, PS nVision	
112	The system shall provide the ability to accumulate budgets, revenues/receipts, transfers, bonds, federal funds, or expenditures at any attribute (or combination of attributes) associated with the account or organizational structure over multiple years (a minimum of ten years in production, indefinite archive)	General	x					PS General Ledger	
113	For capital outlay projects and other user-defined, long-term projects, the system shall provide the ability to accumulate budgets, revenues/receipts, transfers, bonds, federal funds, or expenditures at any attribute associated with the account or organizational structure, by project structure, by phase, over multiple years (a minimum of fifteen years in production).	General	х					PS General Ledger	
114	The system shall provide the ability to maintain and present budget expenditure data by organizational unit (e.g., by department, by office, by district, based on user-defined format, based on user-defined criteria.	General	х					PS General Ledger, PS Commitment Control	
115	The system shall provide the ability to maintain detailed or summary budget and expenditure information for salaries and benefits, including but not limited to: position, bargaining unit, employee, earnings, fund, program, project, or and organizational structure.	General	х					HCM Pay, Oracle PBCS	
116	The system shall provide the ability to establish funds and track all activity associated with that fund (revenues, expenditures, adjustments, proposals) across organizational unit based on user-defined criteria.	General	х					PS General Ledger, PS Commitment Control	
117	The system shall provide the ability to import data from legacy and feeder systems (e.g., tax administration) based on user-defined criteria.	General	х						

General	Ledger			Red	quire	esponse per juirement Module / Solution or Use Only)		
ID#	Requirements	Topic	Y	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
118	Supports 13-period calendar	GL Calendar	х					PS General Ledger
119	Supports financial consolidation across legal entities/business units with revaluation/translation processing	GL Consolidation	х					PS General Ledger
120	Supports consolidation of legal entities with different accounting calendars	GL Consolidation	х					PS General Ledger
121	Supports consolidations across legal entities with dissimilar charts of accounts	GL Consolidation	х					PS General Ledger
122	2. 3.3.2.2.3.3.3.	GL Consolidation	х					PS General Ledger
123	Support for multiple data types (for example, actual, budget and statistical)	GL Data Types	х					Design ChartFields
124	Double-entry controls may not be required on certain data types (for example, statistical or budget data)	GL Data Types	х					PS General Ledger
125	The system shall provide the ability to generate fund and appropriation reports at the summary and detail level, based on user-defined parameters (e.g., FIFO, non-FIFO).	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision
126	The system shall provide the ability to generate allotment reports, including transaction activity and balances, based on user-defined criteria.	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision
127	The system shall provide the ability to generate a report of financial transactions for external audit purposes, by user-defined time period, based on user-defined criteria (e.g., generation of random sample of transactions).	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
128	The system shall provide the ability to generate an archive of all financial transactions in a detail transaction file for financial reporting based on user-defined criteria (e.g., transaction type).	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
129	The system shall provide the ability to report account balances/ fund balances, based on user-defined criteria.	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query

General I	Ledger		One Response per Requirement (Offeror Use Only)			ment		Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
130	The system shall provide the ability to generate a report of revenue and expenditure (summary or detailed) transactions, by any level within the organizational structure, based on user-defined criteria	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
131	The system shall provide the ability to report by fund, appropriation, organization structure (e.g. department, office, district), program structure, object, project, activity, revenue or by any user-defined data field and parameters.	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
132	The system shall provide the ability to run system integrity/exception reports (e.g., batches out of balance, batches with no headers, intradepartmental accounts out of balance, override transactions), based on user-defined criteria (e.g., on daily, weekly, or monthly basis).	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
133	The system shall provide the ability to generate the following reports, based on user-defined criteria, including but not limited to the following:	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
134	Chart of Accounts and Definitions by Fund, by Appropriation, by Organization Structure (any level), by Object Code or Account Ranges	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
135	Listing of Closed Accounts	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
136	Detail Expenditure/Expense Transaction List (including beginning balance and expenditures/expenses for each expenditure/expense account for MTD and YTD) and inception to date.	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
137	GL transaction detail report including beginning balance, debit amount by date, date of credits and amount, relevant references, and ending balance as of a specified date	GL Reporting	х					PS General Ledger, PS nVision, PS Query
138	GL, which includes summary of transactions, by user-defined criteria (e.g., batch type, activity, fund), for user-defined time period (e.g., monthly, month to month with YTD totals).	GL Reporting	х					PS General Ledger, PS nVision, PS Query

General	Ledger			Red	ne Response per Requirement Module / Solution Offeror Use Only)			Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
139	The system shall provide the ability to generate a report of financial transactions listed by user-defined parameters (e.g., date, organization structure, accounting period, program, project, source, account).	GL Reporting	х					PS General Ledger, PS nVision, PS Query
140	The system shall provide the ability to generate reconciliation reports of transactions posted to the General Ledger, based on user-defined criteria.	GL Reporting	х					PS General Ledger, PS nVision, PS Query
141	The system shall provide the ability to generate a reconciliation report of transactions posted in enterprise-wide ERP and to external financial systems including transactions recorded for financial reporting purposes only	GL Reporting	х					PS General Ledger, PS nVision, PS Query
142	The system shall provide the ability to generate edit reports for all batch entries, including but not limited to, journal entries, receipts, payroll, payables, checks and budget entries.	GL Reporting	х					PS General Ledger
143	The system shall provide the ability to generate reports of daily transactions entered, based on user-defined criteria (e.g., by organization structure, by program structure, by project structure).	GL Reporting	х					PS General Ledger, PS nVision, PS Query
144	The system shall provide the ability to generate audit trail reports, with the ability to drill down to the individual transactions or print activity totals by user-defined criteria (e.g., date, transaction type).	GL Reporting	х					PS General Ledger, PS nVision, PS Query
145	The system shall provide the ability to print comparative revenue and expenditure/expense statements using different periods (e.g., current year nine month period to entire prior year, or to same or different nine month period in the prior year).	GL Reporting	х					PS General Ledger, PS nVision, PS Query
146	The system shall provide the ability to generate reports, based on user-defined criteria, including but not limited to:	GL Reporting	х					PS General Ledger, PS nVision, PS Query
147	The ability to produce reports that include columns with individual funds/sub-funds combining totals of the individual funds/sub-funds for the current period and combining totals of the individual funds/sub-funds for prior periods based on user-defined parameters.	GL Reporting	х					PS General Ledger, PS nVision, PS Query
148	The ability to produce individual lines that equal individual accounts, combined accounts (contiguous or non-contiguous), etc.	GL Reporting	х					PS General Ledger, PS nVision

General I	Ledger		One Response per Requirement (Offeror Use Only)			ment	Module / Solution		
ID#	Requirements	Topic	Υ	С	3	F	N		
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations	
149	The ability to produce various subtotal and total lines throughout the reports, as needed.	GL Reporting	х					PS General Ledger, PS nVision	
150	The ability to have an option for organizational structures, which have been reorganized, to link data for current organization structure with that from structure prior to reorganization, for financial reporting purposes.	GL Reporting	х					PS General Ledger, PS nVision, PS Tree Manager	
151	The ability to link specific accounts, totals of accounts, and other information on the general ledger to notes to financial statements.	GL Reporting	х					PS General Ledger, PS Chartfield Designer, PS Tree Manager, PS nVision	
152	The system shall provide the ability to copy and modify existing financial statements, based on user-defined criteria (e.g., for use with new funds) and authorization.	GL Reporting	х					PS General Ledger, PS nVision, PS Tree Manager	
153	The system shall provide the ability to set up an unlimited number of customized report profiles, based on user-defined criteria (e.g., all of the reports, statements, and charts that the department runs for a specific fund and for the CAFR).	GL Reporting	х					PS General Ledger, PS nVision, PS Tree Manager	
154	The system shall provide the ability to choose collation sequences and quantities for standard reports, financial statements and transmittal letters.	GL Reporting	х					PS General Ledger, PS nVision	
155	The system shall provide the ability to design financial statements and reports with an easy to use row and column matrix similar to Windows-based spreadsheet tools.	GL Reporting	х					PS General Ledger, PS nVision	
156	The system shall provide the ability to select from a variety of printing options to customize documents for each of the funds and financial statements.	GL Reporting	х					PS General Ledger, PS nVision	
157	The system shall provide the ability to produce comparative reports, including comparing a wide variety of current periods and prior periods.	GL Reporting	х					PS General Ledger, PS nVision	
158	The system shall provide the ability to do multi-level comparative reporting, with the option to print each key organization, division, program, fund and other levels side-by-side on the same report.	GL Reporting	х					PS General Ledger, PS nVision	

General I	Ledger		One Response per Requirement (Offeror Use Only)			Requirement Module / Solution		Module / Solution
ID#	Requirements	Topic	Υ	С	3	F	N	
1	Allocation of GL account balances by fixed/flexible percentages	Allocations	х					PS General Ledger/Allocations
159	The system shall provide the ability to format transmittal letters, cover sheets and tables of contents that can be copied and modified, from one fund to another fund and to add financial notes and comments.	GL Reporting	х					PS General Ledger, PS nVision
160	The system shall provide the ability to communicate financial/budget information by illustrating trends and fluctuations through the use of graphs and other visual information.	GL Reporting	х					PS General Ledger, PS nVision, Pivot Grids
161	The system shall provide the ability to produce monthly appropriation reports which identify appropriations, allocation, reallocations, expenditures, reimbursements, encumbrances and unallocated available balances.	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
162	The system shall provide the ability to produce monthly cash and appropriated and unappropriated receipts/revenue reports in order to effect complete reconciliation based on user-defined criteria and workflow (e.g., reconciliation between department reports with DAGS financial statements).	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
163	The system shall provide the ability to report on indirect costs and related distribution to direct programs and/or organizational units at any level of the organizational and program hierarchy.	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query
164	The system shall provide the ability to generate balance sheet and operating statements at any point in time, based on user-defined criteria.	GL Reporting	х					PS General Ledger, PS nVision
165	The system shall provide the ability to generate a report of organizational structure and codes.	GL Reporting	х					PS General Ledger, PS nVision, PS Query
166	The system shall provide the ability to generate a prior year appropriation report, which displays a summary of transaction activity, from inception of appropriation to the end of the prior year.	GL Reporting	х					PS General Ledger, PS Commitment Control, PS nVision, PS Query

Encum	brances			Req	espons Juireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
1	funds via purchase requisition/contract request document based on user-defined criteria/thresholds.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
2	The system shall provide the ability to automatically encumber funds via purchase order (including blanket orders)/contract transaction, for multiple line items, based on user-defined criteria/thresholds and approvals.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
3	The system shall provide the ability to check available funds for transactions, based on user-defined criteria (e.g., fund, allocation, allotment).	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
4	The system shall provide the ability to validate account classification values (i.e., organization, program, object, fund, appropriation).	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
5	The system shall provide the ability to display a warning message and/or stop the transaction if appropriations/budget authority are unavailable/insufficient, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
6	The system shall provide the ability to pre-encumber and encumber funds for the future fiscal year before the current fiscal year closes or before enactment of the new fiscal year budget, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
7	The system shall provide the ability to liquidate a pre-encumbrance and encumber funds automatically when a purchase document is generated from a purchase requisition.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
8	The system shall provide the ability to liquidate a future fiscal year pre-encumbrance/encumbrance when the future fiscal year becomes the current fiscal year, and to establish a current year encumbrance.	Encumbrance Accounting	x					PS Commitment Control		
9	The system shall provide the ability to automatically modify encumbrances at the purchase order/contract line item level, based on purchase order/contract document changes (e.g., decreases/increases in item quantity and/or dollar amount, cancellations/back orders, returns).	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
10	The system shall provide the ability to cancel an entire or partial purchase document (e.g., PO) and to automatically liquidate the encumbrance.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
11	The system shall provide the ability to roll outstanding encumbrances (e.g., PO, contract) to any fiscal year and liquidate old encumbrance in prior years, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
12	The system shall provide the ability to track encumbrance liquidation, by user-defined payment type (e.g., procurement card, direct transfer, claim schedule, expense advance, cancellation).	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
13		Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
14	The system shall provide the ability to automatically encumber for shipping & freight charges, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control  PS Purchasing, PS Commitment		
15	manually entered, adjusted and liquidated encumbrances based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
16	The system shall provide the ability to set a percentage threshold for the payment of encumbrances overages, with approvals to override, based on user-defined criteria.	J	x					PS Purchasing, PS Commitment Control		
17	The system shall provide the ability to track encumbrances and encumbrance history, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		

Encum	brances			Req	espons uireme or Use (	ent Module / Solution		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
18	The system shall provide the ability to track encumbrances by multi- year contracts, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
19	The system shall provide the ability to generate encumbrance reports, based on user-defined criteria (e.g., vendor, any level within accounting classification, purchase document number).	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control, PS Query		
20	The system shall provide the ability to manually enter, adjust, correct, and liquidate an encumbrance, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
21	The system shall provide the ability to track the total amount of encumbrance liquidations by user-defined code, organizational unit, by program, by fund, by appropriation, by object of expenditure code, by fiscal year, and by other user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control, PS Query		
22	The system shall provide the ability to identify and calculate amount available for disencumbrance, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
23	The system shall provide the ability to identify all or partial encumbrances as obligations for year end reporting.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
24	The system shall provide the ability to roll over the balance of encumbrance for continuous appropriations in the new fiscal year, based on user-defined criteria.	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		
25	liquidation of purchase orders/contracts based on user-defined criteria (e.g., allow for authorized exceptions, such as contracts greater than 5 years old approved by Comptroller).	Encumbrance Accounting		х					М	
26	The system shall provide the ability to encumber payroll based on user-defined criteria (e.g., casual pay for July 5th payroll).	Encumbrance Accounting	х					PS Purchasing, PS Commitment Control		

Accour	nts Payable			Requ	sponse iirement Use Or		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 F	N		H/M/L	
1	Vendor search by any part of the name	AP Inquiries	х				PS Accounts Payable, PS Suppliers		
2	Vendor search by address	AP Inquiries	х				PS Payables		
	Vendor-aged balance inquiry, showing balances broken down by user-defined aging periods with drill down into invoice detail from balances	AP Inquiries	х				PS Accounts Payable, PS Suppliers		
		AP Inquiries	X				PS Payables		
5		AP Inquiries	X				PS Accounts Payable, PS Suppliers		
6	Invoice search by part of invoice number	AP Inquiries	х				PS Payables		
7	Invoice search by amount	AP Inquiries	Х				PS Payables		
8	Invoice search by date	AP Inquiries	Х				PS Payables		
	·	AP Inquiries	Х	Ш			PS Payables		
		AP Inquiries	х				PS Payables		
-	<u> </u>	AP Reports	Х	$\sqcup$			PS Payables		
		AP Reports	Х				PS Accounts Payable		
		AP Reports	Х			_	PS Payables		
		AP Reports	Х				PS Accounts Payable		
15	·	AP Reports	Х				PS Accounts Payable		
16	•	Checks	х				PS Accounts Payable, PS Banking		
	· ·	Checks	Х			-	PS Banking		
18	Interface with a central processing agency to produce checks	Interface	х				PeopleSoft Payables		PeopleSoft can produce flat file output that can be sent to CPA for check processing.
	Ability to download transactions on a daily basis from other processing systems for direct payment	Interface	х				PS Integration Broker, PS Payables		Create xml invoices and load into express vouchers
	Ability to import purchase order (PO) data from external purchasing systems	_	х				PS Integration Broker		Create web service from external system
	Two-way matching (invoice to PO) against PO data (if vendor has its own purchasing functionality) or imported PO data	Invoice Matching	х				PS Integration Broker, PS Payables		Approach would be to import PO data to PS and then perform matching within PS Payables.
	Ability to match AP invoices with POs imported from external purchasing system	Invoice Matching	х				PS Integration Broker, PS Payables		
	Mismatch conditions with user-defined tolerances with automatic warning/hold	Invoice Matching	х				PS Payables		
	Automatic release of mismatched invoices for payment when updated PO details are entered or imported into the system	Invoice Matching	х				PS Payables		
	Ability to process approved invoices for payment before the due date		х				PS Payables		
	Ability to configure flexible workflows for delegation of authority for invoice approvals	Invoice Processing	х				PS payables, PS Approval Workflo	DW .	
	,	Invoice Processing	Х	$\sqcup$		_	PS Payables		
28	Invoices can be imported electronically based on specified import formats (e.g., PDF, XML etc.).	Invoice Processing	х				PeopleSoft Payables, Integration Broker		.xml file imports supported
-	System supports debit/credit memos	Invoice Processing	х	$\sqcup$			PS Payables		
30	Invoices may be entered in batches	Invoice Processing	Х	$\sqcup$			PS Payables		
	System defaults line item details automatically from purchase order (PO), where vendor provides procurement functionality	Invoice Processing	х				PS Payables		
		Invoice Processing	Х	$\sqcup$			PS Payables		
	Supports freight charge processing	Invoice Processing	Х				PS Payables		
	System allows multiple GL distributions per invoice line item	Invoice Processing	Х	$\vdash$			PS Payables		
	GL distributions may be split by percentage	Invoice Processing	Х	$\vdash$		+	PS Payables		<u> </u>
	GL distributions may be split by amount	Invoice Processing	X	$\vdash$		+	PS Payables PS Payables		
37	GL distributions may be split by quantity	Invoice Processing	Х				ro rayables		<u> </u>

Accou	nts Payable			One Response per Requirement (Offeror Use Only)				Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
38	The system permits a user to establish and maintain recurring invoices and includes these items in cash requirements reporting (for example, rent)	Invoice Processing	х					Peoplesoft Payables, PeopleSoft Contracts, PeopleSoft Query		
39	Integrated invoice scanning capability with optical character recognition (OCR)	Invoice Processing	х					PeopleSoft Payables		3rd party OCR software solution is required
40	Invoices are routed to multiple approvers using workflow capabilities in the system	Invoice Processing	х					PS Payables, PS Approval Workflow		
41		Invoice Processing	Х					PS Payables		
42	Invoice electronic record (e.g., PDF, XML file) may be attached to and viewed from transaction record	Invoice Processing	х					PS Payables		
43	Invoices may be entered to future accounting periods while current period is open	Invoice Processing	х					PS Payables, PS Open Period		Typically subsystem would have multiple periods open while GL would have current period open
44	<u> </u>	Invoice Processing	х					PS Payables		Uncheck post voucher option to prevent further processing
45	Invoice due date and payment discount terms determine when an item is selected for payment and user overrides are allowed	Invoice Processing	х		$\dagger \dagger$			PS Payables		
46	System allows the calculation of interest rates (predetermined by user) on overdue invoices	Invoice Processing	х		$\dagger \dagger$			PS Payables		Set installation options for overdue fee calc
47		Invoice Processing	х					PS Payables		·
48	Capability to support vendor rebate accounting; payment discounts are calculated automatically once vendor invoice terms and conditions input	Invoice Processing	х					PS Payables, PS Purchasing		Vendor rebates managed and calculated in Purchasing then interfaced to AP
49	Provide a tool to receive goods and track them against POs already in the system (without requiring implementation of an inventory management module)	Invoice Processing	х					PS Purchasing		Receipts functionality resides in Purchasing
50	Three-way matching (invoice to PO and goods received) against PO data (if vendor has its own purchasing functionality) or imported PO data	Invoice Processing	х					PS Payables		
51	E-signature workflow integration to enable invoices to be routed to the appropriate SOH staff members for review and signoff approval	Invoice Processing	х					PS Payables, PS Approval Workflo	ow.	
52	Mobile app approval of a payable, with configurable workflow to enable centralized approval of payment/ future payment date based on terms	Invoice Processing	х				_	PS Payables, PS Fluid Approvals		
53	Ability to select 1099 payments based on Vendor Master profile and electronically submit to the IRS	Legal Compliance	х					PS Payables		
54	Ability to accept an inbound 1099 payment transaction file from another application and merge with the current file for submission	Legal Compliance	С					N	И	
55	Ability to make changes after the initial submission and electronically submit to the IRS	Legal Compliance	х					PS Payables		
56	Positive Pay - provide an outbound file of payment transactions to a financial institution prior to issuance of payment checks and direct deposits	Legal Compliance	х					PS Payables		
57	System supports direct payment of invoices (i.e., without a purchase order record)	Payments	х					PS Payables		
58	System provides ability to require specific attachments (e.g., receipt, HCE compliance, etc.) before releasing payments	Payments	х					PeopleSoft Payables, PeopleSoft Approval Workflow		Embed check for attachment as part of Approval Process
59		Payments	х					PeopleSoft Payables		Use Fluid Payment request
60		Payments	х					PS Payables, PS Banking		
61		Payments	х					PS Payables, PS General Ledger		
62	User may choose to take the payment discount even though the due date has expired	Payments	х					PS Payables		

Accoui	nts Payable			Req	esponse Juiremei or Use C	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 1	FN		H/M/L	
63	Individual invoices may be flagged to prohibit payment on the next check run	Payments	х				PS Payables		
64		Payments	Х				PS Payables		
65	User may select to pay invoices based on due date	Payments	Х				PS Payables		
66		Payments	Х				PS Payables		
67		Payments		х				М	
68	User may choose multiple invoices for payment on one check and/or one invoice per check	Payments	х				PS Payables		
69	Capability to stop payment on checks (for example, checks outstanding longer than six months) and initiate escheat process based on check void date	Payments	х				PeopleSoft Payables		
70	System supports manual payments	Payments	Х				PS Payables		
71	Online payment run preview that allows users to deselect items from the payment run before producing checks	Payments	х				PS Payables		
72	Payment runs may be restarted with appropriate check number sequence controls (including voiding damaged checks)	Payments	х				PS Payables		
73	Payments may be made by one legal entity/business unit on behalf of other legal entities/business units (centralized payment processing 'DAGS')	Payments	х				PS Payables		Enable inter/Intra unit accounting to automatically create due to due from accounting
74		Payments	х				PeopleSoft Payables		Configure business unit for ERS, setup supplier fo SBI
75	System supports electronic funds transfer (EFT) based on vendor preference with email communication to vendor	Payments	х				PS Payable, PS Banking		
76	Automated notifications/alerts may be generated and routed to the appropriate staff member(s) when payments due dates are approaching on open invoices	Payments	х				PS Payables, PS Alerts		
77	Payment timing for approved invoices may be automated based on contract terms (i.e., funds would be encumbered upon invoice approval, and the system would automatically disburse funds based on preconfigured business rules and payment due date calculations)	Payments	x				PeopleSoft Payables		Set up desired payment terms
78	System supports State of Hawaii General Excise Tax (GET), including different rates between Oahu and Neighbor Islands	Taxes	х				PS Payables		Create the State excise tax codes for various jurisdictions and apply to invoices based on vendor settings.
79	System supports GET exemptions	Taxes	х			+	PS Payables		vendor settings.
80	·	Taxes	х				PS Payables		
81	Tax rate changes may be entered in advance of actual date of change	Taxes	х				PS Payables		
82	System has a portal for vendors to update their account details online; details to include payments (i.e. payment date, payment amount, check number, invoice number, etc.) and outstanding invoices	Vendor Portal	х				PS eSupplier Connect		Part of e-Supplier connect.
83		Vendor Portal	х				PS eSupplier Connect		Part of e-Supplier connect.
84	System has a portal for vendors to interact with AP staff and correct/update invoice data	Vendor Portal	х			$\top$	PS eSupplier Connect		Part of e-Supplier connect.
85	Multiple remits to address are available for a vendor	Vendor Processing	х				PS Suppliers		
86	Vendor records may be grouped into buy from/pay to relationships	Vendor Processing	Х				PS Suppliers		PS supports multiple contacts, locations etc.
87	Vendors may be grouped into multilevel hierarchical structures to represent parent/subsidiary relationships	Vendor Processing	х				PS Suppliers		
88		Vendor Processing	х				PS Payables		Vendor data import

Accou	nts Payable			Req	esponse uireme or Use C	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	FN		H / M / L	
89	Vendors may be assigned a payment priority	Vendor Processing	х				PS Suppliers		
90	Vendors may be put on hold	Vendor Processing	Х				PS Suppliers		
91	System maintains a vendor monetary amount for individual transactions and overall balance (with warning/hold processing if invoices exceed these limits)	Vendor Processing	х				PS Suppliers, PS Payables, PS Approval Workflow		User custom field to store supplier limits and create separate workflow routing for over the limit transactions
92	Support for one-time vendors	Vendor Processing	Х				PS Suppliers		
93	Invoice entry defaults defined at vendor level (for example, terms code)	Vendor Processing	х				PS Suppliers		
94	System support accounts payable (AP)/accounts receivable (AR) netting to calculate net vendor balance (can optionally be used in payment processing)	Vendor Processing	х				PS Payables, PS Receivables		
95	Supports specific vendor processing, such as minority vendor tracking	Vendor Processing	х				PS Suppliers		
96	Ability to share vendor file between legal entities/business units (a vendor record does not have to be defined multiple times for each legal entity/business unit)	Vendor Processing	х				Tableset Sharing		
97	Vendors may be grouped/analyzed using coding elements that are separate from general ledger (GL) code segment values	Vendor Processing	x				PS Payables		

Accour	nts Receivable			Req	espons Juireme or Use (	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
1	Ability to share customer file between legal entities/business units (a customer record does not have to be defined multiple times for each legal entity/business unit)	Customer Data	х					PS Customers		
	System has a portal for customers to interact with collection agents and correct/update disputed and open items	AR Inquiries	x					PS eBill Payments		
	Customer search by any part of the name	AR Inquiries	Х					PS Customers		
		AR Inquiries	Х					PS Customers		
	Customer aged balance inquiry, showing balances broken down by user-defined aging periods with drill-down into invoice detail from balances		х					PS Receivables		
	currency balance analyzed by transaction currencies	AR Inquiries	х					PS Receivables PS Receivables		
/	Customer aged balances can be viewed by customer groups hierarchically online, with ability to drill through levels of detail online	AR Inquiries	x					PS Receivables		
	customer hierarchy	AR Reports	х					PS Receivables		
	customers)	AR Reports	Х					PS Receivables, PS Query		
		AR Reports AR Reports	Х					PS Receivables PS Receivables		
	user-specified period)		X			_		PS Receivables		
	1 0	AR Reports AR Reports	Х					PS Receivables PS Receivables		
	centralized visibility into system-wide AR, both in aggregate and in detail		х							
14	Cash receipts and applications may be entered online	Cash Processing and Remittances	х					PS Receivables		
15		Cash Processing and Remittances	x					PS Receivables		
	entry screen	Cash Processing and Remittances	х					PS Receivables		Payment worksheet
17	Supports credit card refunds	Cash Processing and Remittances	x					PS Receivables		
18		Cash Processing and Remittances	х					PS Receivables, PS Banking		
19	Supports automated clearing house (ACH) transfers	Cash Processing and Remittances	х					PS Receivables, PS Banking		
20	Supports credit card payments	Cash Processing and Remittances	х					PS Receivables, PS Banking		
		Cash Processing and Remittances	х					PS Receivables, PS Banking		
22	Supports bills of exchange	Cash Processing and Remittances	х					PS Receivables		
	select/deselect items and see remaining unallocated cash balance	Cash Processing and Remittances	х					PS Receivables		Payment Worksheet
24		Cash Processing and Remittances	x					PS Receivables		
25	Automated cash matching by customer/invoice ID	Cash Processing and Remittances	х					PS Receivables		Payment Predictor
26	Automated cash matching by user-defined rules (for example,	Cash Processing and Remittances	х					PS Receivables		Payment Predictor
27	Users can create new financial measures and key performance	Cash Processing and Remittances	х					PS Receivables		A/R WorkCenter, Pivot Grids
		Cash Processing and Remittances	х					PS Receivables		
	amended online	Cash Processing and Remittances	х					PS Receivables		Payment Predictor
		Collections	Х					PS Receivables		
	User-defined statement formats What you see is what you get (WYSIWYG) statement designer	Collections	Х			_		PS Receivables	<u> </u>	What is WYSIWYG? If this is a specific
32	Twinat you see is what you get (wit sive to) statement designer	Collections		x					<b>L</b>	collections letter format, then BI publisher can be used
	, i	Collections	Х					PS Receivables		
	customer hierarchy	Collections	х					PS Receivables		
35	, , , , , , , , , , , , , , , , , , ,	Collections	Х					PS Receivables		

Accour	nts Receivable			Req	espons quireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
	System provides user-defined rules for creation of reminder letters WYSIWYG reminder letter designer	Collections Collections	х	x				PS Receivables	L	What is WYSIWYG? If this is a specific collections letter format, then BI publisher can be used
38	Reminder letters/statements may be grouped into collection cycles	Collections	х					PS Receivables		Dunning process
	·	Collections	Х					PS Receivables		Dunning process
	ı	Collections	Х					PS Receivables		Dunning process
41	letters	Collections	х					PS Receivables		Dunning process
42	customers	Collections	х					PS Receivables		
	Word documents)	Collections	х					PS Receivables		
	<u> </u>	Collections	Х					PS Receivables		Set up actions and action templates
45	Ability to prioritize tasks in accordance with user-defined rules	Collections	х					PS Receivables, PS Activity quides		Activity guides can be created for custom collection tasks
46	Ability to define collection strategies and identify appropriate customers/open items for action (for example, most collectible items or maximize cash inflow)	Collections	х					PS Receivables, PS Activity guides		Activity guides can be created for custom collection tasks
	, , , , , , , , , , , , , , , , , , ,	Collections	х					PS Receivables, PS Activity guides		Activity guides can be created for custom collection tasks
	reminder letters on demand	Collections	х					PS Receivables		
	. ,	Collections	х					PS Receivables		
50	Shared service support (ability to manage customer invoices, remittances and collection processes across multiple entities/business units from one sign on)	Customer Portal	х					PS eBill Payments		Review transactions, monitor account status, paybills online
51	System has a portal for customers to access their own account details online	Customer Portal	х					PS eBill Payments		Review transactions, monitor account status, paybills online
	System has a portal for customers to update their account details online	Customer Portal	х					PS eBill Payments		Review transactions, monitor account status, paybills online
53	Comprehensive customer master to enable online payment acceptance from parents, with online payments automatically posting to the GL or appropriate subledger	Customer Processing	х					PS eBill Payments		
54	Customers may be grouped/analyzed using coding elements that are separate from general ledger (GL) code segment values	Customer Processing	х					PS Customers		Utilize configurable customer fields
	relationships	Customer Processing	х					PS Customers		
56	to represent parent/subsidiary relationships	Customer Processing	х					PS Customers		
57	(for example, Dun & Bradstreet)	Customer Processing	х					PS Integration Broker, PS Customers		
58		Customer Processing	Х					PS Customers		
59 60	, ·	Customer Processing Customer Processing	x					PS Customers, PS Billing PS Customers, PS Billing		
61	Integrated customer credit checking with external source (for example, Dun & Bradstreet)	Customer Processing	х					PS Customers		
62	Customers may be assigned to user-defined classes for processing (for example, national accounts)	Customer Processing	х					PS Customers		
63		Customer Processing	х					PS Customers		
64	System maintains a customer monetary amount limit for individual transactions and overall balance (with warning/hold processing if invoices exceed these limits)	Customer Processing	х					PS Customers		
		Customer Processing	х					PS Customers		
	(AR) balance is zero	Customer Processing	х					PS Customers		
67	System support accounts payable (AP)/AR netting to calculate net customer balance	Customer Processing	х					PS Customers, PS Receivables, PS Payables		Bilateral netting
	·	Disputes	х					PS Receivables		
		Disputes	х					PS Receivables		
70 71		Disputes General	X	х				PS Receivables	<u>L</u>	What A/R documents need tracking?
72		General	х					PS Receivables, PS Query		

Accour	nts Receivable			Requ	esponse uiremer or Use O	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 F	FN	1	H/M/L	
73	The system shall provide the ability to receive full or partial payments based on user-defined criteria.	General	х				PS Receivables		
	The system shall provide the ability to capture miscellaneous information in free-form fields attached to AR/customer accounts and invoices.	General	х				PS Receivables		
75		General	х				PS Receivables		
76		General	х				PS Customers		
		General	х				PS Customers		
	The system shall provide the ability to track and maintain customers based on user-defined parameters (e.g., customer name/number, bill to address, location, customer contact, user-defined customer type, penalty eligibility status).	General	x				PS Customer, PS Receivables, PS Query		
	The system shall provide the ability to include account history on AR account/customer statements based on user-defined criteria (e.g., aging buckets).	General	х				PS Receivables		
80	The system shall provide the ability to establish multiple, user-defined dates on AR account/customer records (e.g., credit card transaction date; credit card expiration date).	General	х				PS Receivables		System has 5 User Defined date fields
81	. ,	General	х				PS Receivables/PS Payables		System integrates to perform bi lateral netting
	The system shall provide the ability to interface and report data from external departmental revenue systems based on userdefined criteria (e.g., department, appropriation, source).	Interface		V				Medium	
83	The system shall provide the ability to interface data from external systems, for use in generation of receivables, including but not limited to: vehicle identification number.	Interface		x				Medium	
84	The system shall provide the ability to manually and/or automatically assign unique invoice numbers, based on user-defined criteria (e.g., sequentially).	Invoice Generation	х				PS Billing		
85	based on user-defined parameters.	Invoice Generation	х				PS Billing		
86	The system shall provide the ability to track AR account/customer records based on user-defined criteria (e.g., payment terms, late fee rates).	Invoice Generation	х				PS Receivables		
87	The system shall provide the ability for decentralized entry of AR invoices.	Invoice Generation	х				PS Billing		
88	The system shall provide the ability to generate invoices, based on user-defined invoice templates (e.g., aging buckets).	Invoice Generation	х				PS Billing		
89	user-defined invoices, based on user-defined criteria.	Invoice Generation	х				PS Billing		
90	user-defined parameters (e.g., AR Type; billing cycles).	Invoice Generation	х				PS Billing		
91	billings based on user-defined criteria.	Invoice Generation	х				PS Billing		
92	The system shall provide the ability to determine an appropriate rate based on specific field information (e.g. rate based on date/time).	Invoice Generation	x						
93	based on user-defined criteria (e.g., automatically, manually).	Invoice Generation	х				PS Billing, PS Receivables, PS General Ledger		
	billings/invoices, based on user-defined criteria (e.g., continue or place on-hold accumulation of interest charges).	Invoice Generation	х				PS Receivables		
	The system shall provide the ability to automatically generate recurring invoices/billings, with an end date or end amount, and with the ability to adjust an invoice based on user-defined	Invoice Generation	х				PS Billing		
96	· ·	Invoice Generation	х				PS Billing, PS Receivables		
97	<u> </u>	Invoice Generation	x				PS Billing		
98	· ,	Invoice Generation	х				PS Billing		

Accour	nts Receivable			Requ	sponse iremen Use O	it	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 F	: N		H/M/L	
	The system shall provide the ability to electronically distribute invoices to selected AR accounts/customers with user-defined control and notification.	Invoice Generation	х				PS Billing		
	The system shall provide the ability to calculate, bill, and/or waive late charges, interest (e.g., one-time or compounded), penalty fees and other user-defined fees (e.g., collection fee), based on user-defined criteria (e.g., State policy; Department policy, program policy).	Invoice Generation	х				PS Receivables		
101	The system shall provide the ability to track and report on late fees, interest, and other user-defined fees.	Invoice Generation	х				PS Receivables, PS Query		
	based on user-defined criteria.	Invoice Generation	х				PS Billing		
	The system shall provide the ability to correct, modify or reverse invoices, based on user-defined security, workflow, audit history and thresholds.	Invoice Generation	x				PS Billing		
	corrections, modifications, or reversals) to posted transactions through correcting entries.	Invoice Generation	х				PS Billing, PS Receivables		
	number to subsequent invoice adjustments and modifications.	Invoice Generation	х				PS Billing		
	invoice based on user-defined criteria (e.g., AR Type).	Invoice Generation	х				PS Billing		
	including journal entries to transfer funds.	Invoice Generation	х				PS Billing, PS Receivables		
	periods	Invoice/Journal Processing	х				PS Receivables		
	Ability to import approved invoices from external billing systems	Invoice/Journal Processing	x				PS Receivables, PS Billing		Import into Billing and then interface to Receivables for tracking and collection
110	Integration with order processing module (if vendor provides it)	Invoice/Journal Processing	х				PS Billing		Yes, PeopleSoft offers the Order Management module as part of the Order to Cash lifecycle
	Online entry capability for low-volume invoices	Invoice/Journal Processing	х				PS Billing		
	Recurring invoice entry capability Write-off journals with user-defined reason codes and automated G	Invoice/Journal Processing	X				PS Billing PS Receivables		
114	Adjustment journals (for example, transfer payments between accounts) with automated GL postings if required	Invoice/Journal Processing	x				PS Receivables		
	Capability to systematically adjust for generally accepted accounting principles related to revenue recognition	Invoice/Journal Processing	х				PS Billing		
	Ability to create credit memos/refunds	Invoice/Journal Processing	Х				PS Receivables		
117	Refund creates disbursement request and raises payment if required	Invoice/Journal Processing	x				PS Receivables, PS Payables		Refunds integrate to Payables where vouchers are generated and paid. Customer would also need to be setup as a supplier.
	The system shall provide the ability to establish and to track employee payroll accounts receivable (e.g., overpayments), based on user-defined criteria (e.g., employee ID, pay period, A/R Date).	Management of AR	х				PS Receivables, PS General Ledger		configure open item accounting in GL
	The system shall provide the ability to obtain payroll amounts withheld for the purpose of salary overpayment recovery via interface from payroll.	Management of AR	x				PS General Ledger		Manage employee receivables via open item accounting
120	The system shall provide the ability to automate application of employee's salary overpayment recovery to related employee receivable based on user-defined criteria.	Management of AR	х				PS General Ledger		Manage employee receivables via open item accounting
	The system shall provide the ability to generate a report which tracks receivables for salary overpayments based on user-defined criteria (e.g., reconciles overpayment recovery against related employee receivables).	Management of AR	x				PS General Ledger		Manage employee receivables via open item accounting
122	• •	Management of AR	х				PS Receivables, PS Expenses, PS General Ledger		Configure open item accounting in GL
		Management of AR	x				PeopleSoft Travel and Expenses		Setup expense billing codes in Expenses.
124	The system shall provide the ability to generate a collection letter to employees with any amounts owed for advances, based on user-defined criteria.	Management of AR	х				PS Receivables, PS General Ledger		
	customer notifications and correspondence based on user-defined criteria (e.g. notification that payment has been received and account is now current; notification of terminations for delinquent documentation).	Management of AR	х				PS Receivables		
	The system shall provide the ability to generate and record AR refund request (e.g., for overpayments), based on user-defined workflow and approvals, based on user-defined criteria.	Management of AR	х				PS Receivables, PS Payables		

Accou	nts Receivable			Requ	sponse uiremer r Use O	nt		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3 F	=	N		H/M/L	
127	The system shall provide the ability to generate credit memos automatically for approved requests based on user-defined criteria and business rules.	Management of AR	х				F	PS Receivables		
128	The system shall provide the ability to write off payment amounts based on user-defined criteria (e.g., discrepancy between payment received and invoice amount).	Management of AR	х				F	PS Receivables		
129	penalties, and interest fees, based on user-defined criteria.	Management of AR	х				F	PS Receivables		
130	notifications to collection agencies based on user-defined criteria.	Management of AR		х					Medium	
131	The system shall provide the ability to track the delinquency history of customers based on user-defined criteria (e.g., number of instances of delayed payment).	Management of AR	х				F	PS Receivables		
132	The system shall provide the ability to post AR collections based on user-defined parameters (e.g., multiple years, multiple funds, program, project).	Management of AR	x				F	PS Receivables		
133	The system shall provide the ability to inquire against and to age pending (e.g., uncleared collections) transactions, with ability to generate notification for required action, based on user-defined criteria.	Management of AR	х				F	PS Receivables		
134	The system shall provide the ability to process and track all aspects of a "bad check" or NSF check payment, based on user-defined criteria (e.g., generation of AR; penalty/ bounced check fee).	Management of AR	х					PS Receivables, PS Cash Management		
135	The system shall provide the ability to track dishonored checks by user-defined parameters (e.g., receipt type, user-defined deposit number).	Management of AR	х					PS Receivables, PS Cash Management		
136	and a new invoice resulting from a dishonored check (include additional fees), based on user-defined criteria and audit trail (e.g., retaining original entry).	Management of AR	х				F	PS Receivables, PS Query, BI Publisher		
137	The system shall provide the ability to generate a report on open items (e.g., current and past due invoices, debit memos, uncleared collections) and closed items.	Reporting	х				F	PS Receivables		
138	on AR invoices which have been closed for reasons other than final payment, based on user-defined criteria (e.g., detailed history of steps taken that led to write-off).	Reporting	х					PS Receivables		
139	The system shall provide the ability to query on and generate a detailed AR aging report, based on user-defined criteria (e.g., sorting by age range of invoices, by organization structure).	Reporting	х				F	PS Receivables		

Cash M	lanagement			Req	esponse Juiremer or Use C	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 I	= N		H/M/L	
1	Ability to electronically upload bank statements	Bank Reconciliation	х				PS Cash Management, PS Financial Gateway		
	without IT involvement in preparing the data exports for upload	Bank Reconciliation	х				PS Cash Management, PS Receivables		
3	Ü	Bank Reconciliation	Х				PS Cash Management		
4	,	Bank Reconciliation	Х				PS Cash Management		
5	The system shall provide the ability to interface daily deposit information from financial institutions based on user-defined criteria (e.g., org code, bank/treasury account #, check date, check number, report of deposit number and amount, location code, monthly deposit and other disbursement information).	Bank Reconciliation	x				PS Cash Management		
6	1	Bank Reconciliation	^				PS Cash Management, PS Financial Gateway		
7	The system shall support all standard electronic bank statement formats (e.g., BAI2; SWIFT940) based on pre-defined mapping templates and create custom mapping templates for loading user-	Bank Reconciliation					PS Cash Management, PS Financial Gateway		
8	, ,	Bank Reconciliation	X				PS Cash Management		
9	reconciliation for manual checks, automated checks, and direct	Bank Reconciliation	x				PS Cash Management		
10	transfers based on user-defined criteria.  The system shall provide the ability to identify outstanding checks, deposits and adjustments which did not clear during bank reconciliation.	Bank Reconciliation	X				PS Cash Management		
11		Bank Reconciliation	X				PS Cash Management		
12	The system shall provide the ability to change the status of a check online without affecting the original receipt/ disbursement transaction, based on user-defined approvals and criteria.	Bank Reconciliation	x				PS Cash Management		
13		Bank Reconciliation	x				PS Cash Management		
14	The system shall provide the ability to account for and reconcile bank accounts and provide monthly bank account statements, with deposit and disbursement information, based on user-defined criteria, business rules, and defined tolerance levels.		x				PS Cash Management		
15	The system shall provide the ability to correct check/deposit amounts without affecting the original receipt/disbursement transaction, and to make online adjustments (e.g., reestablishment of check), based on user-defined authorization.	Bank Reconciliation	х				PS Cash Management		
16	The system shall provide the ability to post checks, deposits, and adjustments to bank reconciliation system, based on user-defined parameters.	Bank Reconciliation	х				PS Cash Management		
17	The system shall provide the ability to retrieve and archive paid checks. Images for 10 years/per state statutory retention.	Bank Reconciliation		х				M	
18	The system shall provide the ability to identify outstanding checks based on user-defined criteria, including but not limited to: by check number, account number, amount, date, payee/vendor, fund, organization, appropriation, user-defined ranges (e.g., date range, dollar range; age range).	Bank Reconciliation	x				PS Cash Management		
19	The system shall provide the ability to archive prior period paid and voided check information, and cleared adjustments, based on user-defined parameters (e.g., calendar year, fiscal year).	Bank Reconciliation	x				PS Payables		

Cash N	Management			Req	espons quiremo or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
20	The system shall provide the ability to process and identify returned items (e.g., dishonored checks) and bank adjustments.	Bank Reconciliation	х					PS Cash Management		
21	The system shall provide the ability to link adjustments to related AR and/or AP transaction, based on user-defined criteria.	Bank Reconciliation	х					PS Cash Management, PS Receivables, PS Payables		
22		Bank Reconciliation	х					PS Cash Management		
23	The system shall provide the ability to track and manage stale-dated checks, based on user-defined criteria.	Bank Reconciliation	x					PS Cash Management		
24	,	Bank Reconciliation	x					PS Cash Management		
25		Bank Reconciliation	X					PS Cash Management		
26		Bank Reconciliation						PS Cash Management		
27		Bank Reconciliation	X					PS Cash Management		
	limited to the following:		х							
28	<u>'</u>	Bank Reconciliation	Х					PS Cash Management		
29	<u> </u>	Bank Reconciliation	Х					PS Cash Management		
30	1	Bank Reconciliation	Х					PS Cash Management		
31	' '	Bank Reconciliation	Х					PS Cash Management		
32	, ,	Bank Reconciliation	Х					PS Cash Management		
33	<u> </u>	Bank Reconciliation	Х					PS Cash Management		
34	,	Bank Reconciliation	Х					PS Cash Management		
35	<b>y</b>	Bank Reconciliation	Х					PS Cash Management		
36	Cancels and Voids	Bank Reconciliation	Х					PS Cash Management		
37	, , , , , , , , , , , , , , , , , , , ,	Bank Reconciliation	Х					PS Cash Management		
38		Bank Reconciliation	X					PS Cash Management		
39	Cash in Transit  Reconciliation to GL/Trial Balance	Bank Reconciliation	X					PS Cash Management PS Cash Management		
40 41		Bank Reconciliation  Bank Reconciliation	X		$\vdash$			PS Cash Management		
41	· ·	Bank Reconciliation	X		$\vdash$			PS Cash Management		
42	on user-defined criteria (e.g., when the "bank statement" has not	Bank Reconciliation						1 O Casii Management		
	been reconciled to G/L; significant reconciling items have not been									
	cleared).		х							
43	I .	Bank Reconciliation	x					PS Cash Management, PS Financial Gateway		
44	\	Cash Book	х					PS Cash Management		
45	, and the second	Cash Deposits/ Receipts	X					PS Receivables		
46		Cash Deposits/ Receipts	X					PS Receivables		
47	The system shall provide the ability to record receipts, based on user- defined receipt categories.	Cash Deposits/ Receipts	X					PS Receivables		
48		Cash Deposits/ Receipts	x					PS Receivables, PS Cash Management, PS Financial Gateway		

Cash N	1anagement			Req	esponse uiremer or Use O	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С		= N		H/M/L	
49	The system shall provide the ability to enter and record cash deposits based on user-defined criteria and business rules (e.g., by subaccount; by default account, such as program ID, based on org ID of depositor; centralized release of postings to GL).	Cash Deposits/ Receipts	х				PS Receivables		
50	The system shall provide automated cash receipt capabilities (e.g., interfaced cash receipts are processed against open invoices).	Cash Deposits/ Receipts	х				PS Receivables		Ability to upload payment files and use payment predictor to apply payments
51	The system shall provide the ability to reprint any receipt.	Cash Deposits/ Receipts	Х				PS Receivables		
52	The system shall provide the ability to correct or reverse the application of cash receipts (e.g., wrong invoice number, date, amount, NSF), based on user-defined criteria and approvals.	Cash Deposits/ Receipts	x				PS Receivables		
53	The system shall provide the ability to track and apply advance collections, pre-pays and overpayments, based on user-defined approvals.	Cash Deposits/ Receipts	x				PS Receivables		
54	The system shall provide the ability to receive and process miscellaneous receipts.	Cash Deposits/ Receipts	x				PS Receivables		
55	The system shall provide ability to receive cash without billing or invoicing involved, based on user-defined criteria (e.g., inclusion of cash receipt in cash management report for bank reconciliation).	Cash Deposits/ Receipts	x				PS Receivables		
56	The system shall provide the ability to apply/split a receipt/ deposit across multiple funds, multiple years, and other user-defined parameters (e.g., by percentage).	Cash Deposits/ Receipts	x				PS Receivables		
57		Cash Deposits/ Receipts	x				PS Receivables		
58	The system shall provide the ability to apply payments to select invoices and to track and view remaining balances.	Cash Deposits/ Receipts	х				PS Receivables		Payment Predictor, Payment Worksheet
59	The system shall provide the ability to capture user-defined receipt descriptions and/or comments.	Cash Deposits/ Receipts		х				L	
60	The system shall provide the ability to automatically apply receipts based on user-defined criteria (e.g., by customer, by location; by type of revenue) and user-defined percentages.	Cash Deposits/ Receipts	x				PS Receivables		Payment Predictor
61	The system shall provide the ability to apply receipt to closed invoices, via re-establishment/re-opening of invoice, based on user-defined authorization.	Cash Deposits/ Receipts	х				PS Receivables		
62	The system shall provide the ability to split receipt into principal, additional fees (if any), interest, tax, penalty and other types of fees including, but not limited to, any combination of user-defined parameters.	Cash Deposits/ Receipts	x				PS Receivables		
63	The system shall provide the ability to generate notification of receipt of funds, which is linked to pending expenditures that are on-hold (e.g., payment vouchers which have been held pending receipt of federal funds), based on user-defined criteria and approvals.	Cash Deposits/ Receipts	x				PS Query, PS Alerts		
64	The system shall provide the ability to manually process dishonored checks in the system or to accept and load an electronic bank file with dishonored check information.	Cash Deposits/ Receipts	x				PS Cash Management		
65	The system shall provide the ability to automatically post the A/R entry resulting from the dishonored check.	Cash Deposits/ Receipts	х				PS Cash Management, PS Receivables		
66	Cash-flow forecast generated based on items in accounts payable (AP) and accounts receivable (AR) modules	Cash Forecasting	х				PS Cash Management, PS Receivables, PS Payables		
67	Daily cash position forecasting	Cash Forecasting	Х				PS Cash Management		
68	User-defined cash-flow forecast periods	Cash Forecasting	Х				PS Cash Management		
69	User entry of cash items not in AP and AR systems	Cash Forecasting	Х	igspace			PS Cash Management		
70	"What-if" analysis based on moving due dates or receipt dates	Cash Forecasting	Х				PS Cash Management		

Cash N	1anagement			Req	esponse Juiremei or Use C	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3 1	FN	1	H/M/L	
71	Forecast cash flow based on pending payments/ encumbered funds and account balances, detect when additional funds are needed in a particular account, and leverage automated workflows to alert the appropriate parties to move additional funds into an account as necessary	Cash Forecasting	x				PS Cash Management		
72	,	Cash Management	х				PS Cash Management		
73	The system shall provide the ability to record the segregation of money in the State Treasury from money outside the State Treasury (e.g., agency checking accounts.).	Cash Management	х				PS Cash Management		
74		Cash Management	x				PS Cash Management		
75	1 1 0	Cash Management	x				PS Receivables, PS Cash Management		
76	The system shall provide the data required to maintain cash projections, based on user-defined criteria.	Cash Management	x				PS Cash Management, PS Payables, PS Receivables, PS Deal Management, PS Payroll		
77	The system shall provide the ability to rollup departmental projections to State-level projections, based on user-defined criteria.	Cash Management	x						
78	The system shall provide the ability to maintain and report data on cash held within department checking accounts, which are outside of the State Treasury, based on user-defined criteria.	Cash Management	х				PS Cash Management, PS Payables, PS Receivables, PS Deal Management, PS Payroll		
79	presented to the State Treasury, and to reconcile items with external departmental systems	Cash Management	х				PS Cash Management, PS Financial Gateway		
80	have sufficient cash based on user-defined criteria.	Cash Management	х				PS Cash Management, PS Financial Gateway		
81	The system shall provide the ability to record and identify deposits, based on user-defined criteria .	Cash Management	х				PS Cash Management, PS Receivables		
82	The system shall provide the ability to process EFT transactions based on user-defined criteria (e.g., location).	Cash Management	x				PS Cash Management, PS Financial Gateway		
83	The system shall provide the ability to process ACH - Credit Cards and debit card, and electronic payment transactions.	Cash Management	х				PS Cash Management, PS Financial Gateway		
84	The system shall provide the ability to download and process bank files.	Cash Management	х				PS Cash Management, PS Financial Gateway		
85	The system shall provide the ability to generate notifications, when departments submit requests to "draw down" federal funds or to send cash directly to the State Treasury, and to provide data on the amount to be received, expected receipt date, department, contact person, and other user defined information, based on user-defined criteria.	Cash Management	x				PS Cash Management, PS Alerts		
86		Cash Management	x				PS Cash Management, PS Alerts		
87	The system shall provide the ability to maintain and report data on the cash within the State Investment Pool and Bond Investment Pool Programs based on user-defined criteria.	Cash Management	x				PS Cash Management, PS Deal Management		

Cash N	lanagement			Req	esponse uiremen or Use O	it	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3 F	: N		H/M/L	
88	The system shall provide the ability to record, calculate, and maintain data required by the Cash Management Improvement Act (CMIA), including but not limited to:	Cash Management	x				PS Cash Management		
89	Identification of Transactions Funded By Major Federal Programs	Cash Management	х				PS Cash Management, PS Query, PS Commitment Control, PS General Ledger		
90	Tracking of Federal Funds Deposits, By Cash/ Redemption Date	Cash Management	х				PS Cash Management, PS Query		
91	Tracking of Federal Funds Expenditures (e.g., payroll, vendor payments)	Cash Management	x				PS Cash Management, PS Query, PS Commitment Control, PS General Ledger		
92	Determination of Clearance Patterns	Cash Management		x			i o derieral Legger	L	More info needed
93	Calculation of Federal Portion of Payment (FPP)	Cash Management		Х				L	More info needed
94	· · · · · · · · · · · · · · · · · · ·	Cash Management	х				PS Cash Management		
95		Cash Management	x				PS Cash Management, PS Query		
96		Cash Management		x				М	Need specs of external systems
97	The system shall provide the ability to track and generate a report on direct costs associated with implementing the requirements of the Cash Management Improvement Act (CMIA), based on user-defined criteria.	Cash Management	x	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			PS Cash Management, PS Query, PS Commitment Control, PS General Ledger		
98		Cash Management	x				PS Cash Management		
99		Cash Projections	Y				PS Cash Management		
100	<u>u - 2 </u>	Cash Projections	x				PS Cash Management, PS Commitment Control		
101	<u>u</u> .	Cash Projections	x				PS Cash Management		
102	The system shall provide the ability to project cash flows from external and feeder systems based on user-defined criteria.	Cash Projections	х				PS Cash Management, PS Financial Gateway		
103	The system shall provide the ability to analyze projected cash flows based on user-defined criteria.	Cash Projections	х				PS Cash Management		
104		Cash Projections	x				PS Cash Management, PS Query		
105		Compliance		х		1	1	M	
106	System can maintain investment and loan information	Debt and Investment Management	x				PS Cash Management, PS Deal Management		
107	Automatic journal entries for periodic interest income and expense	Debt and Investment Management	x				PS Cash Management, PS Deal Management, PS General Ledger		
108	The system shall provide the ability to record and track donations based on user-defined criteria and user-defined time period.	Donations	x				PS Receivables		
109		Donations	x				PS Commitment Control, PS Cash Management, PS Query		Establish funding sources in Commitment Control
110	The system shall provide the ability to track and report on donations based on user defined criteria (e.g., in compliance with State requirements).	Donations	x				PS Commitment Control, PS Cash Management, PS Query		Establish funding sources in Commitment Control

Cash N	/lanagement			Req	esponse uiremen or Use O	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 F	= N		H/M/L	
111	versions of acknowledgement (e.g. thank you) letters to donors based on user-defined criteria (e.g., in cases of multiple donations by a single donor, donor shall receive different versions of letter for each donation).	Donations	x				PS Commitment Control, PS Cash Management, PS Receivables, PS Query, BI Publisher		
112	The system shall provide forecasting capabilities for cash inflows including but not limited to:	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
113	Tax revenues (with at least 12 types of taxes)	Forecasting	x				Oracle PBCS (Planning and Budgeting Cloud Solution)		
114	Non-tax revenues (at least 10 types)	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
115	Maturing investments	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
116	Federal funds	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
117	DCCA (Dept of Commerce & Consumer Affairs)	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
118	Bond Sales	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
119	Miscellaneous Inflows (user-defined categories)	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
120	The system shall provide forecasting capabilities for cash outflows including but not limited to:	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
121	Payroll	Forecasting	X				Oracle PBCS (Planning and Budgeting Cloud Solution)		
122	Debt Service	Forecasting	x				Oracle PBCS (Planning and Budgeting Cloud Solution)		
123	Welfare	Forecasting	x				Oracle PBCS (Planning and Budgeting Cloud Solution)		
124	Capital Improvement Programs	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
125	Employee Benefits	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
126	Tax distribution to counties	Forecasting	х				Oracle PBCS (Planning and Budgeting Cloud Solution)		
127	Miscellaneous Outflows (user-defined categories)	Forecasting	x				Oracle PBCS (Planning and Budgeting Cloud Solution)		
128	The system shall have the ability to provide the extensive revenue forecasting functionality required by large revenue collecting departments and the B&F.	Forecasting	x				Oracle PBCS (Planning and Budgeting Cloud Solution)		
129		General	x				PS Cash Management		
130	The system shall provide the ability to maintain receipts information, based on user-defined approvals, user-defined time period (e.g., weekly), and user-defined criteria.	General	х				PS Cash Management, PS Receivables		
131		General	x						
132		General	x				PS Chartfield Designer, PS Tree Manager		
133		General	x				PS General Ledger		Set up ADB ledgers

Topic   V   0   2   P   N	Cash N	/Janagement		One Response per Requirement (Offeror Use Only)			Module / Solution	Customization Complexity	Offeror Comments		
besident of case of ca	ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
Secretar   Secretar Study provide the ability to track days costs position, based on user-defined criteria and provides the ability to identifying pending transactions (g., pegment)   Secretar   S	134	the requirements of the Cash Management Improvement Act (CMIA) based on user-defined criteria and user-defined workflow (e.g., workflow between B&F and departments for generation and	General	x					•		
based on user-defined criteria (e.g., Cl. account, subsidiary bidger).  The system shall provide the ability to identify/flag pending transactions (eig., psymetria vouchers), which use to te put on that, and the state of the provide state ability to identify/flag pending soon, but there is no appropriate out to the put on the put of the put there is no appropriate out to the put of the put there is no appropriate out to the put of the put the	135	The system shall provide the ability to post reversing entries.	General	х					PS General Ledger		
The system shall provide the ability to identify/flag pending transactions (e.g., payment courters), which can be put on hold, based on user-defined parameters (e.g., cesh forecast is negative; Federal cash is available for driving down, but there is no sportification and the put of	136	· · · · · · · · · · · · · · · · · · ·	General	v					PS Cash Management		
The system shall provide the ability to report fund transfers between bake on user-defined criteria (e.g., cash on-hand, federal at units of the system shall provide the ability to report fund transfers between bake accounts based on user-defined criteria.  140 The system shall provide the ability to reconcile unremitted cash by user-defined parameters (e.g., fiscal year, fund, type, source, and a proportiation to GL).  141 The system shall provide the ability to reconcile inclose of deposits, based on user-defined criteria.  142 The system shall provide the ability to reconcile inclose of deposits, based on user-defined criteria.  143 The system shall provide the ability to reconcile inclose of deposits, based on user-defined criteria.  144 The system shall provide the ability to reconcile inclose of deposits, based on user-defined criteria.  145 The system shall provide the ability to reconcile inclose of deposits, based on user-defined criteria.  146 The system shall provide the ability to rearrian, rank, and query data on sourciles held to secure deposit balances (HIS Chep 38) based on user-defined criteria, including but not limited to:  146 Security Type  147 Depository (i.e., financial institution who has pledged the security)  148 Depository (i.e., financial institution who has pledged the security)  149 Depository (i.e., financial institution who has pledged the security)  150 Enfry Date (filtical pledge date)  151 Calcropy (i.e., financial institution who has pledged the security)  152 Confirmation Date (i.e., the settlement or receipt date of the safety)  153 Receipt Number  154 Receipt Date  155 Deal Management  156 Description  157 Description  158 Deal Management  159 Deal Management  150 Description  150 Description  151 Calcropy (i.e., this settlement or receipt date of the safety)  150 Description  151 Calcropy (i.e., this settlement or receipt date of the safety)  155 Description  156 Description  157 Description  158 Description  158 Description  159 Deal Management  159 Deal Management  150	137	transactions (e.g., payment vouchers), which can be put on hold, based on user-defined parameters (e.g., cash forecast is negative; Federal cash is available for drawing down, but there is no	General						Management, PS Commitment		
139   The system shall provide the ability to report fund transfers between   Denta accounts based on user-defined crimers   Control System shall provide the ability to reconcile unremitted cash by user-defined parameters (e.g., Siscal year, fund, type, source, and appropriation to GL).   PS Cash Management   PS Cash Man	138	The system shall provide the ability to flag funds to be utilized first,	General						Management, PS Commitment		
user-defined parameters (e.g., fiscal year, fund, type, source, and appropriation to GL).  141 The system shall provide the ability to reconcile notices of deposts, based on user-defined criteria.  142 The system shall provide the ability to interface with third-party providers for on-line receipts/payments and deposits based on user-defined criteria.  143 The system shall support the use of lockbox functionality.  144 The system shall support the use of lockbox functionality.  145 The system shall support the use of lockbox functionality.  146 Goneral  147 Easystem shall support the use of lockbox functionality.  148 Goneral  149 Security Type  149 Holder (i.e., financial institution who has pledged the security)  149 Holder (i.e., financial institution who has pledged the security)  150 Entry Date (official pledge date)  151 Category (i.e., what security is being used for)  152 Confirmation Date (i.e., the settlement or receipt date of the safekeeping deposit)  153 Receipt Number  164 General  175 Deal Management  175 De	139	bank accounts based on user-defined criteria.							PS Cash Management		
based or user-defined criteria.   x   PS Financial Gateway   PS Fi	140	user-defined parameters (e.g., fiscal year, fund, type, source, and	General	х					PS Cash Management		
providers for on-line recepits/payments and deposits based on user- defined oriteria.  143 The system shall support the use of lockbox functionality.  144 The system shall provide the ability to maintain, track, and query data on securities field to secure deposit belances (HRS Chap.38)  145 Control Number  146 Security Type  147 Depositor (i.e., financial institution who has pledged the security)  148 Depositor (i.e., financial institution who has pledged the security)  149 Holder (i.e., financial institution who is holding the collateral ascurity)  150 Entry Date (official pledge date)  151 Category (i.e., what security is being used for)  152 Confirmation Date (i.e., the settlement or receipt date of the safekeeping deposit)  153 Receipt Number  154 General  155 Description  156 Description  157 Due Date  158 Par Value  159 Deal Management  150 General  150 Ceneral  151 Category (i.e., what security is being used for)  152 General  153 Receipt Number  154 General  155 Description  156 Ceneral  157 Due Date  158 Par Value  159 Rating  159 Rating  150 General  150 General  151 Category (i.e., what security is being used for)  152 General  153 Receipt Number  154 Receipt Date  155 General  156 Description  157 Due Date  158 Par Value  159 Rating  159 Rating  150 Market Value  150 Market Value  151 Ceneral  152 Page Management  153 Page Management  154 Receipt Date  155 Receipt Number  156 General  157 Due Date  158 Page Management  159 Rating  159 Rating  150 General  150 Rating  150 General  151 Category (i.e., what security is being used for)  152 Page Management  153 Page Management  154 Page Management  155 Description  155 Description  156 Interest Rate of Security  157 Due Date  158 Page Management  159 Rating  150 General  151 Category (i.e., what security is description of the security is defined criteria, including but not limited to:  150 Market Value  151 Category (i.e., what security is defined criteria, including but not limited to:  157 Due Date  158 Page Management  159 Page Management  150 Marke	141	The system shall provide the ability to reconcile notices of deposits,	General	х					PS Cash Management		
The system shall support the use of lockbox functionality.   General   X   PS Receivables	142	providers for on-line receipts/payments and deposits based on user-	General	х					PS Financial Gateway		
data on securities held to secure deposit balances (HRS Chap.38) based on user-defined criteria, including but not limited to:  145 Control Number  General x PS Deal Management  Depositor (i.e., for whom the collateral and securities are being held)  147 Depositor (i.e., for whom the collateral and securities are being held)  148 Depository (i.e., financial institution who has piedged the security)  149 Holder (i.e., financial institution who is holding the collateral security)  150 Entry Date (official piedge date)  151 Category (i.e., what security is being used for)  152 Confirmation Date (i.e., the settlement or receipt date of the safekeeping deposit)  153 Receipt Number  General x PS Deal Management  Safekeeping deposit)  154 Receipt Date  General x PS Deal Management  Seneral x PS Deal Management  PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Security  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security)  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the security  Seneral x PS Deal Management  Depository (i.e., financial institution who has piedged the se	143	The system shall support the use of lockbox functionality.	General	х					PS Receivables		
145   Control Number   General   X   PS Deal Management	144	data on securities held to secure deposit balances (HRS Chap.38)	General	х					PS Deal Management		
Depositor (i.e., for whom the collateral and securities are being held)   PS Deal Management	145		General	х					PS Deal Management		
held) Depository (i.e., financial institution who has pledged the security) Holder (i.e., financial institution who is holding the collateral security) Security) Security  Entry Date (official pledge date) Seneral Security (i.e., what security is being used for) Seneral Security (i.e., what security is being used for) Seneral Security (i.e., what security is being used for) Seneral Security (i.e., what security is being used for) Seneral Security (i.e., what security is being used for) Seneral Security (i.e., what security is being used for) Seneral Security (i.e., financial institution who has pledged the security Security (i.e., financial institution who is holding the collateral security is being used for) Seneral Security (i.e., financial institution who has pledged the security is being used (institution who is holding the collateral security is being used (institution who is holding the collateral security is being used (institution who is holding the collateral security is being used (institution who is holding the collateral security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the security is being used (institution who is holding the securit	146	Security Type	General	Х					PS Deal Management		
149   Holder (i.e., financial institution who is holding the collateral security)   Security   PS Deal Management   Security   PS Deal Management   PS Dea		held)		х					ū .		
security)  150 Entry Date (official pledge date)  151 Category (i.e., what security is being used for)  152 Confirmation Date (i.e., the settlement or receipt date of the safekeeping deposit)  153 Receipt Number  154 Receipt Date  155 Description  156 Interest Rate of Security  157 Due Date  158 Par Value  159 Rating  159 Rating  150 General  150 General  150 General  151 Category (i.e., what security is being used for)  150 General  151 PS Deal Management  152 PS Deal Management  153 PS Deal Management  154 PS Deal Management  155 Description  156 Interest Rate of Security  157 Due Date  158 Par Value  159 Rating  150 General  150 General  150 Rating  150 General  151 PS Deal Management  152 PS Deal Management  153 PS Deal Management  154 PS Deal Management  155 PS Deal Management  156 PS Deal Management  157 Due Date  158 Par Value  159 Rating  150 General  150 General  150 Rating  150 General  150 Alarket Value  150 General  150 Caneral  150 PS Deal Management  151 PS Deal Management  152 PS Deal Management  153 PS Deal Management  154 PS Deal Management  155 PS Deal Management  156 PS Deal Management  157 PS Deal Management  158 PS Deal Management  159 PS Deal Management  150 PS Deal Management  150 PS Deal Management  150 PS Deal Management  151 PS Deal Management  152 PS Deal Management  155 PS Deal Management  156 PS Deal Management  157 PS Deal Management  158 PS Deal Management  159 PS Deal Management  150 PS Deal Management				х					-		
151 Category (i.e., what security is being used for) 152 Confirmation Date (i.e., the settlement or receipt date of the safekeeping deposit) 153 Receipt Number 154 Receipt Date 155 Description 155 Description 156 Interest Rate of Security 157 Due Date 158 Par Value 159 Rating 160 Market Value 161 The system shall provide the ability to maintain, track, and query data on collateral securities based on user-defined criteria, including but not limited to:  150 Category (i.e., what security is being used for) 151 PS Deal Management 152 PS Deal Management 153 PS Deal Management 154 PS Deal Management 155 PS Deal Management 156 Par Value 157 PS Deal Management 158 Par Value 159 Rating 150 Caneral 150 PS Deal Management 150 PS Deal		security)							ū		
152 Confirmation Date (i.e., the settlement or receipt date of the safekeeping deposit)  153 Receipt Number General Seceipt Number General Seceipt Date Seceipt Date Seceipt Confirmation Seceipt Date Seceipt Date Seceipt Security General Seceipt Security General Seceipt Security General Seceipt Security Second Second Security Second Second Security Second					$\vdash$	-+	$\dashv$		<u> </u>		
153   Receipt Number   General   X   PS Deal Management		Confirmation Date (i.e., the settlement or receipt date of the							ū		
Description   General   x   PS Deal Management	153		General	Х					PS Deal Management		
156   Interest Rate of Security   General   x   PS Deal Management     157   Due Date   General   x   PS Deal Management     158   Par Value   General   x   PS Deal Management     159   Rating   General   x   PS Deal Management     160   Market Value   General   x   PS Deal Management     161   The system shall provide the ability to maintain, track, and query data on collateral securities based on user-defined criteria, including but not limited to:   X   PS Deal Management     170   PS Deal Management   PS Deal Management     181   PS Deal Management     181   PS Deal Management     182   PS Deal Management     183   PS Deal Management     184   PS Deal Management     185   PS Deal Management     18		·	General	_					_		
157   Due Date   General   X   PS Deal Management     158   Par Value   General   X   PS Deal Management     159   Rating   General   X   PS Deal Management     160   Market Value   General   X   PS Deal Management     161   The system shall provide the ability to maintain, track, and query data on collateral securities based on user-defined criteria, including but not limited to:   X   PS Deal Management     170   PS Deal Management   PS Deal Management     181   PS Deal Management   PS Deal Management   PS Deal Management     181   PS Deal Management	155		General	Х					PS Deal Management		
158   Par Value   General   X   PS Deal Management   PS Deal Managemen		· · · · · · · · · · · · · · · · · · ·							<u> </u>		
159   Rating   General   X   PS Deal Management     PS Deal Management   PS Dea					$\sqcup$				_		
160 Market Value General x PS Deal Management  161 The system shall provide the ability to maintain, track, and query data on collateral securities based on user-defined criteria, including but not limited to:  General X PS Deal Management  PS Deal Management  PS Deal Management  X V V V V V V V V V V V V V V V V V V							_		<u> </u>		ļ
The system shall provide the ability to maintain, track, and query data on collateral securities based on user-defined criteria, including but not limited to:    PS Deal Management   PS Deal Managem		ŭ			$\vdash$	-+			S		<u> </u>
		The system shall provide the ability to maintain, track, and query data on collateral securities based on user-defined criteria,							<u> </u>		
102   Financial institution	162	Financial Institution	General	Х			1		PS Deal Management		

Cash N	1anagement			Req	esponse uiremen or Use C	nt		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3 1	F	N		H/M/L	
163	Deposit - State Amount	General	Х					PS Deal Management		
164	Deposit - Employee Retirement System (ERS) Amount	General	Х					PS Deal Management		
165	Federal Insurance	General	Х					PS Deal Management		
166	Dollar Value of Non-Pass-Through Securities	General	Х					PS Deal Management		
		General	Х					PS Deal Management		
168	The system shall provide the ability to distribute interest earnings to the participants in the State Investment Pool and Bond Investment Programs based on program requirements.	Interest Earnings Allocation	×					PS Allocations		
169	The system shall provide the ability to maintain data on State Investment Pool Program and Bond Investment Pool Program investments with premiums and discounts, and to amortize the premium and discount on those investments for use in the interest distribution based on user-defined criteria.	Interest Earnings Allocation	X					PS Deal Management		
170	The system shall provide the ability to calculate interest on specified I	Interest Earnings Allocation	Х					PS Deal Management		
171	The system shall provide the ability to interface detailed and summary level data from financial institutions based on user-defined frequency (e.g., daily, weekly, monthly, quarterly) and user-defined criteria (e.g., receipts, expenditures, cash balance by bank account, program ID, organization unit).	Interface	x					PS Cash Management, PS Financial Gateway		
172	The system shall provide the ability to interface data on cash flows, both actual and projected, from external systems (including an Investment portfolio management system) based on user-defined criteria.	Interface	x					PS Financial Management, PS Financial Gateway		
	The system shall provide the ability to process internal loans (e.g., cash flow loans), including processing entries for borrowing and repayment of specified funds, based on user-defined criteria (e.g., specific funds are designated as available to borrow from).	Loans - Internal	x					PS Cash Management		In-House banking
174	The system shall provide the ability to establish, track and repay interim financing loans for bonds based on user defined criteria.	Loans - Internal	х					PS Cash Management		In-House banking
175	<u> </u>	Reporting	x					PS Cash Management, PS Query		
176	<u> </u>	Reporting	x					PS Cash Management, PS Query		
177	, <u>v</u>	Reporting	x					PS Cash Management, PS Query		
178	The system shall provide a cash receipts report based on user-defined criteria.	Reporting	х					PS Cash Management, PS Query		
179		Reporting	x					PS Cash Management, PS Query		
180		Reporting	v					PS Cash Management, PS Query		
181	The system shall provide the ability to generate daily cash position statement (Statement of Cash by Fund per HRS) and management reports, based on user-defined criteria (e.g., GL account, subsidiary ledger).	Reporting	x					PS Cash Management, PS Query		
182	The system shall provide the ability to generate a report on available cash balance and total cash advanced to Subsidiary Account, based on user-defined criteria.	Reporting	x					PS Cash Management, PS Query		

Cash N	/lanagement			Req	esponse uiremen or Use Oi	t	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 F	N		H/M/L	
183	The system shall provide the ability to generate a report on average daily, monthly, and quarterly cash balances, by user-defined criteria.	Reporting	х				PS Cash Management, PS Query		
184	The system shall provide the ability for cash basis reporting which details and summarizes receipts and disbursements (e.g., accounts receivable, accounts payable), based on user-defined criteria.	Reporting	x				PS Cash Management, PS Receivables, PS Payables, PS Query		
185	The system shall provide the ability to generate cash forecast reports reflecting beginning cash, inflows, outflows, and ending balance, by user-defined parameter (e.g., by fund, by appropriation, by month).	Reporting	x				PS Cash Management, PS Query		
186		Reporting	x				PS Deal Management, PS Query		
187	The system shall provide the ability to generate a cash management report, which monitors the timeliness of check deposits (e.g., date of check, date check received, date check was deposited, date check was remitted, date check was posted), based on user-defined criteria.		x				PS Cash Management, PS Query		
188	The system shall have the ability to generate error reports, based on user-defined criteria.	Reporting	х				PS Cash Management, PS Query		
189	The system shall have the ability to generate cash status report, at summary and detail level, by user-defined parameter (e.g., bank account), based on user-defined frequency (e.g., daily, weekly, monthly, quarterly) and user-defined criteria (e.g., transaction detail by document number; receipts; expenditures; cash balance by bank account, program ID, organization unit).	Reporting	×				PS Cash Management, PS Query		
190		Reporting	X				PS Cash Management, PS Query		
191	The system shall provide the ability to generate cash reports, at summary and detail level, by user-defined parameter (e.g., fund), based on user-defined time period (e.g., weekly, monthly, quarterly, annually), and user-defined criteria (e.g., receipts, expenditures, cash balance by bank account, program ID, organization unit).	Reporting	x				PS Cash Management, PS Query		
192	The system shall provide the ability to generate reports on securities pledged for collateral based on user-defined criteria, including but not limited to:		Y				PS Deal Management, PS Query		
193	Summary of Par and Market Value of Securities Pledged	Reporting	x			+	PS Deal Management, PS Query		
194	Collateral Securities Pledged By Banks: enable user-defined valuation as a % of par value.	Reporting	x				PS Deal Management, PS Query		

Purcha	sing			Req	espons quireme or Use (	ent	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	FN		H/M/L	
1	Unapproved requisitions by requisitioner	Inquiries	Х				PS Purchasing		
2	Unapproved requisitions by approver	Inquiries	х				PS Purchasing		
3	Unapproved purchase orders by approver	Inquiries	Х				PS Purchasing		
4	Open purchase orders by supplier	Inquiries	х				PS Purchasing		
5	Open purchase orders by approver	Inquiries	Х				PS Purchasing		
6	Requisition history (shows requisitioner status of any requisition including related purchase orders, receipts and invoices)	Inquiries	х				PS Purchasing		
		Policy & Compliance	х				PS Purchasing, PS Approval Workflow		
	Ability to configure automatic flagging/ routing of vendor information that does not match across the PO, receipt, and invoice to the appropriate party for review/updates	Policy & Compliance	х				PS Purchasing		PS uses common supplier setup/definitions across all procurement processes, so this should not be an issue
	Ability to configure business rules for establishing purchasing and approval restrictions (e.g., maximum dollar amounts allowed by role for any single purchase; maximum dollar amounts allowed by role for purchases in aggregate; restricted items by role, etc.)	Policy & Compliance	х				PS Purchasing, PS Approval Workflow		
	Ability to print approved purchase order at the source (ability to override Vendor Master delivery method)	•	х				PS Purchasing		
11	Approval routing of PO transactions by configured business rules (e.g., PO transactions <\$XXX and PO transactions >\$X,XXX)	Purchase Order Processing	х				PS Purchasing, PS Approval Workflow		
12	, , , , , ,	Purchase Order Processing	Х				PS Purchasing		
13	Supports blanket orders	Purchase Order Processing	Х				PS Purchasing		
		Purchase Order Processing	х				PS Purchasing, PS Commitment Control		
15	Ability to close out purchase orders either individually or a mass change	Purchase Order Processing	х				PS Purchasing		
16	Online entry of purchase orders	Purchase Order Processing	Х				PS Purchasing		
17	Create purchase orders directly from master vendor contract	Purchase Order Processing	Х				PS Contracts, PS Purchasing		
18	Change order capability, with audit trail documenting the change (subject to availability of funds if applicable)	Purchase Order Processing	x				PS Purchasing		
19	Ability to document a receiver report associated with a PO	Purchase Order Processing	Х				PS Purchasing		
20	Dock receiving at the purchase order line level	Purchase Order Processing	Х				PS Purchasing		
21	Desktop receiving for services and consumables	Purchase Order Processing	Х				PS Purchasing		
22	The system shall support the use of purchasing cards (pCard)	Purchasing Card (pCard)	Х				PS Purchasing		
23	The system shall record pCard expenses in the appropriate accounts	Purchasing Card (pCard)	Х				PS Purchasing		
24	The system shall support pCard reconciliation between accounts and bank records	Purchasing Card (pCard)	х				PS Purchasing		
25	The system shall support import of pCard bank records	Purchasing Card (pCard)	Х				PS Purchasing		
	· ·	Reports	Х				PS Purchasing		
27	Purchase order audit (history of any purchase order, showing related requisitions, receipts and invoices along with any change order activity)	Reports	х				PS Purchasing		
	Unfulfilled purchase orders by date (shows purchase order lines that are not yet fully received by user-defined date ranges)	Reports	х				PS Purchasing		
29	Online requisition entry at various levels of the organization	Requisition Processing	Х				PS Purchasing		
30		Requisition Processing	х				PS Purchasing, PS Approval Workflow		
		Requisition Processing	х				PS Purchasing, PS Commitment Control		
32	Create requisitions from online catalog	Requisition Processing	Х				PS Purchasing, PS ePro		
33		Requisition Processing	v				PS Fluid Approvals		No app required, PS fluid extends PS application
			^						to dynamically render on form factor being used

Purcha	asing			One R Red (Offer	quirer	ment		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
34	Ability to create supplier master data without a vendor being established in the accounts payable (AP) module	Vendor Master	х					PS Suppliers		
35	Ability to mask private information such as bank account numbers unless the user has appropriate access rights	Vendor Master	х					PS Suppliers, PeopleTools		
36	Ability to maintain preferred vendor lists	Vendor Master	Х					PS Purchasing		
37	E-signature workflow integration to facilitate requisition approval tracking, as well as the automated posting of entries to the journal ledger when purchases are later received	Workflow	х					PS Purchasing, PS Approval Workflow		

Data V	/arehouse			Red	Respor quiren	nent	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С		F		H/M/L	
1	The system shall comply with the state and federal data security requirements surrounding financial data elements.	Security	Х				Autonomous Data Warehouse		Oracle has the capability to comply with all FedRamp security requirements as your definitions are solidified we can propose any changes that are needed.
2	The system shall have data privacy encryption at rest and in movement/delivery.	Security	X				Autonomous Data Warehouse		
3	The system shall have the ability to restrict access by roles, groups, users. Access might be restricted to certain data sets, features, by data source, etc.	Security	Х				Autonomous Data Warehouse		Yes based on application security configuration.
4	The system shall use a dimensional modeling schema (Star, Snowflake, etc.).	Architecture	Х				Autonomous Data Warehouse		
5	The system shall support Slowly Changing Dimensional (SCD) tables.	Architecture	Х				Autonomous Data Warehouse		
6	The system shall have a data repository that includes various types of data: structured, semi-structured, flexible structure, and unstructured.	Architecture	Х				Autonomous Data Warehouse		
7	The system shall refresh data in near real-time while maintaining full ACID transactional consistency.	Architecture	Х				Autonomous Data Warehouse		
8	The system shall be able to adapt to workload needs; dynamically expanding and scaling back compute resources as needed to maximize performance and concurrency.	Architecture	Х				Autonomous Data Warehouse		
9	The system shall have the ability to run multiple analytic workloads in parallel - with independent resource scaling.	Architecture	Х				Oracle Analytics Cloud		
10	Data queries generated as result of user interaction with the business intelligence / data warehouse applications shall not affect existing performance of the transactional database(s) from which data are pulled.	Architecture	Х				Oracle Analytics Cloud		
12	The system shall be appropriate in scale for the business requirement needs.	Architecture	Х				Autonomous Data Warehouse		
13	The system shall have a backup strategy that also includes backup of non-recoverable transactions (i.e. incremental strategy, ETL strategy, etc.)	Recovery	Х				Autonomous Data Warehouse		
14	The system shall have customizations and white labeling to allow users to customize the system to their preferences and needs.	Platform Functions	Х				Oracle Analytics Cloud		
15	The system shall have customizable data visualization capabilities - dashboards - with user-friendly features.	Data Visualization	Х				Oracle Analytics Cloud		
16	The system shall have interactive data visualization capabilities - charts, graphs, etc.	Data Visualization	Х				Oracle Analytics Cloud		
17	The system shall be designed and documented for intuitive usability and high adoption.	Analytics	Х				Oracle Analytics Cloud		
18	The system shall allow for for canned and ad-hoc self-service reporting and analytics using near real-time data.	Analytics	Х				Oracle Analytics Cloud		
19	The system shall have the capability for job workflows and orchestration.	Analytics	Х				Oracle Analytics Cloud		
20	The system shall have interactive reporting capabilities that allow users to filter, slice and dice, drilldown, crosstab, sort, format, pin, schedule, print, etc.	Analytics	Х				Oracle Analytics Cloud		
21	The system shall have OLAP operations including rollup, drill-down, slice and dice, multi-dimensional analysis, data exploration, and timeseries auto generation.	OLAP	Х				Oracle Analytics Cloud		
22	The system shall include a modern mechanism for extract, transform, and load (ETL) capabilities as well as extract,load, and transform (ELT) capabilities.	Integration	Х				Oracle Data Integrator		

Data V	Varehouse			Re	Respor equiren	nent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
23	The system shall have the ability to use the data warehouse as a data source for various integration tools including, but not limited to, HADOOP and HIVE.	Integration	Х					Oracle Data Integrator		
24	The system shall have regulatory compliance capabilities.	Decision Services	Х					Oracle Analytics Cloud		
25	The system shall have threat/fraud detection capabilities.	Decision Services	Х					Oracle Analytics Cloud		
26	The system shall be able to perform analytics, transform data, create business recommendations, and comment on the information to help drive decisions.	Decision Services	Х					Oracle Analytics Cloud		
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Data W	/arehouse	se		ne Res Requ Offeror	ireme	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
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Data W	Varehouse				One Response per Requirement Module / Solution (Offeror Use Only)		Module / Solution	Customization Complexity	Offeror Comments	
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	



**Appendix A-2 – Expansion Phase Requirements** RFP-ERP-2020

## Requirements Matrix | Instructions

This requirements matrix is comprised of multiple tabs, and together they contain the full set of requirements for which SOH requires vendor responses.

Please respond to each and every requirement (even ones that appear redundant) as follows:

- 1. Indicate your response to each line item with an "X" in the appropriate "One Response per Requirement" column, according to the following labels and definitions:
- Y = Yes, we meet this requirement out-of-the-box or with configuration capabilities provided within the software.
- C = We can meet this requirement via customization/extension-- i.e., for a SaaS solution, the functionality would be provided by building an extension using platform as a service (PaaS) capabilities provided either by the vendor or a third party. (If this column is indicated, please provide an indication of High, Medium, or Low development complexity in the "Customization Complexity" column. Costs of all extensions/customizations by process/functional area should also be noted separately in your Pricing Response.)
- 3 = We can meet this requirement by partnering with another third party solution. (If this column is indicated, please provide the name of the third party product in the "Comments" column.)
- F = We can meet this requirement with a future release of our software. (If this column is indicated, please provide the version and timing of the release in the "Comments" column.)
- N = No, we cannot meet this requirement.
- 2. For each line item, note the name of the module that will handle the required functionality in the "Module/Solution" column, so that SOH can align your module pricing to the requirements.

APPENDIX A-2 2 Instructions - 2 RFP-ERP-2020

Core Requirements	
Tab	Topic
Appropriations	Appropriations
Budget	Allocations
Budget	Budget Administration
Budget	Budget Development: Base Budget/Rollover/Versions
Budget	Budget Development: Functionality/Capability
Budget	Budget Development: General
Budget	Budget Document
Budget	Budget Forecasting
Budget	Budget Reporting: General
Budget	Budget Resource Planning
Budget	CIP Budgeting
Budget	General
Budget	Personnel Budget
eProcurement Interface	Application Programming Interface (API)
Grant Management	Budgeting
Grant Management	Commitment Control
Grant Management	Create and Maintain Grant
Grant Management	General General
Grant Management	Interfaces
Grant Management	Manage Grant
Grant Management	Monitoring
Grant Management	Outcomes tracking
Grant Management	Record and Track Grant Transactions
Grant Management	Reporting
Grant Management	SOH acts as Grantor
Projects	Capital Budgeting
Projects	Create and Maintain Project
Projects	Create and Maintain Project Budget
	General General
Projects Projects	Interface
Projects	Manage Project
Projects	Project Billing
Projects	Project Costing
Projects	Project Expenses
Projects	Project Inquiries
Projects	Project Management Integration
Projects	Project Reports
Projects	Project Setup
Projects	Project Staffing
Projects	Record and Track Project Transactions
Projects	Reporting
Projects	Time Recording
Travel	Audit Requirements
Travel	General
Travel	Other
Travel	Reporting
Travel	Taxes
Travel	Travel Completion
	Travel Management
Travel	Travel Request
Travel	Travel Requests
Travel	Havel Nequesis

Project	ts			e Respo Require fferor Us	ment		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С 3	F	N		H/M/L	
	request for capital projects, based on project-level budget data and other user-defined criteria.	Capital Budgeting	х				PS Project Costing		
	The system shall provide the ability to integrate capital expenditure data with the capital budgeting, by user defined criteria (e.g.,	Capital Budgeting Capital Budgeting	X				PS Project Costing, Oracle PBCS		
4	project, appropriation, year of funding).  The system shall provide the ability to allow for authorized budget adjustments to capital projects during the year, based on authorization and other user-defined criteria.	Capital Budgeting	X				PS Project Costing PS Project Costing, Oracle PBCS		
	(i.e., a minimum of five years), on an appropriation basis within a project, based on user-defined criteria (e.g., availability of current appropriations).	Capital Budgeting	x				PS Project Costing, Oracle PBCS		
	The system shall provide the ability to produce CIP Plan with narrative overviews, project summaries and project details, including scope, cost and schedules, with chart, tables, exhibits, etc., based on user-defined time period.	Capital Budgeting	x				PS Project Costing, Oracle PBCS		
7	The system shall provide the ability to generate, route, identify dependencies, and track status of CIP-related documents through automated workflow, based on user-defined criteria.	Capital Budgeting	x				PS Project Costing, PS Approvals		
	The system shall provide the ability to track and consolidate capital budgets, actual and budgeted activity, based on user-defined criteria and user-defined workflow.  The system shall provide the ability to track and report on historical		х				PS Project Costing, Oracle PBCS		
9	The system shall provide the ability to track and report on historical budget information on capital projects for a minimum of 20 years, in compliance with State's data retention policy, based on user-defined criteria.	Capital Budgeting	x				PS Project Costing, Oracle PBCS		
	The system shall provide the ability to both automatically generate and manually assign project numbers based on user-defined criteria (e.g., assign project number generated from external systems; separate numbering sequencing for capital versus non-capital projects).	Create and Maintain Project	X				PS Project Costing		
11	The system shall provide the ability to maintain project detail information (e.g., start and end date of projects; project classification - capital versus non-capital; project title/ description),	Create and Maintain Project							
12	based on user-defined time periods (inception-to-date basis).  The system shall provide the ability to identify and structure a project in multiple phases/ cost elements over multiple years with associated budgets.	Create and Maintain Project	X				PS Project Costing PS Project Costing		
13	The system shall provide the ability to maintain and track projects by user-defined criteria (e.g., project title/ description, project phase/ cost element, master project and sub-projects).	Create and Maintain Project	х				PS Project Costing		
15	unlimited work breakdown structures. The system shall provide the ability to maintain multiple versions	Create and Maintain Project  Create and Maintain Project	х				PS Project Costing		
16	of project (e.g. proposed project; approved project).  The system shall provide the ability to update the master project budget file with additional allocations and track each separately by amount, date, name of project manager, source of funds, and other user-defined criteria.	Create and Maintain Project Budget	X				PS Project Costing		
17	The system shall provide the ability to retain original budget,	Create and Maintain Project Budget	X				PS Project Costing PS Project Costing		
18	The system shall provide the ability to immediately provide revised budget status upon the revision of project estimates.	Budget	x				PS Project Costing		
20	various categories (e.g., administrative overhead, matching funds), The system shall provide the ability to track budget details, based	Create and Maintain Project	х	$\perp$	_		PS Project Costing		
21	The system shall provide the ability to perform budgetary control	Budget Create and Maintain Project Budget	X				PS Project Costing PS Project Costing, PS Commitment Control		
22	At a minimum, the solution enables tracking of projects via the GL	General	x				PS Project Costing, PS General Ledger		
	The system shall provide the ability to capture effective start and end dates for capital projects, by user defined parameters (e.g., project ID, appropriation, phase/ cost element).	General	х				PS Project Costing		

Project	ts			Re	Respon equiremeror Use	nent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H / M / L	
24	The system shall provide the ability to develop and track budgets, encumbrances/ commitments, and expenditures for capital projects at the summary and detail level, by user-defined time period (e.g., across fiscal years, from project inception to completion, term of bond), based on user-defined criteria (e.g., phase / cost element, multiple funding sources).	General	×					PS Project Costing, PS Commitment Control		
25	The system shall provide the ability to calculate debt and finance charges for capital projects, by user defined criteria (e.g., type of financing option).	General	x					PS Project Costing		
26	The system shall provide the ability to track capital project funding, by source (e.g., bonds, loans), for user-defined criteria.	General	х					PS Project Costing, PS Commitment Control		
	The system shall provide the ability to establish and track encumbrance dates as well as periods of liquidation, based on user-defined criteria.	General	х					PS Project Costing, Oracle PBCS		
28	The system shall provide the ability to generate forecasts for capital projects (including concept projects), by user-defined criteria (e.g., fund, project category), for user-defined time period (e.g., current, five-year, duration of entire project).	General	х					PS Project Costing, PS Commitment Control		
29	The system shall provide the ability to develop and reconcile cash flow projections based on user-defined criteria (e.g., cash flow required to meet contract payment schedule).	General	х					PS Cash Management		
30	The system shall provide the ability to manage capital project closeout based on user-defined criteria and workflow (e.g., final inspection; asset placed in service; completion of punchlist/ final acceptance; release of retention upon completion of punchlist).	General	x					PS Project Costing		
31	1 /	Interface	X					PS Project Costing, PS Integration Broker		
	project, based on user-defined criteria (e.g., by category).	Manage Project	х					PS Project Costing		
33	The system shall provide the ability to compare actual expenditures to forecasts.	Manage Project	х					PS Project Costing		
34	The system shall provide the ability to track hours expended for all projects by organizational unit, pay period, employee, account number, and other user-defined criteria.	Manage Project	х					PS Project Costing		
	The system shall provide the ability to track projects based on user-defined criteria (e.g., encumbrances; allocations by fiscal year).		х					PS Project Costing		
36	The system shall provide the ability to generate and submit online project authorization forms and project numbers/identifier for opening and closing projects.	Manage Project	х					PS Project Costing, PS Form Builder		
37	The system shall provide the ability to revise/update project cost estimates and schedules based on user-defined criteria (e.g., revise end dates for contracts tied to projects).	Manage Project	x					PS Project Costing		
38	The system shall provide the ability to prevent costs from being charged to closed projects, closed project phases/sub phases/ cost elements, and/or closed project activities.	Manage Project	х					PS Project Costing, PS Chartfield Designer		
39	charged to closed accounts or "inactive" accounts.	Manage Project	х					PS Project Costing, PS Chartfield Designer		
40	The system shall provide the ability to prevent charges from being allocated or expended to a lapsed appropriation on an inactive project.	Manage Project	х					PS Commitment Control		
41	The system shall provide the ability to reject transactions that would result in a project exceeding budget authority, based on user-defined criteria.	Manage Project	x					PS Commitment Control		
42	The system shall provide the ability to establish and manage multiple contracts and purchase orders for a single project based on user-defined criteria (e.g., contract beginning and end dates; alerts/ notifications that contract extensions are required; stoppayments for expired contracts).	Manage Project	x					PS Project Costing, PS Purchasing		
43	· · · · · · · · · · · · · · · · · · ·	Manage Project	X					PS Project Costing, PS Contracts		
	The system shall provide the ability to "drill back" to the originating documents within a project for the original purchase order or contracts.	Manage Project	X					PS Projects, PS Purchasing, PS Contracts  Contracts		
		Manage Project	x					PS Contracts		

Projec <sup>-</sup>	ts			Re	Responsequiremeror Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
46	The system shall provide the ability to automatically roll-forward into new budget year all previous budget appropriations, including but not limited to: expenditures/encumbrances (separated out by contract and dollar amount), progress payments throughout multiple years for the life of a project, and balances, based on user defined criteria.	Manage Project	x					PS Projects, PS Commitment Control		
47	unused project dollars into other projects and track the dollars based on the original and rollover/reprogram projects over multiple years, within user-defined criteria and parameters (e.g. specific proviso items). This includes the ability to manually perform or bypass the rollover process, based on authorization.	Manage Project	x					PS Project Costing		
48	The system shall provide the ability to manage project closeout based on user-defined criteria (e.g., defined business process; closeout checklist).	Manage Project	x					PS Project Costing		
49	The system shall provide the ability to display a warning message or prevent closure of a project with outstanding charges, open or outstanding purchase orders, or which has been over expended.	Manage Project	x					PS Project Costing		
50	The system shall provide the ability to generate advance notifications of project end dates, by user-defined process (e.g., prompt at point of user transaction; report), based on user-defined criteria.	Manage Project	x					PS Project Costing, PS Query		
51	The system shall provide the ability to open a closed project and allow for costs/receipts to be applied to either a closed or inactive project, based on user-defined criteria and authorization.  The system shall provide the ability to close project codes at the	Manage Project	х					PS Project Costing		
52	project level, preventing user from having to close each budget line associated with the specified project.	Manage Project	х					PS Project Costing		
53	The system shall provide the ability to close projects for specific associated budget lines while others remain active, without the user having to adjust individual lines.	Manage Project	х					PS Project Costing		
54	inactive or on-hold projects based on user-defined criteria (e.g. not allow time to be charged for inactive or on-hold projects).	Manage Project	х					PS Project Costing		
55	projects.	Manage Project	х					PS Projects		
56	transactions relating to projects throughout the project life, based on user-defined criteria.	Manage Project	х					PS Projects		PeopleSoft delivers archiving tool as PROJ_RESOURCE data can become large
57 58	Projects may be flagged as billable  Users can create new financial measures and key performance indicators (KPIs) that are then available for inclusion in existing dashboards	Project Billing Project Billing	X					PS Projects, PS Billing PS Projects, PS Billing		
59 60	Billing of actual costs incurred Billing of actual costs incurred with percentage uplift	Project Billing Project Billing	X					PS Projects, PS Billing PS Projects, PS Billing		
61	Milestone-based billing	Project Billing	х					PS Projects, PS Billing		
62 63	Stage payment billing Recurring billing amounts with percentage increments	Project Billing Project Billing	X X	-				PS Projects, PS Billing PS Projects, PS Billing		
64	Percentage of complete billing	Project Billing	X					PS Projects, PS Billing		
65	User-specified billing schedule	Project Billing	Х					PS Projects, PS Billing		
66 67	Time- and rate-based billing (for example, hours worked) User-defined billing methods	Project Billing Project Billing	X	1	++	+		PS Projects, PS Billing PS Projects, PS Billing		
68	Other billing methods	Project Billing	X					PS Projects, PS Billing		
69	Invoices may be previewed online before transmission	Project Billing	Х	+	+	$\prod$		PS Projects, PS Billing		
70 71	Billing process supports retentions  Revenue recognition capability	Project Billing Project Billing	X X	+	++	+		PS Projects, PS Billing PS Projects, PS Billing		
72	Projects accumulate employee costs based on actual costs (salary and employment costs)	Project Costing	х					PS Projects, PS Time and Labor		
73	Projects accumulate employee costs based on actual costs plus uplift	Project Costing	х					PS Projects, PS Time and Labor		
74	Projects accumulate employee costs based on role/employee grade rates	Project Costing	х					PS Projects, PS Time and Labor		
75	Projects accumulate employee costs based on standard costs	Project Costing						PS Projects, PS Time and Labor		
76	Project-related expenses automatically transferred from accounts	Project Expenses	X					1 3 Frojects, F3 Time and Labor		
	payable (AP)		х					PS Project Costing, PS Payables		

Project	ts			Req	espons uireme or Use (	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
77	Purchase orders (POs) for projects automatically recorded as commitments in project module (if vendor has purchasing module)	Project Expenses	x					PS Project Costing, PS Purchasing, PS Commitment Control		
78	Direct entry of project commitments	Project Expenses	х					PS Project Costing		
79	system prior to capitalization	Project Expenses	х					PS Project Costing, PS Payables, PS Asset Management		
	Online project analysis with multilevel drill down through work breakdown structures	Project Inquiries	х					PS Project Costing		
	Online project analysis with multilevel drill down through work breakdown structures to compare actual to budget	Project Inquiries	х					PS Project Costing		
	Billable projects online revenue/expense analysis  Ability to display key project information for project managers on mobile devices	Project Inquiries Project Inquiries	X					PS Project Costing PS Project Costing		
84	Integration with Microsoft Project	Project Management Integration	×					PS Project Costing PS Project Costing		
85	Integration with other project management tools	Project Management Integration	х					PS Project Costing		
86	Project detail analysis report	Project Reports	х					PS Project Costing		
87	Print project tasks in Gantt chart format	Project Reports	х					PS Project Costing		
	Employee utilization report	Project Reports	х					PS Project Costing		
89		Project Setup	х			$\prod$		PS Project Costing		
90	Work breakdown structure can be defined outside general ledger (GL) code structure  Work breakdown structure should support specific analysis	Project Setup Project Setup	х					PS Project Costing		
	elements:	•	х					PS Project Costing		
92	Project Task	Project Setup Project Setup	X					PS Project Costing PS Project Costing		
94	Activity	Project Setup	X					PS Project Costing		
95	etc	Project Setup	х					PS Project Costing		Supports Analysis Type, Category, Sub Category
	analysis	Project Setup	х					PS Project Costing		
	Ability to define project phases with different processing rules for each phase (for example, no billing to client during initial phase)	Project Setup	х					PS Project Costing, PS Billing		
	User-defined project expense/revenue classifications	Project Setup	Х					PS Project Costing		
	Work breakdown structure and revenue/expense classifications can be mapped to GL accounts  Project accumulates data by period (QTD, YTD and inception to	Project Setup	х					PS Project Costing		
	date)	Project Setup	х					PS Project Costing		
	Project accumulates totals in base currencies  Project budgets may be recorded against work breakdown	Project Setup Project Setup	Х					PS Project Costing		
	structure	Project Setup	х					PS Project Costing		
	breakdown structure		х					PS Project Costing		
-	·	Project Setup	Х					PS Project Costing		
105 106	Ability to define project templates to speed setup  Ability to specify project dependencies	Project Setup Project Setup	X			+		PS Project Costing PS Project Costing		
	Ability to define roles associated with a project (for example,	Project Staffing	<del> </del> ^					1 3 1 1 Gleet Gosting		
108	surveyor and consultant)  Organizational structure that can assign employees to specific	Project Staffing	Х					PS Project Costing		
	roles (for example, surveyor and consultant) Billing rates may be held by role, employee grade and employee	Project Staffing	X					PS Project Costing PS Project Costing		
	Ability to hold standard rates by role, employee grade and employee employee	Project Staffing	×					PS Project Costing PS Project Costing		
111	• •	Project Staffing	X		$\vdash$	_		PS Project Costing  PS Project Costing		+
	Ability to assign employees to elements of work breakdown structure	Project Staffing	x					PS Project Costing		
	Integration with HR system (if vendor provides one) for organization hierarchy, role and employee data	Project Staffing	х					PS Project Costing		
	·	Project Staffing	х					PS Project Costing, PS Integration Broker		
115	Integration with resourcing system to allocate employees to projects based on skills, availability and preferences	Project Staffing	х					PS Project Costing	processor	
	The system shall provide the ability to track and record transactions applicable to individual projects at all levels of the account classification (i.e., organization, program, object, fund, appropriation) by user-defined time period (e.g., month, YTD, inception to date), by organizational level for all projects, based on user-defined criteria.	Record and Track Project Transactions	x					PS Project Costing		

Project	ts			One Res Requi	ireme	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
	salaries, benefits, and other non-salary, labor-related costs, based on user-defined criteria.	Record and Track Project Transactions	x					PS Project Costing		
118	'	Record and Track Project Transactions	x					PS Project Costing		Adjustments should originate in subsystem and then integrated to Project Costing to maintain subsystem to Projects data integrity
	• • • • • • • • • • • • • • • • • • •	Record and Track Project Transactions	х					PS Project Costing		
120	· · · · · · · · · · · · · · · · · · ·	Record and Track Project Transactions	х					PS Project Costing		Adjustments should originate in subsystem and then integrated to Project Costing to maintain subsystem to Projects data integrity
121	The system shall provide the ability to generate a master project listing, by any level in the organization (e.g., state-wide, department) based on user-defined criteria (e.g., status information).	Reporting	х					PS Project Costing, PS Query, PS nVision		
122	The system shall provide the ability to generate a project listing, by any level in the organization (e.g. state-wide, department), by user-defined time period, based on user-defined criteria (e.g., project structure, project phase / cost element, contracts).	Reporting	х					PS Project Costing, PS Query, PS nVision		
123	, , ,	Reporting	x					PS Project Costing, PS Query, PS nVision		
124	, , , , , , , , , , , , , , , , , , , ,	Reporting	x					PS Project Costing, PS Query, PS nVision		
	The system shall provide the ability to generate a project status report (e.g. expenditures by cost element; percent completed; overdue).	Reporting	x					PS Project Costing, PS Query, PS nVision		
126	The system shall provide the ability to generate a project distribution summary, by accounting period-to-date, with prior month comparison, actual to budget comparison, and inception-to-date.	Reporting	x					PS Project Costing, PS Query, PS nVision		
127		Reporting	x					PS Project Costing, PS Query, PS nVision		
128	The system shall provide the ability to report on actual expenditures versus budget, encumbrances, and contract commitments, at any level of the organization based on user-defined criteria (e.g., milestones).	Reporting	X					PS Project Costing, PS Commitment Control, PS Query, PS nVision		
129	,	Reporting	x					PS Project Costing, PS Query, PS nVision		
130	The system shall provide the ability to produce detail and summary- level capital project reports, based on user-defined criteria (e.g., include/exclude organizational unit).	Reporting	x					PS Project Costing, PS Query, PS nVision		
131	,	Reporting	x					PS Project Costing, PS Query, PS nVision		
132		Reporting	x					PS Project Costing, PS Commitment Control, PS Query, PS nVision		
133	The system shall provide the ability to generate reports on private activity, by bond issuance, based on IRS requirements and bond-funded project timeframes (e.g., at proposal (budget request), allotment (approval to proceed with project), project completion stages (when the asset is put into service), and changes in activity related to asset).	Reporting	x					PS Project Costing		
134	,	Reporting	X					PS Project Costing		

Projec	ts			One Response per Requirement (Offeror Use Only)				Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H / M / L	
135	Ability for employees to enter timesheets online	Time Recording	х					PS Time and Labor		Functionality resides within PS HCM, not part of PeopleSoft Financials
136	Offline timesheet entry with automatic synchronization	Time Recording	х					PS Time and Labor		Functionality resides within PS HCM, not part of PeopleSoft Financials
137	Mobile timesheet entry capability	Time Recording	х					PS Time and Labor		Functionality resides within PS HCM, not part of PeopleSoft Financials
138	Ability to record billable and nonbillable time	Time Recording	х					PS Time and Labor		Functionality resides within PS HCM, not part of PeopleSoft Financials
139	Ability to log timesheet approval by client prior to processing	Time Recording	х					PS Time and Labor		Functionality resides within PS HCM, not part of PeopleSoft Financials
140	Ability to enter expenses to be billed to client	Time Recording	Х					PS Billing		

Appro	priations			ne Req Req Offero	uiren	nent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	C	3	F	N		H/M/L	
1	Ability to track appropriations based on user-defined criteria	Appropriations	Х					PS Commitment Control		
2	Ability to perform and track various types of adjustments to authorized appropriations, across multiple years, including but not limited to the following:	Appropriations	х					PS Commitment Control		
3	Ability to process adjustments retroactively, based on user-defined criteria	Appropriations	х					PS Commitment Control		
4	Ability to enter appropriations through an user-defined template, with system-generated notifications (e.g., notification to budget specialist)	Appropriations	х					PS Commitment Control		
5	Ability by authorized users to override appropriation control, and to track/review transactions which occur due to override	Appropriations	х					PS Commitment Control		
6	Ability to reconcile allocations and appropriations, to monitor allocations levels versus appropriation levels, based on user-defined criteria (e.g., type of appropriation; general fund versus federal funds), to restrict release of allocations until final appropriation authority is approved	Appropriations	х					PS Commitment Control		
7	Ability to track multi-appropriations balances at year-end to roll the appropriations balances forward to new fiscal year as opposed to enactment year	Appropriations	х					PS Commitment Control		

Budget				Req	espons Juireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
1	Ability to generate allocation documents to define the purpose of the allocation, rationale for allocation, guidelines for implementation, allocation of resources (i.e., how positions and funds are to be distributed by cost center and character), and additional user defined criteria		х					Oracle PBCS		
_		Allocations	х					Oracle PBCS		
3	Allow for the draft allocation document to be routed for approval based on user-defined criteria	Allocations	Х					Oracle PBCS		
4	Ability to report on the timeline and current status of all stages of the allocation process, including but not limited to the creation and approval of allocation documents	Allocations	х					Oracle PBCS		
5	Ability to maintain all completed allocated documents and make them available for read-only access	Allocations	х					Oracle PBCS		
6	Ability to sort completed allocation documents by program, allocation number, program title, and other user-defined criteria	Allocations	х					Oracle PBCS		
7	Ability to define required fields (e.g., cost centers) for the input of allocations into an expenditure plan	Allocations	х					Oracle PBCS		
8	Produce a report of Program Managers based on user-defined criteria (e.g., current year)	Allocations	х					Oracle PBCS		
9	, ,	Allocations	х					Oracle PBCS		
10	1	Allocations	x					Oracle PBCS		
11	Allow attachment(s) be added to the allocation document to provide additional information	Allocations	х					Oracle PBCS		
12	Ability to compare appropriations to actual expenditures, based on user-defined criteria (e.g., to any level provided by budget detail)	Budget Administration	х					Oracle PBCS		
13	Ability to track fund totals, appropriation totals, positions, expenditures, and revenues/receipts	Budget Administration	Х					Oracle PBCS		
14	Ability to compare authorized allocation authority to actual expenditures, based on user-defined criteria (e.g., to any level provided by budget detail)	Budget Administration	х					Oracle PBCS		
15	Ability to support allocation transfers tracking over user-defined periods (e.g., over multiple years, over multiple fiscal years), based on user-defined criteria (e.g., by authority)	Budget Administration	х					Oracle PBCS		
16	Ability to support allocation transfers (e.g., between characters or programs) tracking over user-defined periods (e.g., over multiple years, over multiple fiscal years), based on user-defined criteria (e.g., by authority)	Budget Administration	х					Oracle PBCS		
17	Provide flexibility to accommodate future change to budget allocation at the sub-organization level either within another module or separately procured system, without requiring rework of the activities included in the scope of this procurement	_	х					Oracle PBCS		
18	use to create a base budget for the beginning of a budget development cycle	Budget Development: Base Budget/Rollover/Versions	х					Oracle PBCS		
19	be further adjusted to reflect the enacted budget and other appropriation legislation	Budget Development: Base Budget/Rollover/Versions	х					Oracle PBCS		
20		Budget Development: Base Budget/Rollover/Versions	х					Oracle PBCS		

Budget				Req	esponse Juiremei or Use C	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	FN		H/M/L	
21		Budget Development: Base Budget/Rollover/Versions	х				Oracle PBCS		
22		Budget Development: Base Budget/Rollover/Versions	х				Oracle PBCS		
23	Provide version control capability	Budget Development: Base Budget/Rollover/Versions	х				Oracle PBCS		
24	Ability to track requested, recommended and approved budget, and	Budget Development: Base Budget/Rollover/Versions	х				Oracle PBCS		
25		Budget Development: Base Budget/Rollover/Versions	х				Oracle PBCS		
26		Budget Development: Functionality/Capability	х				Oracle PBCS		
27		Budget Development: Functionality/Capability	х				Oracle PBCS		
28	Ability to develop budgets (e.g., expenditures), based on user-defined parameters (e.g., category, object, program structure, fund, item of appropriations, and organization structure) including, but not limited to, the following:	Budget Development: Functionality/Capability	х				Oracle PBCS		
29		Budget Development: Functionality/Capability	х				Oracle PBCS		
30	l	Budget Development: Functionality/Capability	х				Oracle PBCS		
31	Ability to apply a percentage increase or decrease to a single or range of budget figures, based on user-defined criteria (e.g., organization structure, program structure, fund, appropriation)	Budget Development: Functionality/Capability	х				Oracle PBCS		
32		Budget Development: Functionality/Capability	х				Oracle PBCS		
33	Ability to capture detailed budgeted revenues/receipts adjustments, by fund, by appropriation, by source of receipt, and by other user-defined parameters	Budget Development: Functionality/Capability	х				Oracle PBCS		
34		Budget Development: Functionality/Capability	х				Oracle PBCS		
35		Budget Development: Functionality/Capability	х				Oracle PBCS		
36	l	Budget Development: Functionality/Capability	х				Oracle PBCS		
37	Ability to develop budget revenue/receipt estimates, by fund, by appropriation, by source of receipt, and by other user-defined criteria	Budget Development: Functionality/Capability	х				Oracle PBCS		
38	Ability to utilize and maintain data from multiple external sources	Budget Development: Functionality/Capability	х				Oracle PBCS		

Budget				Req	espons uireme or Use	ent	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	C		F		H/M/L	
39		Budget Development: Functionality/Capability	х				Oracle PBCS		
40	, ,	Budget Development: General	х				Oracle PBCS		
41		Budget Development: General	х				Oracle PBCS		
	Ability to create and save personal configurations of the entry worksheet	Budget Development: General	х				Oracle PBCS		
	stage/version in the budget development cycle without impacting budgets for other stages/versions.	Budget Development: General	х				Oracle PBCS		
44	(e.g., House could have HD1, HD2, etc. Senate could have SD1, SD2, etc. Conference could have CD1, CD2, etc.)	Budget Development: General	х				Oracle PBCS		
	Ability to record audit trail information (including user ID) when changes are made to budget information within a stage of the budget development cycle, based on user-defined parameters (e.g., by department, by version)	Budget Development: General	х				Oracle PBCS		
	Ability to record audit trail information when information is moved from one stage of the budget development cycle to another stage, based on user-defined parameters (e.g., by department, by version)	Budget Development: General					Oracle PBCS		
	Ability to analyze data at any stage of the budget development cycle, by user-defined level of detail (e.g., by any level within the SOH's organizational hierarchy; by account number; by account name/description), based on user-defined criteria	Budget Development: General	x				Oracle PBCS		
	Ability to produce user-defined budget documents (e.g., budget highlights at any level of the organization structure, fund condition at any level of the organization structure)	Budget Document	х				Oracle PBCS		
49	Ability to export and merge data and text (e.g., budget narrative) for the production of budget documents	Budget Document	х				Oracle PBCS		
	Ability to produce and update the budget document and all reports, including supplemental reports and schedules, in a web-based format, which provides the ability to have pop-up screens and sidebars and to be downloaded by external users	Budget Document	х				Oracle PBCS		
	Provide annotation of changes and revisions for budget document narratives, based on user-defined criteria (e.g., system-generated changes; user changes)	Budget Document	х				Oracle PBCS		
	Ability to track and manage changes or revisions to the budget document narratives	Budget Document	х				Oracle PBCS		
		Budget Forecasting	х				Oracle PBCS		
54	Ability to perform "what if" budgeting modeling and analysis, at any user-defined level (e.g., individual employee, project, and program), for multiple user-defined criteria and parameters	Budget Forecasting	Х				Oracle PBCS		
		Budget Forecasting	Х				Oracle PBCS		
	Ability to export and import budget forecasting data from and to external systems (e.g., demographics)	Budget Forecasting	Х				Oracle PBCS		
57	Ability to assign effective dates to user-defined parameters (e.g., object detail), to create projections that support compounded increases or decreases, based on set value or percentage value, over multiple year budgets.	Budget Forecasting	х				Oracle PBCS		
	Ability to change projections at any time during the fiscal year, based on user-defined criteria (e.g., state economic forecasts), for user-defined parameters, including, but not limited to the following:	Budget Forecasting	Х				Oracle PBCS		

Budget				Red	espons quireme or Use (	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	1	H/M/L	
	Ability to save an unlimited number of forecasting models, with assigned model owner, maintaining them for historical purposes.	Budget Forecasting	х				Oracle PBCS		
60	Ability to produce and maintain multi-year, long range forecasts, for a minimum ten year period.	Budget Forecasting	х				Oracle PBCS		
61	Ability to model across-the-board budget changes for revenue/receipt and/or expenditures,.	Budget Forecasting	х				Oracle PBCS		
	Ability to generate summary and detail level projection reports, by user-defined criteria (e.g. B&F Org, Program ID, department/office, by user-defined time period, for user-defined parameters	Budget Reporting: General	х				Oracle PBCS		
	Ability to generate statements/reports/documents of budgeted expenditures, bonds, transfers, and revenues/receipts in comparison with prior years budgeted and actual expenditures, bonds, transfers, and revenues/receipts, based on user-defined parameters (e.g., as of given date, any level of the organization structure, object structure, by fund, by appropriation)	Budget Reporting: General	х				Oracle PBCS		
	Ability to generate statements/reports/documents of actual expenditures, bonds, transfers, and/or revenues/receipts by any level within the organizational structure, by appropriation structure, by program structure, by user-defined time period (e.g., current or prior fiscal year history; calendar year; multiple years; state and federal FY)	Budget Reporting: General	х				Oracle PBCS		
	Ability to generate statements/reports/documents comparing budgeted versus actual expenditures, bonds, transfers, or revenues/receipts by any level within the organizational structure, by appropriation structure, by program structure, by user-defined time period (e.g., current or prior fiscal year history; calendar year; multiple years; accounting FY, budget FY)	Budget Reporting: General	х				Oracle PBCS		
	Ability to generate statements/reports/documents comparing projected versus actual expenditures, reimbursements, loans, bonds, transfers, or revenues/receipts by any level within the organizational structure, by appropriation structure, by program structure, by user-defined time period (e.g., current or prior fiscal year history; calendar year; multiple years; accounting FY, budget FY)	Budget Reporting: General	х				Oracle PBCS		
67	Ability to generate budget reports at any level within the organization (e.g. department, office, district, complex area, complex), by program structure, by project structure, by fund, by appropriation, by object code, by other user-defined criteria (e.g., any named version of the budget), including but not limited to the following information:	Budget Reporting: General	х				Oracle PBCS		
	Proposed budget (adopted, adjusted, multi-year), for user-defined period	Budget Reporting: General	х				Oracle PBCS		
	transfers, for user-defined period (e.g., Current YTD, inception-to-date)	Budget Reporting: General	Х				Oracle PBCS		
	transfers, and percentage, for user-defined period	Budget Reporting: General	Х				Oracle PBCS		
72		Budget Reporting: General Budget Reporting: General	X				Oracle PBCS Oracle PBCS		
73	•	Budget Reporting: General	х				Oracle PBCS		
		Budget Reporting: General Budget Reporting: General	X				Oracle PBCS Oracle PBCS		

Budget				Req	espons uireme or Use (	ent		Module / Solution	Customization Complexity	Offeror Comments
104	Deminerante	Tonio		Onero	or use (	Only	)			
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
76	Budget Projections (e.g., revenues/receipts, expenditures, reimbursements, loans)	Budget Reporting: General	х					Oracle PBCS		
77	Budget Forecasts	Budget Reporting: General	х					Oracle PBCS		
		Budget Reporting: General	х					Oracle PBCS		
	. , , , , , , , , , , , , , , , , , , ,	Budget Reporting: General	х					Oracle PBCS		
80	Ability to generate allocation/allotment reports, for user-defined time period (e.g., quarterly), based on user-defined criteria	Budget Reporting: General	х					Oracle PBCS		
81		Budget Reporting: General	х					Oracle PBCS		
		Budget Reporting: General	Х					Oracle PBCS		
83	Ability to generate a report that identifies all incremental changes between multiple versions of the budget or points in time, based on user-defined criteria	Budget Reporting: General	x					Oracle PBCS		
	Ability to generate an adjustment report that reconciles all adjustments to the enacted budget	Budget Reporting: General	х					Oracle PBCS		
	Ability to aggregate data for SOH-wide reports, based on user- defined criteria	Budget Reporting: General	х					Oracle PBCS		
	user-defined criteria	Budget Reporting: General	х					Oracle PBCS		
87	Ability for "view only" access to organizational units and users during budget development and enactment processes	Budget Reporting: General	х					Oracle PBCS		
88	Ability to define multiple document approval stages and track a record of the budget at each user-defined stage	Budget Reporting: General	х					Oracle PBCS		
	Ability to support distribution, publishing, and tracking of budget documents to external stakeholders	Budget Reporting: General	х					Oracle PBCS		
90	Ability to accommodate multiple methods of budgeting, including but not limited to:	Budget Reporting: General	х					Oracle PBCS		
91	Academic Plan (text-data merge with the Financial Plan)	Budget Reporting: General	х					Oracle PBCS		
92		Budget Reporting: General	Х					Oracle PBCS		
93		Budget Reporting: General	Х					Oracle PBCS		
	Zero-Based Budgeting	Budget Reporting: General	х					Oracle PBCS		
95		Budget Reporting: General	Х			_		Oracle PBCS		
	and to support the authorization process for receipt of federal funds, based on user-defined criteria (e.g., by program, by project)	Budget Reporting: General	X					Oracle PBCS		
	Ability to roll-up accounts based on user-defined criteria (e.g., across any level of the organization structure)	Budget Reporting: General	Х					Oracle PBCS		
		Budget Reporting: General	х					Oracle PBCS		
99	Ability to perform calculations based on user-defined rules and guidelines, user-defined time periods, and user authorization level	Budget Reporting: General	х					Oracle PBCS		
100	Ability to integrate carryover data with the budget process, including but not limited to budget planning, budget documents, and budget forecasting, based on user-defined criteria (e.g., add or remove "one-times")	Budget Reporting: General	х					Oracle PBCS		

Budget				Req	esponse Juireme or Use C	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H / M / L	
	defined templates and based on user-defined parameters (e.g., user- defined limits on amount of narrative). This capability shall include but not be limited to:		х					Oracle PBCS		
102		Budget Reporting: General	Х				(	Oracle PBCS		
103		Budget Reporting: General	Х				_	Oracle PBCS		
104		Budget Reporting: General	Х				_	Oracle PBCS		
105		Budget Reporting: General	Х				-	Oracle PBCS		
106	Ability to download and upload budget narrative to word processing tools, while retaining original format	Budget Reporting: General	х				(	Oracle PBCS		
107	Ability to maintain (store), print, download and/or upload budget information for all budget phases in various user-defined formats (e.g., MS Excel, MS Access, Adobe.pdf, .jpg, XML), based on user-defined parameters	Budget Reporting: General	х					Oracle PBCS		
108	environment) to historical budget and actual information, for a minimum of 3 previous bienniums, based on user-defined criteria	Budget Reporting: General	х					Oracle PBCS		
	Multi-Year display (two previous years, two current years, 4 planning years)	Budget Resource Planning	х				(	Oracle PBCS		
110	Approval Workflow (for budget plans up until BOE submittal)	Budget Resource Planning	х					Oracle PBCS		
		Budget Resource Planning	х					Oracle PBCS		
112	Document Management for plan submissions and supporting documents	Budget Resource Planning	х				(	Oracle PBCS		
113	Reports/Outputs for SOH leadership, BOE, Budget and Finance and the Legislature	Budget Resource Planning	х				(	Oracle PBCS		
	Provide ability to collect and process the data via the new electronic system and produce the Forms via a reporting function in a "pixel perfect" replication for State B&F as they require paper. Budget Plan Submissions for Budget and Finance and Legislature including (Form A, B, C, FF, BJ Tables and Variances). State of Hawaii B&F Budget Forms == https://budget.hawaii.gov/budget/budget-forms/	Budget Resource Planning	x					Oracle PBCS		
115		Budget Resource Planning	Х				(	Oracle PBCS		
	Making entities (BOE, GOV and/or Legislature may require budget plans to be submitted in various formats which may change from year-to-year)	Budget Resource Planning	х					Oracle PBCS		
		Budget Resource Planning	Х					Oracle PBCS		
		Budget Resource Planning	Х					Oracle PBCS		
119	Program Dashboards - KPI (Budget to Actual and Position Appropriated, Established, Filled, Vacant)	Budget Resource Planning	х					Oracle PBCS		
120	Request bank, programs can develop future budget plans and decide which budget year they would like to submit them	Budget Resource Planning	х				(	Oracle PBCS		
121		CIP Budgeting	х					Oracle PBCS		
		General	х				_	Oracle PBCS		
	,	General	Х				(	Oracle PBCS		

Budget				Req	espons Juireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
124	Ability to track budget changes during the budget development process, based on user-defined criteria (e.g., differences in funds/programs/revenues/expenditure amounts, by object of expenditure)	General	х					Oracle PBCS		
125	Provide word processing capability for entering narrative, using user- defined templates and based on user-defined parameters (e.g., user- defined limits on amount of narrative)		х					Oracle PBCS		
	Ability to maintain (store), print, download and/or upload budget information for all budget phases in various user-defined formats (e.g., Google Sheets, Google Docs, MS Excel, MS Access, Adobe.pdf, .jpg, XML), based on user-defined parameters	General	Х					Oracle PBCS		
127	For general budget, support online access (in production environment) to historical budget and actual information, for a minimum of 7 previous biennium's, based on user-defined criteria	General	х					Oracle PBCS		
128	Ability to load and perform salary and benefit compensation projections, based on user-defined criteria	Personnel Budget	Х					Oracle PBCS		
129	Provide budgeting capabilities, identifying and maintaining information related to positions	Personnel Budget	х					Oracle PBCS		
	•	Personnel Budget	х					Oracle PBCS		
	Ability to track and summarize positions based on any user-defined stage in the budget process and on any level within the organizational structure, based on user-defined criteria (e.g., certificated, classified, support services personnel, etc.)	Personnel Budget	х					Oracle PBCS		
132	Ability for Programs to reconcile position control with personnel records from the HR System. Eliminate manual monitoring of position ceilings	Personnel Budget	Х					Oracle PBCS		
133	•	Personnel Budget	х					Oracle PBCS		
	recruitment and retention bonuses, and fringe benefits) relative to positions and its attributes, by user-defined criteria (e.g., bargaining unit, classification, location, program)	Personnel Budget	х					Oracle PBCS		
135	Ability to project budgeted and adjusted salary and benefit projection (from YTD actuals or known pending adjustments) based on positions and other user-defined parameters	Personnel Budget	х					Oracle PBCS		
	Ability to allocate and track budget and actual personnel usage (appropriated, established, filled, vacant), by FTE, based on user-defined criteria (e.g. department, office)	Personnel Budget	х					Oracle PBCS		
	Ability to accumulate summary salary and wages information, based on user-defined format	Personnel Budget	Х					Oracle PBCS		
	Ability to allow authorized personnel to adjust budgeted amounts (for salaries and for benefits) by fund, by appropriation and by program resulting from: funding changes, additional allocations, to cover shortages, or for correction of errors made and provide a complete history and audit trail of all adjustments	Personnel Budget	x					Oracle PBCS		
139	Ability to report on budgeted versus actual personnel expenditures, including but not limited to overtime expenditures, based on user-defined parameters	Personnel Budget	х					Oracle PBCS		

Budge	get		One Response per Requirement (Offeror Use Only)			ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
140	Ability to determine/calculate position counts, full time equivalents, employee counts, and automatically adjust the counts when position changes and employee changes occur, based on user-defined parameters (e.g., by organizational unit, by fund, and by bargaining unit)	Personnel Budget	х					Oracle PBCS		
	Ability to report on actuals and to project future employer costs (e.g., state share of costs for social security, increases due to MOUs) for salaries and benefits for positions, based on user-defined criteria (e.g., percentage, flat rate per employee)	Personnel Budget	х					Oracle PBCS		
142	Ability to calculate the lump sum payment due to staff upon retirement based upon user-defined criteria (e.g., age, leave balance, salary, and effective date of retirement)	Personnel Budget	х					Oracle PBCS		

Travel				ne Res Requi	remen	t	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 F	N		H/M/L	
1	On a monthly basis, provide a random selection of X% of intra-State	A 114 D	х				PS Travel and Expenses, PS		
2	travel completion reports for audit purposes  Ability to create and send documentation to employee for appropriate	Audit Requirements					Query PS Travel and Expenses		
		Audit Requirements	х				1 5 Traver and Expenses		
3	Ability to track specific vendors and amounts associated with T&E expense reimbursements	Audit Requirements	х				PS Travel and Expenses, PS Query		
4	Ability to track specific vendors associated with individual P-Card purchases	Audit Requirements	х				PS Travel and Expenses, PS Query		
5	·	Audit Requirements	х				PS Travel and Expenses, PS Query		
6		Audit Requirements	х				PS Travel and Expenses, PS Query		
7	configurable rules (e.g., business rules), with ability to drill-down to all detail.	General	х				PS Travel and Expenses, PS Query		
8	filing of expense claims based on user-defined criteria.	General	х				PS Travel and Expenses		
9	The system shall provide the ability to electronically manage and route the required supporting documentation (e.g., travel reimbursement package) as part of the online approval process.	General	x				PS Travel and Expenses		
10	The system shall provide for the delegation of authority via workflow and maintenance of audit trail (e.g., action taken and by whom).	General	x				PS Travel and Expenses, PS Approvals		
11	The system shall provide the ability to manage and track status of employee advances and employee expense claims via workflow.	General	х				PS Travel and Expenses, PS Approvals		
12	The system shall provide the ability to allocate employee expenses based on user defined categories (e.g., Program, organization) and percentages.	General	x				PS Travel and Expenses		
13	The system shall provide the ability for an authorized user to reject/return/modify an employee advance request or employee expense claim back to requestor for correction.	General	х				PS Travel and Expenses, PS Approvals		
14	The system shall provide the ability to generate notification to requestor of the reason(s) for modified (e.g., reduced, cut) employee expense claim or employee advance request.	General	x				PS Travel and Expenses, PS Approvals		
15	The system shall provide the ability to process employee advances, including full or partial liquidation of an employee advance from an employee expense claim.	General	x				PS Travel and Expenses, PS Payables		
16	The system shall provide the ability to process respective balance due amounts when employee expense claim exceeds employee advance.	General	х				PS Travel and Expenses, PS Receivables		
17	The system shall support the ability to match expense report line items to uploaded procurement card and credit card statements (e.g., rental car charges billed directly to credit card).	General	х				PS Travel and Expenses, PS Purchasing		
18	documentation) have been received and/or audited.	General	х				PS Travel and Expenses PS Approvals		
19	information (e.g., pargaining unit rules, nonpargaining unit rules).	General	х				PS HCM, PS Travel and Expenses		Delivered messaging that automatically syncs HR data to Financial system.
20	The system shall provide the ability to track and report overdue employee advances.	General	х				PS Travel and Expenses		

Travel				Red	espon quirem or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
21	outstanding 30 days, employee advance has been cleared due to filing of employee expense claim.	General	х					PS Travel and Expenses, BI Publisher		
22	The system shall provide the ability to make employee reimbursement payments directly to employee's bank account.	General	x					PS Travel and Expenses		
23	The system shall provide the ability to identify and process deviations from approved travel, including generation of receivables and personal expenses, based on user-defined criteria and business rules (e.g., personal time associated with travel).	General	х					PS Travel and Expenses		
24	The system shall provide the ability to track travel cancellations, including applicable credits (e.g., airline ticket credits), based on user-defined criteria.	General	х					PS Travel and Expenses		
25	Ability to monitor travel credits for future travel use	General	х				_	PS Travel and Expenses		
26	Online help documentation	Other	х					PS Travel and Expenses, PS Activity Guide Builder		
27	·	Other	Х					PS Travel and Expenses		
28	Support both travelers filing their own expense reports and also secretarial support for the same.	Other	х					PS Travel and Expenses		
29	The system shall provide the ability for management to generate expenditure report information by program, employee, organizational unit, fiscal year, various expenditure criteria (account classification), and/or other user-defined criteria.		х					PS Travel and Expenses, PS Query		
30	The system shall provide the ability to generate reports to management on the status of expense claims, by approval history, and by other user-defined criteria.	Reporting	х					PS Travel and Expenses, PS Query		
31	The system shall provide the ability to generate report/ queries to identify specific expenses, by organization/ expenditure code, fiscal year, description, vendor, and other user-defined criteria.	Reporting	х					PS Travel and Expenses, PS Query		
32	The system shall provide the ability to generate reports on travel based on user-defined criteria (e.g., by bargaining unit, by travel type) and user-defined time period.	Reporting	х					PS Travel and Expenses, PS Query		
33	The system shall provide the ability to export all related employee expense data in a user-defined format.	Reporting	х					PS Travel and Expenses, PS Query		
34	The system shall provide the ability to identify taxable/reportable payments (including reportable mileage) based on user-defined criteria (e.g., for same day travel, per diem is taxable; employee receives an out of state per diem and actual travel expenses are less than those established by CBAs).	Taxes	х					PS Travel and Expenses		
35	The system shall provide the ability to interface to payroll and generate mandated reports/ forms for taxable/reportable expense payments (e.g., W-2).	Taxes	х					PS Travel and Expenses		
36	The system shall provide the ability to interface with data from State collective bargaining agreements (CBAs) and Federal CONUS (Continental United States) allowable costs to determine taxable income for travel.	Taxes	х					PS Travel and Expenses		
37	Automatic conversion of data and documentation from Travel	Travel Completion	х					PS Travel and Expenses		process starts with Travel authorization, users create expense reports from the authorization
38	Ability to adjust itinerary upon return, including adjustment of per diem allowance due to additional business travel and/or personal travel	Travel Completion	х					PS Travel and Expenses		· · ·
39	Direct deposit of travel advance to employee's bank account for additional reimbursements	Travel Completion	х					PS Travel and Expenses		

Travel				Re	Respon equirem ror Use	nent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
40	Automate foreign currency exchange for international travel	Travel Completion	х					PS Travel and Expenses		FX rates and pairings need to be stored in Financials
	Rule-based workflow and electronic approval; disallow continuation of workflow until all requirements are met (i.e. receipts are attached for each business expense other than per diem and air travel/hotel if PO was processed - cross-referenced);	Travel Completion	х					PS Travel and Expenses, PS Approvals		
	Allow an alternate workflow if there are significant changes in travel (i.e., Increase of 15% or more owed to the traveler or an increase of \$75 or more, Change in destination, Change in account codes, Change in the distribution of account codes, Itinerary change of a day or more)	Travel Completion	х					PS Travel and Expenses, PS Approvals		clone and modify Expense approvals or create new ones
43	Allow changes to GL distribution	Travel Completion	Х					PS Travel and Expenses		
44	Allow reimbursement adjustments for excess lodging based on policy	Travel Completion	х					PS Travel and Expenses		
45	Comply with tax laws on excess per diem payments and provide a reporting mechanism for taxable amounts (to be included with salaries and wages)	Travel Completion	х					PS Travel and Expenses		
46	Mobile application for Travel Completion approval <organization mobile="" operating="" required="" specify="" system(s)="" to=""></organization>	Travel Completion	х					PS Travel and Expenses		Enable/Configure fluid (mobile)
47	Travel Management integration (e.g., integration with a solution that handles travel bookings; automated audit/validation of travel compliance with policy, including pricing policies and timing policies; expense reporting; receipt submission; final expense approval; etc.)	Travel Management	x					PS Travel and Expenses, PS Integration Broker		
	Ability to generate an expense report/reimbursement request "template" that is able to be populated automatically as documentation is submitted.	Travel Management	х					PS Travel and Expenses		
	Online itinerary that integrates with Travel Request form	Travel Management	х					PS Travel and Expenses		
	Calculate per diem allowance based on collective bargaining unit contracts, including calculations for business versus personal travel based on agency rules (e.g., allowable time for travel with change in time zone, etc.); allow for exceptions (i.e. Lanai travelers)	Travel Management	x					PS Travel and Expenses		system allows for multiple Per Diem rules
	Incorporate agency travel compliance rules including the completion of supplemental forms as necessary	Travel Management	х					PS Travel and Expenses, PS Activity Guide builder		
	Incorporate FAR (federal funds only) for CONUS regulations	Travel Management	х					PS Travel and Expenses		
	Ability to book air travel and hotel accommodations based on itinerary (optional for employee)	Travel Management	x					PS Travel and Expenses		
54	Option for an employee to book travel outside of the application and ability to record the itinerary in the system	Travel Management	х					PS Travel and Expenses		
55	Allow the attachment of travel documentation	Travel Request	х					PS Travel and Expenses		
56	Direct deposit of travel advance to employee's bank account	Travel Request	х					PS Travel and Expenses		
	Rule based workflow and electronic approval; disallow continuation of workflow until all requirements are met (i.e., receipts are attached for each business expense other than per diem and air travel/hotel if PO was processed - cross-referenced)	Travel Request	х					PS Travel and Expenses, PS Activity Guide builder		
	Allows multiple GL distributions per travel line item; GL distributions may be split by percentage, amount, quantity	Travel Request	х					PS Travel and Expenses		
59	Mobile application for Travel Request approval	Travel Request	х					PS Travel and Expenses, PS Fluid Approvals		
	Allow for "no-cost" travel	Travel Request	х					PS Travel and Expenses		
61	Allow for adjustments to travel information following the initial travel request and/or approval	Travel Request	х					PS Travel and Expenses		

Travel				One Response per Requirement (Offeror Use Only)		Requirement		Requirement			Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L				
	The system shall provide the ability to initiate online travel requests and obtain online travel authorization approval, while automating the compliance/verification of user-defined travel policies.	Travel Requests	x					PS Travel and Expenses					
	The system shall provide the ability to define business rules for travel requests and reimbursements based on category of traveler (e.g., student, teacher) and other user-defined criteria.	Travel Requests	х					PS Travel and Expenses					
	entries with explanation	Travel Requests	Х					PS Travel and Expenses					
65	The system shall provide the ability to flag for review any travel dates that overlap with other travel dates or claims.	Travel Requests	х					PS Travel and Expenses, PS Alerts					

eProcu	urement Interface		Re	equirer	nse per nent e Only)	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y C	3	F		H/M/L	
1	API to/from the State's eProcurement platform expected to be launched in 2022 ( <i>RFP in progress</i> )	Application Programming Interface (API)	x			PS ePro, PS Integration Broker		ePro is delivered with APIs to connect to 3rd party marketplaces for purchase requests. Need more detailed requirements to see if delivered API can be configured vs a true customization. PeopleSoft delivers the Integration Broker toolset to create web services with 3rd party applications.
2	API to include:	Application Programming Interface (API)	х			PS ePro, PS Integration Broker		
3	budget/funds verification and encumber funds for P Card usage	Application Programming Interface (API)	х			PS ePro, PS Integration Broker		
4	import vendor master data and remittance information	Application Programming Interface (API)	х			PS ePro, PS Integration Broker		
5	validate account codes used inbound to EFS	Application Programming Interface (API)	х			PS ePro, PS Integration Broker		
6	validation with Hawaii Compliance Express (HCE)	Application Programming Interface (API)	х			PS ePro, PS Integration Broker		

Grant	Management			ne Re Requ Offero	uireme	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
1	For new grants, the system shall provide the ability to integrate with the budget execution process including but not limited to:	Budgeting	х					PS Commitment Control, PS Form Builder		
2	Submission to Governor (and/or other authorizing department) for	Budgeting	х					PS Commitment Control, PS		
3	Request to DAGS for appropriation symbol	Budgeting	х					PS Commitment Control, PS Form Builder		
4	Request to B&F for allotment for funds (A19)	Budgeting	х					PS Commitment Control, PS Form Builder		
5	which are on-going versus one-time)	Budgeting	х					PS Commitment Control, PS Form Builder		
6	For increased awards to existing grants, the system shall provide the ability to integrate with the budget execution process including but not limited to:		х					PS Commitment Control, PS Form Builder		
7	Submission to Governor (and/or other authorizing department) for approval to increase appropriation ceiling and expend	Budgeting	x					PS Commitment Control, PS Form Builder		
8		Budgeting	Х					PS Commitment Control, PS Form Builder		
9		Budgeting	Х					PS Commitment Control, PS Form Builder		
10	Requests to B&F for increase in budget ceiling	Budgeting	Х					PS Commitment Control, PS Form Builder		
11	The system shall provide the ability to set budget controls for various categories (e.g., funding source, cost category, administrative overhead, matching funds), based on user-defined criteria (e.g., as a percentage or a flat amount).	Commitment Control	х					PS Commitment Control		
12	The system shall provide the ability to track budget controls, based on user-defined criteria.	Commitment Control	х					PS Commitment Control		
13	edits prior to posting grant transactions.	Commitment Control	х					PS Commitment Control		
14	The system shall provide the ability to both automatically and manually generate grant numbers based on user-defined criteria (e.g., many departments use Federal grant number to track grants).	Create and Maintain Grant	х					PS Grants		
15	The system shall provide the ability to maintain grant detail information, based on user-defined time periods (e.g., grant inception-to-date).	Create and Maintain Grant	x					PS Grants		
16	The system shall provide the ability to maintain and track grants by user-defined criteria (e.g., grantor information; grantee information; funds, CFDA number, formula vs. discretionary grants; investment).	Create and Maintain Grant	х					PS Grants		
17	The system shall provide the ability to establish grant and sub- grant(s) structure (e.g., program ID), and to manage the relationship within this structure.	Create and Maintain Grant	х					PS Grants		
18	grantee(s) who are responsible for awarding and managing grant dollars to other entities (e.g., counties who are sub-grantees for Homeland Security grants that award dollars to other entities in their county).	Create and Maintain Grant	х					PS Grants		
19	categories for reporting purposes (e.g., Title II; federal budget cost categories; state budget cost categories).	Create and Maintain Grant	Х					PS Grants		
20	budget cost categories with federal budget cost categories based on user-defined criteria.	Create and Maintain Grant	Х					PS Grants, PS GL		
21	The system shall provide the ability to track and maintain awards for multiple grant years based on user-defined criteria.	Create and Maintain Grant	х					PS Grants		

Grant I	Management			Req	espons uireme or Use (	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
	The system shall provide the ability to copy award information based on user-defined criteria (e.g., copy award from current FY to next FY).	Create and Maintain Grant	х					PS Grants		
23	Ability to both automatically and manually generate grant numbers based on configurable criteria	Create and Maintain Grant	Х					PS Grants		
	Ability to maintain grant detail information, including but not limited to award date, lapse date, liquidation date, etc.	Create and Maintain Grant	Х					PS Grants		
	and or other tanks, ottory	Create and Maintain Grant	х					PS Grants		
	are relationary than and outdoor	Create and Maintain Grant	Х					PS Grants		
27	Ability to identify user-defined budget / cost categories for reporting purposes	Create and Maintain Grant	Х					PS Grants		
28	Ability to track and maintain awards for multiple grant years based on configurable criteria	Create and Maintain Grant	Х					PS Grants		
29	At a minimum, the solution enables tracking of grants via the GL	General	х					PS Grants, PS GL		
30	Accommodate multiple fiscal calendars (i.e., Hawaii vs. federal) and provide the ability to generate grants reporting using either calendar as the basis.	General	х					PS Grants, PS GL		
31	The system shall provide support for grant proposal development process based on user-defined criteria, including but not limited to the following related processes:	General								
32	Develop new, continuation and revised proposals	General	Х					PS Grants		
33	Enter all related program/proposal Information(e.g., organization, persons, special items, resources, keywords, etc.)	General	х					PS Grants		
34	Respond to compliance questions/queries	General		Х						
35	Review and customize biographical info and other supporting data	General		Х						
36	Send status notification to related parties	General		Х						
37	The system shall provide the ability to protect sensitive information as required throughout the grant development and award process.	General	х					PS Grants		
38		General	х					PS Grants		
39	The system shall provide the ability to insert narratives and to include attachments to the grant record, including but not limited to: Federal award letters, special conditions, grantor correspondence, etc.	General	x					PS Grants		
40	Maintain data, manage the process, and provide workflow across the entire grant cycle, from the beginning to close-out date	General	х					PS Grants		
41	Ability to insert narratives and to include attachments to the grant record, including but not limited to: Federal award letters, special conditions, grantor correspondence, etc.	General	х					PS Grants		
42	The system shall provide the ability to interface with grant-related Federal Government databases included but not limited to: SAM.gov and Grants.gov.	Interfaces		х					M	
	The system shall provide the ability to generate grant award letters and contract awards, based on user-defined templates and user-defined criteria (e.g., incorporate grant requirements into subgrantee award letters and documentation).	Manage Grant		Х					L	

Grant	Management			Red	Respor quirent or Use	nent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
44	The system shall provide the ability to establish and manage multiple contracts tied to a specific grant based on user-defined criteria (e.g., contracts to multiple sub-grantees).		х					PS Grants		
45	The system shall provide the ability to develop and maintain budgets for sub-grantees based on user-defined criteria (e.g., freeze initial detailed budget worksheet; maintain budget throughout the life of the grant).	Manage Grant	X					PS Grants		
46	compliance, including cross-reference with vendor exclusion lists (e.g., SAM, HCE).	Manage Grant		х					Н	
47	based on user-defined criteria (e.g., by category).	Manage Grant	х					PS Grants		
48	The system shall provide the ability to calculate, track, control, and report on indirect costs (e.g., capital depreciation expenses) based on user-defined criteria and user-defined time period.	Manage Grant	X					PS Grants		
49	The system shall provide the ability to compare actual expenditures to forecasts.	Manage Grant	х					PS Grants		
50	The system shall provide the ability to calculate available grant balances from user-defined criteria (e.g., expenditures; encumbrances).	Manage Grant	х					PS Grants		
51	/	Manage Grant	х					PS Grants		
52	The system shall provide the ability to generate grant billings based on user-defined criteria (e.g., grantor requirements; itemize by subgrantee) and reconcile receipts based on grant invoices.	Manage Grant	х					PS Grants, PS Billing		
53	The system shall provide the ability to process request for draw- down of Federal funds based on user-defined criteria (e.g., flag transaction errors to prevent drawing down on these transactions).	Manage Grant	х					PS Grants		
54	The system shall provide the ability to process internal billings to other state agencies (e.g., sub-grantees) based on user-defined criteria (e.g., incorporating specific grant forms within the electronic workflow).	Manage Grant	х					PS Grants		
55	The system shall provide the ability to manage billings by subgrantee, based on user-defined criteria (e.g., place holds on payments to sub-grantees for non-performance; in compliance with Transparency Act, confirm that sub-grantee check is cashed).	Manage Grant	х					PS Grants		
56		Manage Grant	х					PS Grants		
57		Manage Grant	х					PS Grants		
58	The system shall provide the ability to track hours expended for all grants/programs by organizational unit, pay period, employee, account number and other user-defined criteria.	Manage Grant	х					PS Grants		
59	The system shall provide the ability to generate advance notifications of grant end dates or other user-specified events and alerts (e.g., expenses due, draw-down of funds, expenditure balances), by user-defined process (e.g., prompt at point of user transaction; report), based on user-defined criteria.	Manage Grant	х					PS Grants		
60	The system shall provide the ability to support processing of carryovers, grant extensions and amendments based on user-defined criteria.	Manage Grant	Х					PS Grants		

Grant I	Management			One Requestion	uireme	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
61	incurring new obligations, and to leave a grant open for purposes of expenditures tied to existing obligations.	Manage Grant	Х					PS Grants		
62	The system shall provide the ability to close and reopen grant codes at the grant/program level, preventing users from having to close each budget line associated with the specified grant/program.	Manage Grant	х					PS Grants		
63	The system shall provide the ability to close and reopen grants for specific associated budget lines while others remain active, without the user having to adjust individual lines.	Manage Grant	х					PS Grants		
64	The system shall provide the ability to integrate with SPO website for contract close-out reporting based on user-defined criteria (e.g. total expenditures, major accomplishments, etc.).			х					М	
65	The system shall have the ability to track and reconcile federal funds, including those awarded for a special purpose or a grant, based on user-defined criteria (e.g., budget adjustments at the fund/office level).	Manage Grant	х					PS Grants		
66	The system shall provide the ability to track compliance with federal funding requirements based on user-defined criteria (e.g., track A133 audits across departments).	Manage Grant		х					М	
67	The system shall provide the ability to reconcile grant data with external funding agency data based on user-defined criteria.	Manage Grant		х					М	
68	0 0 7	Manage Grant	×					PS Grants		
69		Manage Grant	х					PS Grants, PS Allocations		
70		Manage Grant	Х					PS Grants, PS Cash Management		
71	The system shall provide self-service capabilities for sub-grantees, including but not limited to: view contract information; submission of forms, such as change request and reimbursement request.	Manage Grant		х					L	
72	The system shall provide the ability to establish monitoring requirements, by grant, by organization (e.g., sub-grantee), based on user-defined criteria (e.g., 20% of service providers required to be audited by specific date, etc.)	Monitoring		х					L	
73	The system shall provide the ability to trigger or initiate monitoring activities based on user-defined criteria (e.g., audit results).	Monitoring		Х					L	
74	The system shall provide the ability to create and perform adhoc and pre-defined analytical calculations based on user-defined criteria (e.g., sub-grantee actual expenditures versus budgeted; sub-grantee actual units of services versus budgeted).			х					L,	
75	and/or organization contact information in relation to specific monitoring cases.	Monitoring		x					L	
76	The system shall provide the ability to track monitoring recommendations, corrective actions and responses.	Monitoring		х					L	

Grant I	Management			One Req Req (Offero	uireme	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
77	The system shall provide the ability to assign monitoring codes to each case and maintain recommendations.	Monitoring		х					L	
78	The system shall provide the ability to display and report summary and detailed monitoring case information.	Monitoring		х					L	
79		Monitoring		х					L	
80	The system shall provide the ability to electronically enter and associate monitoring reports with contractors, including but not limited to: cleared/resolved findings, corrective actions.	Monitoring		х					L	
81	The system shall provide the ability to issue, print and track notices of non-compliance.	Monitoring		х					L	
82	The system shall maintain an archive of contractor (e.g., sub- grantee) reports and performance information, by grant, based on user-defined criteria.	Monitoring		х					L	
83	transmit notices of non-compliance based on user-defined criteria including but not limited to: date of non-compliance.	Monitoring		х					L	
84	·	Outcomes tracking	Х					PS Grants		
85	Support multiple separate projects to track specific expenditures toward specific promises/outcomes at the individual grantee level	Outcomes tracking	Х					PS Grants		
86	Tracking enablement for specific grants and outside funding which SOH tracks, including IDEA, various Titles, e-Rate, etc.	Outcomes tracking		х					L	
87	Ability to track grant requirements and outcomes throughout the lifecycle of the grant and monitor progress	Outcomes tracking	х					PS Grants		
88	<u> </u>	Record and Track Grant Transactions	х					PS Grants, PS GL		
89		Record and Track Grant Transactions	x					PS Grants, PS GL		
90		Record and Track Grant Transactions	х					PS Grants, PS GL		
91		Record and Track Grant Transactions	х					PS Grants, PS GL		
92	Ability to track and record transactions applicable to individual grants at all levels of the account classification (i.e., organization, program, object, fund, appropriation) by user-defined time period (e.g., month, YTD, inception to date), by organization level for all grants, based on user-defined criteria (e.g., expenditures vs. budgeted, expenditures		x					PS Grants, PS GL		
93	Ability to record miscellaneous adjustments, reclassifications and interfund transfers associated with grants (e.g., FIFO adjustments to	Record and Track Grant Transactions	х					PS Grants, PS GL		

Grant	Management			Req	espon quirem or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
94	promity to trace into a deceste parentage a trial grain rainaning baleed on	Record and Track Grant Transactions	х					PS Grants, PS GL		
95	The system shall provide a grant dashboard based on user-defined criteria (e.g., dashboard view for grants managers of assigned grants).	Reporting	Х					PS Grants		Grants Dashboard
96	The system shall provide the ability to generate a grant/sub-grant listing, by user-defined time period (e.g., Accounting Fiscal Year, Budget Fiscal Year), based on user-defined criteria.	Reporting	Х					PS Grants, PS Query		
97	The system shall provide the ability to generate grant/sub-grant detail transaction reports, based on user-defined time period (e.g., month, quarterly, YTD, inception-to-date), based on user-defined criteria.	Reporting	х							
98	The system shall provide the ability to generate a query and/or report (with drill-down capability) by grant/sub-grant, by user-defined time period (e.g., month, year, inception to date), by other user-defined parameters (e.g., Federal Catalog Number, Legislative District), based on user-defined criteria (e.g., budgeted vs. actuals).	Reporting	х					PS Grants, PS Query		
99	The system shall provide the ability to generate a query and/or report on grants at all levels of the account classification (e.g., organization, program, object, fund, appropriation), with the ability to summarize across departments, based on user-defined criteria (e.g., expenditures vs. budgeted; expenditures vs. revenues).		x					PS Grants, PS Query		
100	The system shall provide the ability to separate prior years expenditures and prior years budget for generally accepted accounting principles (GAAP) and governmental accounting standards board (GASB) reporting, by user-defined period (e.g., Accounting fiscal year, Budget fiscal year, calendar year), by user-defined criteria (e.g., inception-to-date budget, remaining budget, multi-year budget).	Reporting		x					M	
101	<u> </u>	Reporting	х					PS Grants, PS Query, PS General Ledger, PS nVision		
102	The system shall provide the ability to generate expenditure and exception reports for compliance with funding agency reporting requirements and compliance, based on user-defined criteria (e.g., by sub grantee).	Reporting	х					PS Grants, PS Query, PS General Ledger, PS nVision		
103	The system shall provide the ability to transmit and receive reports/information electronically to/from all grantee/grantor agencies, based on user-defined criteria.	Reporting	х							
104	The system shall provide the ability to generate reports, based on specific grant requirements (e.g., only specific line items are eligible expenditures) and other user-defined requirements.	Reporting	х					PS Grants, PS Query, PS General Ledger, PS nVision		
105	The system shall provide the ability to generate federal financial reporting and payment requisition forms by any level within the organization structure, by project number, by federal/state grant number, by program structure, and by any other user-defined identifier.	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
106		Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		

Grant	Management			Re	Respone equirer	ment		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
107	The system shall provide the ability to generate report on State/ other non-federal funds, and in-kind contribution used as a match for federal fund grants based on user-defined criteria (e.g. match requirements set forth in an award letter; maintenance of effort requirement).	Reporting	Х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
108	The system shall provide the ability to generate Federal grant reports in compliance with Federal Cost Principles and Allowable Costs set forth in OMB circulars (e.g., A-122)	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
109	The system shall provide the ability to generate single and program- specific audits in compliance with Federal grant requirements set forth in OMB Circular A-133, including but not limited to:	Reporting								
110		Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
111		Reporting	Х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
112		Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
113	The system shall provide the ability to generate reports in compliance with MWBE (Minority and Women Owned Business Enterprise) reporting requirements, EPA green initiatives, and other Federal reporting requirements	Reporting	X					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
114	on user-defined criteria (e.g., report with assumptions and related criteria used to develop billing rates).	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
115	incorporate the approved/valid Indirect Cost Rate and Fringe Benefit Rate to be used in the Federal Financial Report.	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
116	The system shall provide the ability to generate the Indirect Cost Rate Proposal based on federal grant requirements set forth in OMB Circular A-133.	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
117	The system shall provide the ability to automatically update the USDA contact information on Indirect Cost Rate Proposal Submission (e.g., name, mailing address, e-mail address, contact number).	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
118	The system shall support online submission of the Indirect Cost Rate Proposal based on user-defined criteria.	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
119	Provide a grant dashboard based on user-defined criteria (e.g., dashboard view for grants managers/accountants of assigned grants)	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
120		Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
121	Ability to generate grant/sub-grant detail transaction reports, and to generate a query and/or report (with drill-down capability), based on user-defined time period (e.g., month, quarter, YTD, inception-to-date), based on configurable criteria	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
122	Ability to generate a query and/or report on grants at all levels of the account classification (e.g., organization, program, object, fund, appropriation)	Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
123		Reporting	х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		
124	Ability to customize the "roll up" of individual account line items into various personnel, operating or other categories to comply with grant reporting requirements	Reporting	Х					PS Grants, PS Query, PS General Ledger, PS BI Publisher		

Grant	Management	One Response per Requirement (Offeror Use Only)		Module / Solution	Customization Complexity	Offeror Comments			
ID#	Requirements	Topic	Υ	С	3	F N		H / M / L	
125	Ability to generate expenditure and exception reports for compliance with funding agency reporting requirements and compliance, based on user-defined criteria (e.g., by sub grantee)	Reporting	х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
126	Ability to transmit and receive reports/information electronically, to and from all grantee and grantor agencies, based on user-defined criteria	Reporting	х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
127	Ability to generate reports based on specific grant requirements (e.g., only specific line items are eligible expenditures) and other user-defined requirements	Reporting	х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
128	Ability to generate payroll certification reports required by Federal grant requirements, in compliance with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance).	Reporting	х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
129	Ability to generate report on State/other non-federal funds, such as cost sharing, matching, or in-kind contribution used as a match for federal fund grants	Reporting	х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
130	Ability to generate Federal grant reports in compliance with the Uniform Guidance, including but not limited to:	Reporting	Х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
131	(1) Financial Reports (e.g., SF-425)	Reporting	х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
132	(2) Schedule of Expenditures of Federal Awards (SEFA)	Reporting	х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
133	Ability to automate recurring searches/reports	Reporting	Х				PS Grants, PS Query, PS General Ledger, PS BI Publisher		
134	Ability to internally track grant proposal status, and accommodate the upload of associated documentation in multiple file formats	SOH acts as Grantor		х				М	
135	Ability to manage online grant applications, monitor for completion, and automate compliance checks and communication	SOH acts as Grantor		х				M	
136	Ability to create and design grant forms in a flexible way that is adaptable to multiple grant types, lengths, etc.	SOH acts as Grantor		х				М	
137	Ability to track grantee interactions and manage grantee	SOH acts as Grantor		х				М	

Bonds			C	ne Re	spons	e per			
Domas				Req	uireme r Use (	ent	Module / Solution	<b>Customization Complexity</b>	Offeror Comments
ID#	Requirements	Topic	Y	С		T	4	H / M / L	
1	The system shall provide the ability to comply with all provisions of	Bond Accounting	v				PS Treasury Deal		
·	federal law and regulations pertaining to retaining the bondholders' exemption from federal income taxation on interest paid on state bonds.	Dona Accounting					13 Heddary Dear		
2	The system shall provide the ability to transfer Cash between Sub-	Bond Accounting	х				PS Cash Management, PS Deal		
	The system shall provide the ability to account for bond escrow investments and to provide user-defined notification of maturity and interest earnings for debt service payments.	Bond Accounting	×				PS Treasury Deal		
	The system shall provide the ability to calculate debt service requirements for all outstanding bonds, by payment types (e.g., principal, interest, total), by time period (e.g., fiscal year, fiscal quarter), by category (e.g., GO, GOR, revenue) and by department/entity (e.g., DHHL, Highways, Airports, Harbors, etc.).	Bond Accounting	х				PS Deal Management		
5	The system shall have the ability to sub-total debt service requirements based on user-defined criteria.	Bond Accounting	х				Ps Deal Management		
	payable.	Bond Accounting	х				Ps Deal Management		
	The system shall provide the ability to amortize bond issuance cost, deferred gain/loss on bond refunding, bond premiums and discounts and easily adjust, if applicable, for defeasements.	Bond Accounting	×				PS Deal Management		
	The system shall have the ability to provide bond administration system functionality, by bond type (e.g., General Obligation, General Obligation Reimbursable, and Revenue), including but not limited to:	Bond Administration	x				Ps Deal Management		
9	Set up Bond Issuance schedule	Bond Administration	х				PS Deal Management		Create "schedule" portfolio with projected bond issuances
10	1	Bond Administration	х				PS Treasury Deal		
11	Calculate and Service Debt	Bond Administration	Х			_	PS Deal Management		
12	Reconcile Bonds Outstanding	Bond Administration Bond Administration	X			_	Ps Deal Management		
13		Bond Administration	X				PS Treasury Deal PS Treasury Deal		
15	· · · · · · · · · · · · · · · · · · ·	Bond Administration	х				PS Deal Management		
16	Set up and Calculate Amortization Schedule (e.g., by fiscal year, by fiscal quarter)	Bond Administration	х				PS Deal Management		
17	( 0 , ),	Bond Administration	х				PS Deal Management		
18	The system shall provide the ability to maintain and report bond information including but not limited to: bond balances, series, date of issuance, investment rates, maturity dates, original amount, and callable/noncallable.	Bond Administration	x				PS Deal Management		
19	The system shall provide the ability to track bonds based on user-defined criteria (e.g., callable vs. non-callable; type of bond).	Bond Administration	х				PS Deal Management		
20		Bond Administration	х				PS Deal Management		
21	· · · · · · · · · · · · · · · · · · ·	Bond Administration	Х				PS Cash Management, PS Deal Management		
	opening and ending balances, additions and deletions) based on user-defined criteria (e.g., by project).	Bond Administration	X				PS Cash Management, PS Deal Management		
23	The system shall provide the ability to record defeasements and track defeased bonds based on user-defined criteria.	Bond Administration	Х				PS Treasury Deal		
24	The system shall have the ability to provide debt management system functionality, including but not limited to:	Debt Management	Х				PS Treasury Deal		

Bonds				Red	espons quireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
25	Set Up and Maintain Financing Calendar	Debt Management	Х					PS Deal Management, PS Query, Oracle PBCS		Calendar functionality does not exist, but future dated deals can be entered into the system, maintained and reported on with PS tools or PBCS
26	Set up Bonds	Debt Management	Х					PS Deal Management		
27	Calculate Basis Mismatch and Bond Yield	Debt Management	Х					PS Deal Management		
28	Payment of Debt Service	Debt Management	Х					PS Deal Management, PS Cash Management		
29	Transfer Agent Services for State Issued Bonds	Debt Management	Х					PS Treasury Deal		
30	Fiscal Agent Services for State Issued Bonds	Debt Management	Х				_	PS Treasury Deal		
31	Ad Hoc and Trend Analysis (e.g., interest rates in bond market; financial and economic trends that impact bonds)	Debt Management	Х					PS Deal Management, PS Kibana Analytics		Would need to identify and import data from source financial analytics service
	Required Reporting (e.g., disclosure)	Debt Management	Х					PS Treasury Deal		
33	The system shall provide the ability to generate forecasts for debt ratio based on forecasting debt requirements to projected General Fund revenues over a user-defined time period, based on user-defined criteria.	Debt Management	x					PS Deal Management, Oracle PBCS		
	The system shall provide the ability to accumulate loans at any attribute (or combination of attributes) associated with the account or organizational structure, by project structure, by phase/cost element, over multiple years, for a user-defined time period.	Loans	x					PS Deal Management		
35	The system shall provide the ability to support loans (e.g., interfund loans, program loans, intrafund loans) tracking, by any level in the organizational hierarchy, by user-defined periods (e.g., over multiple years, over multiple fiscal years), based on user-defined parameters, including but not limited to:	Loans	Х					PS Deal Management		
36	Fund	Loans	Х					PS Deal Management		
37	Appropriation	Loans	Х					PS Deal Management		
38	Organization Structure	Loans	Х				_	PS Deal Management		
39	Project(s)	Loans	Х					PS Deal Management		
40	Loan Date	Loans	Х				_	PS Deal Management		
41	Interest Rate	Loans	Х					PS Deal Management		
42	Payments (principal and interest)	Loans	Х				_	PS Deal Management		
43	YTD Payments (inflow vs. outflow)	Loans	Х				_	PS Deal Management		<u> </u>
44	Payment Dates (inflow vs. outflow)	Loans	X		$\vdash$	_	_	PS Deal Management		
45	Penalties/Interest	Loans	X		$\vdash$			PS Deal Management		
46 47	User-defined Loan Category (e.g., leveraged; restricted)  Loan Terms	Loans	X		$\vdash$		_	PS Deal Management		
47	Legal/Federal Loan Requirements	Loans	X		$\vdash$	-		PS Deal Management PS Deal Management		
49	Authority (Citation and Amount)	Loans Loans	X				_	PS Deal Management		
50	Decisions To Forgive Debt (partial or full)	Loans	X	-	+	$\dashv$	_	PS Deal Management		
51	Fees/ NSF	Loans	X	-	+	$\dashv$	_	PS Deal Management		
52	Write-offs As Bad Debt	Loans	T <sub>x</sub>		+ +			PS Deal Management		+
53	The system shall provide the ability to track loan activity, based on user-defined criteria, including but not limited to:	Loans	X				_	PS Deal Management		
	Source of Loan: (e.g., general fund, revenue bond, special revenue fund loan, federal fund, enterprise fund, pool loan)	Loans	х					PS Deal Management	-	
55	Type of Loan (e.g., cash flow, statutory or budget act, revolving loan, program loan, reimbursement loan, guaranteed loan, loan converted from grant)	Loans	х					PS Deal Management		
56	Other (e.g., Bond authority traded between organizations)	Loans	Х					PS Treasury Deal		

Bonds				Req	esponse uiremer or Use C	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3 1	FN		H/M/L	
	The system shall provide the ability to track various types of adjustments to authorized expenditures or revenues resulting from loan transactions, across multiple years, based on user-defined criteria.	Loans	х				PS Treasury Deal		
	The system shall provide the ability to create and maintain (e.g., modify) an amortization schedule for any type of loan, based on user-defined criteria (e.g., adjustments that would account for unscheduled principal reductions or any other change that would render the original schedule obsolete).	Loans	х				PS Deal Management		
	multiple versions of loan projections, at any time during the fiscal year, based on user-defined criteria (e.g., amortization schedules), for user-defined parameters, including, but not limited to the following:	Loans	x				PS Treasury Deal		
60	repayment)	Loans	х				PS Deal Management		
61	Loan Principal	Loans	Х				PS Deal Management		
62	Loan Interest	Loans	Х				PS Deal Management		
63	Loan Fees and Returned Check Fees	Loans	х				PS Deal Management, PS Cash Management		
64	Deferred Revenue	Loans	Х				PS Treasury Deal		
65	Other	Loans	х				PS Deal Management		
	The system shall provide the ability to reconcile loans, showing disbursements and repayments at the fund level to overall GL account, based on user-defined criteria (e.g., by school district).	Loans	х				PS Deal Management, General Ledger		Set up ChartField attributes and/or Fund trees for the fund ChartField to link loan source to activity
	which are funded through General Obligation Bonds and to refund the associated debt service costs based on user-defined criteria (e.g., by department; by project).	Loans	х				PS Treasury Deal		
		Loans	х				PS Treasury Deal		
69		Loans	х				PS Treasury Deal		
	The system shall provide the ability to generate reports on private activity, by bond issuance, based on IRS requirements and bond-funded project timeframes (e.g., at proposal (budget request), allotment (approval to proceed with project), project completion stages (when the asset is put into service), and changes in activity related to asset).	New Bond Allocation	X				PS Treasury Deal		
	The system shall have the ability to provide folder for each Series of GO Bonds, with the following information:	New Bond Allocation	х				PS Treasury Deal		
72	Year and Series Designation;	New Bond Allocation	Х				PS Treasury Deal		
73		New Bond Allocation	х				PS Treasury Deal		
	,	New Bond Allocation	Х				PS Deal Management		Create separate portfolios
	7	New Bond Allocation	Х				PS Deal Management		
76		New Bond Allocation	Х				PS Deal Management		

Bonds				Re	Respor equiren	ment		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С		F			H/M/L	
77	Principal Amount;	New Bond Allocation	Х					PS Deal Management		
	,	New Bond Allocation	Х				_	PS Deal Management		
-	Reoffering Price of Bonds;	New Bond Allocation	Х					PS Treasury Deal		
80		New Bond Allocation	Х					PS Treasury Deal		
81	Amount used for costs of issuance (including underwriter's discount;	New Bond Allocation	Х					PS Treasury Deal		
82	Amount use for New Money- cap ex;	New Bond Allocation	х					PS Treasury Deal		
83	Amount used for working capital;	New Bond Allocation	х					PS Treasury Deal		
		New Bond Allocation	х				_	PS Treasury Deal		
85	Amount used to reimburse expenditures made prior to the Date of Issue of the Bonds; and	New Bond Allocation	х					PS Treasury Deal		
86	Other Uses;	New Bond Allocation	х					PS Treasury Deal		
87	Identification of Purposes Financed and/or Refinanced	New Bond Allocation	х					PS Treasury Deal		
88	For New Money: list each Project allocated to the Bonds, with the following information:	New Bond Allocation	х					PS Treasury Deal		
89	· Department Name, Act No., SLH No.,	New Bond Allocation	х					PS Treasury Deal		
90	Date of enactment of the Act,	New Bond Allocation	х					PS Treasury Deal		
91	· Title of Project,	New Bond Allocation	х					PS Treasury Deal		
92	· Amount of Expenditures Allocated to Bonds,	New Bond Allocation	Х					PS Treasury Deal		
93	<ul> <li>Amount of Allocated Expenditures expended by date and amount,</li> </ul>	New Bond Allocation	х					PS Treasury Deal		
94	· Amount of expenditures allocated to Governmental Purpose,	New Bond Allocation	х					PS Treasury Deal		
95		New Bond Allocation	Х				_	PS Treasury Deal		
96		New Bond Allocation	х				_	PS Treasury Deal		
97		New Bond Allocation	х					PS Treasury Deal		Treasury Deal has the ability to store attachments for each particular Deal (Bond Offering). In addition,
98	For Refunding: for each series of refunded bonds provide a link to the folder for that refunded series;	New Bond Allocation	х					PS Treasury Deal		,
99	,	New Bond Allocation	Х					PS Treasury Deal		
		New Bond Allocation	х					PS Treasury Deal		
101	Whether other bonds sold within 15 days of the Bonds, and if so, a link to the folder for such other bonds.	New Bond Allocation	х					PS Treasury Deal		
102		New Bond Allocation	х					PS Treasury Deal		
103	- Y	New Bond Allocation	х	f		1		PS Treasury Deal		
		New Bond Allocation	Х				_	PS Treasury Deal		
105		New Bond Allocation	х			İ	_	PS Treasury Deal		
		New Bond Allocation	х					PS Treasury Deal		
107	,	New Bond Allocation	х					PS Treasury Deal		
108		New Bond Allocation	х					PS Treasury Deal		
109		New Bond Allocation	х					PS Treasury Deal		
110		New Bond Allocation	х					PS Treasury Deal		

Bonds			C		Respon quirem		er	Module / Solution	Customization Complexity	Offeror Comments
			(		or Use		y)	Module / Solution	Cactoffileation Complexity	Oncor Somments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
	(i) Whether Project is a Governmental Purpose Project or a Private Purpose Project. A Private Purpose Project is any Project other than a Governmental Purpose Project. To qualify as a Governmental Purpose Project, one of the following must be true with respect to the Project:	New Bond Allocation	X					PS Treasury Deal		
		New Bond Allocation	х					PS Treasury Deal		
	(ii) There is a transfer of ownership, use or output of the Project to a person other than the State, County or City or agency or instrumentality thereof who (x) is unrelated to a State, a County, a City, or instrumentality thereof and (ii) makes no payment for ownership o use of the Project (i.e., a grant of the Project) or makes payments that do not exceed the State's direct costs of operating and maintaining the Project;	New Bond Allocation	х					PS Treasury Deal		
114		New Bond Allocation	X					PS Treasury Deal		
	(iv) The Project consists of a transfer of proceeds to a State agency or instrumentality but the proceeds are not ultimately used to make a loan to a person other than the State, County or City or agency or instrumentality thereof and any use of the Project by a person other than the State, County or City or agency or instrumentality thereof satisfies (a), (b) or (c) above;		x					PS Treasury Deal		
116	(j) if the Project is a Private Purpose Project a description of the type of private use; and	New Bond Allocation	х					PS Treasury Deal		
117	· · · · · · · · · · · · · · · · · · ·	New Bond Allocation	х					PS Treasury Deal		
	The system shall have the ability to input data on projects on a periodic basis, including projects not initially receiving an allotment of capital improvement funds and including any information regarding a change in use.	New Bond Allocation	х					PS Treasury Deal		
	The system shall have the ability to input expenditure data on a periodic basis and allocation of such expenditures by Bond Series and by Project	New Bond Allocation	х					PS Treasury Deal		
120		Reporting	х					PS Treasury Deal		
121	<u> </u>	Reporting	х					PS Deal Management, Oracle PBCS		
122	Budgeted	Reporting	х					PS Deal Management, Oracle PBCS		
123	Budgeted Versus Actuals	Reporting	х					PS Deal Management, Oracle PBCS		
124	Projected Versus Actuals	Reporting	х		$\prod$			PS Deal Management, Oracle PBCS		

Bonds				Requ	espons uireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
125	Fund Balance	Reporting	х					PS Deal Management, Oracle PBCS		
126	Budget Projections	Reporting	х					PS Deal Management, Oracle PBCS		
127	Comparative Statement of Revenues	Reporting	х					PS Deal Management, Oracle PBCS		
128	GAAP Reports	Reporting	х					PS Deal Management, Oracle PBCS		
129	The system shall provide the ability to compute the current portion of bonds.	Reporting	Х					PS Deal Management, Oracle PBCS		

Appendix B – Optional Phase Requirements RFP-ERP-2020

## Requirements Matrix | Instructions

This requirements matrix is comprised of multiple tabs, and together they contain the full set of requirements for which SOH requires vendor responses.

Please respond to each and every requirement (even ones that appear redundant) as follows:

- 1. Indicate your response to each line item with an "X" in the appropriate "One Response per Requirement" column, according to the following labels and definitions:
- Y = Yes, we meet this requirement out-of-the-box or with configuration capabilities provided within the software.
- C = We can meet this requirement via customization/extension-- i.e., for a SaaS solution, the functionality would be provided by building an extension using platform as a service (PaaS) capabilities provided either by the vendor or a third party. (If this column is indicated, please provide an indication of High, Medium, or Low development complexity in the "Customization Complexity" column. Costs of all extensions/customizations by process/functional area should also be noted separately in your Pricing Response.)
- 3 = We can meet this requirement by partnering with another third party solution. (If this column is indicated, please provide the name of the third party product in the "Comments" column.)
- F = We can meet this requirement with a future release of our software. (If this column is indicated, please provide the version and timing of the release in the "Comments" column.)
- N = No, we cannot meet this requirement.
- 2. For each line item, note the name of the module that will handle the required functionality in the "Module/Solution" column, so that SOH can align your module pricing to the requirements.

APPENDIX A-2 2 Instructions - 2 RFP-ERP-2020

<b>Core Requirements</b>	
Tab	Topic
Investments	General
Investments	Inquiry & Reporting
Asset Inventory	Asset Data
Asset Inventory	Asset Inventory
Asset Inventory	Depreciation
Asset Inventory	Disposal
Asset Inventory	General
Asset Inventory	Interface
Asset Inventory	Leases
Asset Inventory	Reporting
Asset Inventory	Transaction Processing

Invest	ments			Red	Respon quirem ror Use	nent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
1	The system shall provide ability to manage and track investment accounts and automatically reconcile with General Ledger and related user-defined functions within the EFS	General	Х					PS Cash Management, PS Deal Management		
2	The system shall provide ability to capture general investment account data based on user-defined configuration including, but not limited to:	General	х					PS Cash Management, PS Deal Management		
3	Type of investment	General	х					PS Cash Management, PS Deal Management		
4	Financial Institution/Issuer	General	х					PS Cash Management, PS Deal Management		
5	Fund Type	General	х					PS Cash Management, PS Deal Management		
6	Cost (e.g., face amount less discount plus premium plus accrued interest)	General	х					PS Cash Management, PS Deal Management		
7	Agency Purchasing	General	х					PS Cash Management, PS Deal Management		
8	Document/Certificate No.	General	Х					PS Cash Management, PS Deal Management		
9	Investment Purchase trade date, settlement date and Maturity Dates	General	Х					PS Cash Management, PS Deal Management		
10	Investment Pool - include or exclude	General	Х					PS Cash Management, PS Deal Management		
11	Term/Period/Number of Days	General	Х					PS Cash Management, PS Deal Management		
12	Yield (e.g., percentage)	General	х					PS Cash Management, PS Deal Management		
13	Interest (e.g., purchased accrued interest)	General	х					PS Cash Management, PS Deal Management		
14	Amounts (e.g., face amount, discount, premium, etc.)	General	х					PS Cash Management, PS Deal Management		
15	Interest (including any purchased accrued interest)	General	х					PS Cash Management, PS Deal Management		
16	Duration	General	х					PS Cash Management, PS Deal Management		
17	The system shall have ability to compute rate of return based on user-defined cash or accrual bases.	General	х					PS Cash Management, PS Deal Management		
18	The system shall provide the ability to track and report on investments based on user-defined categories including, but not limited to:	General	Х					PS Cash Management, PS Deal Management		
19	Type of Inflow/Outflow	General	х					PS Cash Management, PS Deal		
20	Fund (e.g., general, special, trust, agency, bond, etc.)	General	Х					PS Cash Management, PS Deal Management		
21	Investment type and description/narrative	General	Х					PS Cash Management, PS Deal Management		
22	The system shall provide ability to track and manage the cash flows and project cash flows of securities in the portfolio.	General	х					PS Cash Management, PS Deal Management		
23	The system shall provide ability to track maturing investments (e.g., net amount of cash in/outflows, investments and type of investments purchased to meet cash obligation or cash shortfalls for the day.	General	Х					PS Cash Management, PS Deal Management		
24	The system shall provide the ability to compute investments maturities, by investment type, by time period (e.g., fiscal year, fiscal quarter), and other user-defined criteria.	General	х					PS Cash Management, PS Deal Management		

Investr	nents			Red	esponse quireme or Use (	nt	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N	H/M/L	
25	The system shall provide the ability to sub-total investment maturities based on user-defined criteria.	General	х				PS Cash Management, PS Deal Management		
26	updates based on user-defined parameters (e.g., dynamic/real-time, scheduled/batched, etc.)	General	х				PS Cash Management, PS Deal Management		
27	The system shall provide ability to query and report on investment purchases based on user-defined maturity date/period.	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
28	The system shall provide capability to generate standard and adhoc investment tracking reports based on user-defined parameters (e.g., date or period driven) including, but not limited to, financial statements, trial balance, transaction register, etc.	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
29	The system shall have ability to generate the following reports using State-defined formats including, but not limited to:	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
30	Allocation of investment pool earnings to participating agencies	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
31	Daily Investment Maturities	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
32	General Fund Earnings	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
33	Interest on Investments Maturing	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
34	Investment Pool Earnings - realized interest, gain on sale	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
35	Investment Register - Detail	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
36	Investment register - details of holdings, summary by fund	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
37	Investment Register - Summary	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
38	Statement of Cash	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
39	Status of Outstanding investment register - detail holdings, summary by fund	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
40	Performance measurements, bechmark designation	Inquiry & Reporting	х				PS Cash Management, PS Deal Management		
41	Compliance monitoring - Investment Policy criteria, HRS	Inquiry & Reporting		х				L	Additional information needed
42		Inquiry & Reporting	х				PS Financial Gateway, PS Genera Ledger	I	
43	Capability to receive daily transaction files from Custodial Bank and generate entries for general ledger recording	Inquiry & Reporting	х				PS Financial Gateway, PS Genera Ledger	I	

Asset I	nventory		One Response per Requirement (Offeror Use Only)			Module / Solution	Customization Complexity	Offeror Comments		
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
1	Provide subledger functionality for tracking various asset categories with additional granularity, and all subledgers roll up seamlessly into the GL	Asset Data	х					PS Asset Management, PS General Ledger		
2	Ability to record maintenance information against an asset	Asset Data	х					PS Maintenance Management, PS Asset Management		
3	Ability to define asset maintenance schedules with tracking of scheduled maintenance performed	Asset Data	х					PS Maintenance Management, PS Asset Management		
4	·	Asset Inventory	х				_	PS Asset Management		
5	The system shall provide the ability to perform physical counts, based on user-defined criteria (e.g. by location, by specific item, by group of items) and user-defined time period (e.g., SPO requirement for annual "wall to wall" inventory).	Asset Inventory	х					PS Asset Management, PS nventory		
6	The system shall provide the ability to perform cycle counts, based on user-defined criteria (e.g. by location, by specific item, by group of items).	Asset Inventory	x					PS Asset Management, PS nventory		
7	based on user-defined criteria (e.g., inventory count; impairments; audit findings; inactivation of record incorrectly entered, with required audit trail; write-off).	Asset Inventory	x					PS Asset Management, PS nventory		
8	The system shall provide the ability to define the start date of depreciation and the useful life of the asset, based on user-defined criteria (e.g., fund type).	Depreciation	X				F	PS Asset Management		
9	, ,	Depreciation	×					PS Asset Management, PS General Ledger		
10	( 31 )	Depreciation	X				F	PS Asset Management		
11		Depreciation	х				F	PS Asset Management		Use What -if depreciation functionality
12	The system shall provide the ability to roll back depreciation (e.g., to accommodate last minute accounting adjustments) and re-run depreciation based on user-defined business rules.	•	x				F	PS Asset Management		
13	The system shall provide the ability to apply prior year depreciation in current fiscal year based on user-defined criteria.	Depreciation	х				F	PS Asset Management		
14	The system shall provide the ability to retain depreciation information for each asset, based on user defined criteria, including but not limited to the following: time period (e.g., fiscal year, life-to-date basis), depreciation method, accumulated depreciation, and fund source.	Depreciation	x				F	PS Asset Management		
15	The system should provide the ability to depreciate infrastructure as defined by user-defined reporting requirements (e.g., State, Dept).	Depreciation	x				F	Ps Asset Management, PS Query		
16		Depreciation	x					PS Asset Management, PS General Ledger		

Asset I	nventory			Req	espons uireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
17	The system shall provide the ability to depreciate change increases that do not extend the asset's useful life over the asset's remaining useful life (e.g., if an asset has a five year life and a change increase is added in the second year, the change increase should be depreciated over the four remaining years in the asset's life).	Depreciation	x					PS Asset Management		
18	including the ability to generate required state forms (e.g., certification of disposal) and to allow for electronic workflow (e.g., approvals, routing), based on user-defined approvals and criteria (e.g., \$1K and above requires SPO approval).	Disposal	x					PS Asset Management, PS Form Builder, BI publisher		
19	information, based on user-defined criteria (e.g., disposal method, police report number for stolen items, hazardous materials).	Disposal	x					PS Asset Management		
-	or loss on the sale or disposal of an asset.	Disposal	х					PS Asset Management		
	asset.	Disposal	х					PS Asset Management		
22	for stolen items based on user-defined criteria (e.g., automatic generation of form).	Disposal	х					PS Asset Management, PS Form Builder, PS Query		
23	The system shall provide the ability to print asset identification tags/chips based on user-defined criteria.	General			х					PS can generate data file but 3rd party barcode printing software required
24	The system shall provide the ability to generate Asset ID Numbers manually and/or automatically, based on user-defined criteria.	General	х					PS Asset Management		
25	The system shall provide the ability to create a master Asset ID Number with separate associated sub-assets (e.g., building, air conditioner) in a parent-child relationship.	General	х					PS Asset Management		
26	The system shall provide the ability to record and maintain assets by user-defined groupings based on user-defined criteria.	General	х					PS Asset Management		
27	The system shall have the ability to identify and track assets that have been received but for which invoice has not yet been paid.	General	х					PS Asset Management, PS Purchasing		
28	The system shall provide the ability to identify an item as an asset from payables module and to automatically or manually post it to the asset accounting subsystem, based on user-defined criteria.	General	x					PS Asset Management, PS Payables		
29	criteria (e.g., owner organization; custodian organization; estimated life of asset) in compliance with State requirements (e.g., HRS 103D, Part XII; HAR, Title 3, Subtitle 11, Chp. 130; SPO Inventory	General						PS Asset Management , PS Query, PS nVision		
30	Manual). The system shall provide the ability to track and report on assets that are issued to employees and are maintained offsite (e.g., laptops at teachers' homes).	General	X					PS Asset Management		
31	The system shall provide the ability to track and report on assets that are acquired through donations based on user-defined criteria (e.g., equipment).	General	x					PS Asset Management		
32	The system shall provide the ability to track all assets based on Comprehensive Accounting Financial Report (CAFR) categories including, but not limited to land, buildings, improvements other than buildings, intangible assets, machinery and equipment, and construction in progress.	General	x					PS Asset Management		
	The system shall provide the ability to collect and maintain the asset data required to support the production of the Comprehensive Annual Financial Report (CAFR) and other user-defined report requirements (e.g., State reports, Department reports, granting agency reports).	General	x					PS Asset Management, PS Query		

Asset I	nventory			Req	espons Juireme or Use (	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
	The system shall provide the ability to define asset information (e.g., purchase amount, life of asset) within specified limits/values, based on user-defined categories (e.g., capital item; non-capital item).	General	х					PS Asset Management		
35	greater or less than user-defined dollar value (e.g., software licenses).	General	х					PS Asset Management		
36	The system shall provide the ability to track and maintain assets, based on user-defined categories (e.g., gifts; purchased using grant funds).	General	x					PS Asset Management		
37	The system shall provide the ability to track the addition, transfer, deletion, or modification of an asset, based on user-defined criteria (e.g., dollar value).	General	x					PS Asset Management		
38	The system shall provide the ability to track the transfer history of an asset, based on user-defined criteria (e.g., organizational unit transferred from/to; transfer report number, transfer date).	General	x					Ps Asset Management		
39	·	General	×					PS Asset Management		
40	,	General	x					PS Asset Management		
41	'	General	x					PS Asset Management		
42	•	General	x					PS Asset Management		
43	The system shall provide the ability to calculate replacement value based upon user-defined criteria.	General	x					PS Asset Management		
44	The system shall provide the ability to calculate and track replacement schedules based on user-defined criteria (e.g., expected life of asset).	General	х					PS Asset Management, PS Query		Based on expected life entered in system
45	construction from "in progress" to fixed asset account, without losing the accompanying details based on user-defined criteria and workflow (e.g., identification of asset with open punchlist as "in service" by building engineer; asset capitalization based on value being placed in service; and completion of punchlist items and capitalization of remaining asset value).	General	x					PS Asset Management		
46	The system shall provide the ability to track periodic increases to construction in progress (e.g., change orders).	General	x					PS Asset Management		
47	The system shall provide the ability to track and report on changes in use of asset (e.g., private activity), by bond issuance, based on IRS requirements and other user-defined criteria.	General	х					PS Asset Management , PS Deal Management, PS General Ledger, PS Query		Link assets to Bond issuance via Fund Codes or use financing codes in Asset Management
48	The system shall provide the ability to reinstate an asset, based on user-defined criteria (e.g., if the wrong asset is retired).	General	х					PS Asset Management		
49	The system shall provide the ability to interface excess inventory property data to SPO website based on user-defined criteria.	Interface		x					М	Need further requirements and specs from 3rd party system. PeopleSoft comes delivered with Integration Broker web services/messaging tools.
50	The system shall provide the ability to interface with external capital projects systems	Interface		x					М	Need further requirements and specs from 3rd party system. PeopleSoft comes delivered with Integration Broker web services/messaging tools.

Asset I	nventory			Req	espons quireme or Use	ent		Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Y	С	3	F	N		H/M/L	
51	The system shall provide the ability to track rented or leased assets based on user-defined criteria (e.g., organization unit; lease terms).	Leases	х					PS Asset Management		
52	The system shall provide the ability to drill down to related purchase order for leased asset.	Leases	х					PS Asset Management		
53	The system shall provide the ability to distinguish between capital and operating leases and to provide information on property inventory according to type of lease, based on user-defined criteria.	Leases	x					PS Asset Management		
54	The system shall provide the ability to track the requisition for a capital lease, the approval of the capital lease and changes to the capital lease, based on user-defined criteria (e.g., rental rate, terms).	Leases	x					PS Asset Management		
55	The system shall provide the ability to incorporate data on capital leases in the budget development and execution process.	Leases	х					PS Asset Management, Oracle PBCS		
56	The system shall provide the ability to calculate future minimum lease payments by organization (e.g., department/entity), by user-defined time period (e.g., fiscal year), based on user-defined criteria.	Leases	x					PS Asset Management, PS Query		
57	The system shall provide the ability to sub-total future minimum lease payments based on user-defined criteria.	Leases	, x					PS Asset Management, PS Query		
58	. ,	Reporting	x					PS Asset Management, PS Query		
59	The system shall provide the ability to generate an Asset Inventory Report, by any level in the organizational structure, in compliance with State statute (HRS 103D-1206) and other user-defined criteria (e.g., prepared and signed by property guardian on annual basis).	Reporting	x					PS Asset Management, PS Query, PS Tree Manager, PS nVision		
60	, , , , , , , , , , , , , , , , , , , ,	Reporting	x					PS Asset Management, PS Query, PS Tree Manager, PS nVision		
61		Reporting	x					PS Asset Management, PS Query, PS Tree Manager, PS nVision		
62	Asset master list with the ability to sort by any asset identification fields (e.g., location, class, category, department, function, fund, amounts, dates).	Reporting	х					PS Asset Management, PS Query, PS Tree Manager, PS nVision		
63	By monthly, year to date (YTD), total to date (TDD) depreciation per asset	Reporting	х					PS Asset Management, PS Query, PS Tree Manager, PS nVision		
64	The system shall provide the ability to generate asset reports which reflect beginning balance, additions and deletions, partial dispositions, depreciation, accumulated depreciation, transfers, sales, adjustments, during the designated reporting period, by user-defined criteria (e.g., by inventory/asset category (such as equipment, vehicles, and land), at any level of the organizational structure, and by funds/appropriations).	Reporting	x					PS Asset Management, PS Query, PS Tree Manager, PS nVision		
65	· · · · · · · · · · · · · · · · · · ·	Reporting	х					PS Asset Management, PS Query, PS Tree Manager, PS nVision		
66	The system shall provide the ability to generate a report of assets transferred, based on user-defined criteria (e.g., by issuing or receiving school, by fund source).	Reporting	x					PS Asset Management, PS Query, PS Tree Manager, PS nVision		

Asset I	nventory			Req	esponse uiremen or Use O	nt .	Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3 F	N		H/M/L	
67	The system shall provide the ability to generate a report of lost/stolen/destroyed assets, based on user-defined criteria.	Reporting	x				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
68	·	Reporting	x				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
69	The system shall provide the ability to generate a detailed and summary depreciation schedule at any level in the organizational structure, on an accounting period, monthly, quarterly and annual basis, based on user-defined criteria.	Reporting	x				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
70	The system shall provide the ability to generate monthly reconciliation reports, based on user-defined criteria (e.g., monthly changes to equipment values, listing outstanding PO items).	Reporting	х				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
71	The system shall provide the ability to record the current valuation of facilities and to revalue facilities based on user-defined criteria.	Reporting	х				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
72	The system shall provide the ability to generate reports on the replacement value of assets, based on user-defined criteria (e.g., by fiscal year, for multiple years).	Reporting	x				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
73	The system shall provide the ability to generate a five year cost projection report for all leased property, based on user-defined criteria (e.g., 5 year increments for CAFR for capital leases).	Reporting	х				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
74	The system shall provide the ability to generate a project status report of all capital improvement projects (CIP).	Reporting	х				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
75	The system shall provide the ability to generate lease report(s), by lease type, based on user-defined criteria.	Reporting	х				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
76	The system shall provide the ability to generate CAFR-required schedules and reports (e.g., in compliance with GASB 34 and 42), in user-defined format (e.g., format required for published; with notes).	Reporting	x				PS Asset Management, PS nVision, BI Publisher		
77	The system shall provide the ability to allocate asset costs for purposes of financial statements based on user-defined criteria (e.g. allocate building assets based on square footage, etc.).	Reporting	х				PS Asset Management, PS Allocations		
78	The system shall provide the ability to generate the following user- defined reports, with the capability to include user-defined notes:	Reporting	х				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
79	Asset Replacement Report (based on user-defined criteria, such as by estimated useful life)	Reporting	х				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
80	Asset Tracking Report (based on user-defined criteria, such as by source of funds)	Reporting	x				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
81	,	Reporting	x				PS Asset Management, PS Query, PS Tree Manager, PS nVision		
82	The system shall provide the ability to process asset transactions based on user-defined criteria (e.g., set controls based on dollar thresholds).	Transaction Processing	x				PS Asset Management		
83	The system shall provide the ability to process multiple asset and GL transactions in a single entry for identical assets based on user-defined criteria (e.g., deletions/ disposals/ sales, transfers).	Transaction Processing	x				PS Asset Management		

Asset I	nventory		One Response per Requirement (Offeror Use Only)					Module / Solution	Customization Complexity	Offeror Comments
ID#	Requirements	Topic	Υ	С	3	F	N		H/M/L	
84	The system shall provide the ability to annotate transactions with unlimited comments, by line item.	Transaction Processing	х					PS Asset Management		
85	The system shall provide the ability to automatically and manually transfer asset transactions (e.g., journal posting of depreciation) to the GL.	Transaction Processing	x					PS Asset Management		Journals must be generated in GL in batches
86	The system shall provide the ability to automate transfers between organizational units, funds, custodians, and agencies with multi-tier location coding, based on user-defined criteria (e.g., in groups) and business rules.	Transaction Processing	x					PS Asset Management		
87	The system shall provide the ability to process mass transfers between organizational units (e.g., interagency) based on user-defined criteria and business rules.	Transaction Processing	х					PS Asset Management		



**Appendix C – Technical Requirements** RFP-ERP-2020

## Requirements Matrix | Instructions

This requirements matrix is comprised of multiple tabs, and together they contain the full set of requirements for which SOH requires vendor responses.

Please respond to each and every requirement (even ones that appear redundant) as follows:

- 1. Indicate your response to each line item with an "X" in the appropriate "One Response per Requirement" column, according to the following labels and definitions:
- Y = Yes, we meet this requirement out-of-the-box or with configuration capabilities provided within the software.
- C = We can meet this requirement via customization/extension-- i.e., for a SaaS solution, the functionality would be provided by building an extension using platform as a service (PaaS) capabilities provided either by the vendor or a third party. (If this column is indicated, please provide an indication of High, Medium, or Low development complexity in the "Customization Complexity" column. Costs of all extensions/customizations by process/functional area should also be noted separately in your Pricing Response.)
- 3 = We can meet this requirement by partnering with another third party solution. (If this column is indicated, please provide the name of the third party product in the "Comments" column.)
- F = We can meet this requirement with a future release of our software. (If this column is indicated, please provide the version and timing of the release in the "Comments" column.)

  N = No, we cannot meet this requirement.

Technical Requirements	
Tab	Topic
Technical Architecture	General
Technical Architecture	Application Architecture
Technical Architecture	Database Architecture
Technical Architecture	Infrastructure
Technical Architecture	Integration Architecture
Technical Architecture	System Administration Toolkit
Solution Architecture	Scalability
Solution Architecture	System Flexibility
Solution Architecture	Security & Authentication
Solution Architecture	Audit
Solution Architecture	Data Storage & Archiving
Solution Architecture	System Capacity & Performance
Solution Architecture	Business Continuity & Disaster Recovery
Solution Technology	Workflow Processing
	Reporting, Business Intelligence, & Data
Solution Technology	Warehouse
Solution Technology	Content/Document Management & Imaging
Solution Technology	End-User Interface
Solution Technology	Data Entry Support & On-line Help

Techn	ical Architecture				e Res Requi			Offeror Comments
ID#	Requirements	Topic	Υ	G		3	N	
1	The system shall be based on Software as a Service (SaaS) or Offeror-Hosted architecture.	General	X					Hosted architecture on Oracle Cloud Infrastructure. The software is provided as COTS managed to be SaaS-like.
2	The system user interface shall meet the accessibility requirements as described in the WCAG 2.0 Standard.	User Interface	X					http://www.oracle.com/us/corporate/accessib ility/index.html Please see Oracle's VPAT for PeopleSoft here: https://www.oracle.com/corporate/accessibilit y/templates/t2-10957.html
3	The system shall provide all screens, reports and transactions through a web browser.	User Interface	Х					PeopleSoft user interface is web based.
4	The system shall provide a browser-based graphical user interface (GUI) without any requirement to deploy any application code to client workstations. This user interface shall be available on both Microsoft Windows and MacOS.	User Interface	Х					PeopleSoft web user interface only needs a supported web browser.
5	The system shall provide the ability to automate the deployment of software and updates to user workstations including, but not limited to web-based deployment tools.	Application Architecture	Х					PeopleSoft is web based so there would not be any deployment of software to workstations, any new updates would be available to user as soon as they login to the web application.
6	The system shall provide a user (with appropriate access rights) the ability to configure (add, modify, delete) the user interface - without a need for vendor-assisted customization	Application Architecture	Х					Changes to placement of fields on a delivered page can be done via delivered functionality like Drop Zones or Page/Field Configurator allowing addition of new fields to an existing page based on configuration.
7	The system shall provide a user (with appropriate access rights) the ability to configure (add, modify, delete) reports - without a need for vendor-assisted customization	Application Architecture	Х					Reports created via Query Manager can be configured as needed.
8	The system shall provide a user (with appropriate access rights) the ability to configure (add, modify, delete) workflows and business rules- without a need for vendor-assisted customization	Application Architecture	Х					Workflows can be configure using Approval Workflow Engine.
9	The system shall provide the ability to manage automatic job scheduling (i.e. batch jobs, billing) including, but not limited to the interface with external job schedulers and automatic notification capabilities when a job abnormally terminates.	Application Architecture	х					Automatic job scheduling can be configured using Process Scheduler.
10	The system shall provide built-in document management for attaching scanned and imaged documents to financial transactions.	Application Architecture	х					Documents or files can be uploaded to the system as Attachments as part of the workflow of Approval Workflow Engine as delivered.
11	The system shall provide the ability to perform mass changes to a defined group of data, with appropriate selection criteria.	Application Architecture			Х			Mass changes for an defined set of data can be done via constructed grids.

APPENDIX C 4 Technical Architecture - 4 RFP-ERP-2020

Techni	cal Architecture					ponse reme		Offeror Comments
ID#	Requirements	Topic	Υ	G	c	3	N	
12	The system shall provide the ability to accommodate upgrades to	Application Architecture						Oracle Cloud would automatically upgrade OS,
	future operating systems, databases and other software upgrades.		Х					DB, and other software upgrades.
13	Vendor must detail its integration, and compatibility, levels with	Application Architecture						PeopleSoft BI Publisher can output data into
	Office 365 and Google Docs							PDF, RTF, ETX, or XSL. RTF is compatible with
								Word. PeopleSoft Query can output to excel,
								csv, html, xml all of which can be utilized by
		<b>5</b>	Х	-				Microsoft Office products.
14	The system shall provide utilities for performance monitoring and	Data Architecture	l.,					Business Transaction Monitoring is included.
4.5	tuning for both business logic and data.	D 1 A 1'' 1	Х					Oracle Enterprise Manager is used.
15	The system shall provide the ability for extracting all data (Hawaii	Data Architecture						The customer always owns their data and can
	data) be extracted on demand and on schedule.							extract is as they wish. This is a dedicated
16	The evetem shall provide a dispeter recovery site/colution	Data Architecture	X	<del> </del>	<del>                                     </del>		_	implementation for the State.
16 17	The system shall provide a disaster recovery site/solution.  The system shall provide a failover procedure with automated	Data Architecture  Data Architecture	Х	+				Yes a DR services is included.
17	deployment to a disaster recovery site/solution.	Data Architecture	x					This is a manual process that depicts when the
18	The system shall provide standard data extraction Application	Data Architecture	<del> </del> ^-	+				failover to the DR site is required.  Assume this would be done via PS Integration
10	Program Interface (API) to allow import and export of data to other	Data Architecture						Broker however not sure if Oracle Cloud has
	systems.		X					other API tools offered.
19	The system shall provides data import functionality to receive	Data Architecture	+^-	+				Spreadsheet or other defined file uploads can be
	standard format data from external parties.	Bata / tromtostaro			x			built according to the data set needed.
20	The system shall provide the ability to copy, archive and retrieve	Data Architecture	$\top$	1				The system is capable however no pricing has
	data to external storage media (e.g. tape, DVD, SAN) based on							been provided.
	user-defined selection criteria.		х					
21		Data Architecture						Although some updates are non invasive, Oracle
	The system shall provide the ability to perform database							reserves maintenance windows and will use
	maintenance including, but not limited to backup and upgrades							them as needed. We can not guarantee there
	without requiring system downtime.						Χ	will not be a maintenance window.
22	The system shall provide the version control and the ability to roll	Deployment Architecture						This can be accomplished utilizing a 3rd party
	back version changes.			<u> </u>	<u> </u>	Х		tool like PHIRE or STAT
23	The system shall provide tools to synchronize environments	Deployment Architecture						As part of the services the State can refresh
	(migration/change control) across the landscape including, but not							down-level environment from Production on a
	limited to sandbox, development, testing, training, production, and							monthly basis. If more refreshes are required
	disaster recovery (DR).							they can be added utilizing CSUs. DR is a
0.4	The existence shall provide DayOne at the existence time of day larger than	Donlovmont Ausbits street	X	-	_			automated replication using Data Guard.
24	The system shall provide DevOps-style automation of deployments to all environments.	Deployment Architecture	Х					The implementation will be built out per the State's direction.
25	The system shall provide the ability to apply security patches independently from functional upgrades and patches.	Deployment Architecture	X					
26	The system shall be based on Software as a Service (SaaS) or	Infrastructure	X	1				Oracle is proposing PeopleSoft fully
	Offeror-Hosted architecture.							managed on IaaS/PaaS Oracle Cloud.

APPENDIX C 4 Technical Architecture - 5 RFP-ERP-2020

Techn	ical Architecture				e Res Requi			Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	N	
27	The system shall provide the ability to integrate with current and future applications from both State and external parties	Integration Architecture			Х			This can be built utilizing Integration Broker for web service integrations for via Application Engine process for SFTP flat file integrations.
28	The system shall provide the ability to exchange information and support services with external SaaS solutions.	Integration Architecture			Х			This can be built utilizing Integration Broker for web service integrations for via Application Engine process for SFTP flat file integrations.
29	The system shall provide the ability to set up appropriate approval, audit trail, and reconciliation procedures for all inbound and outbound interfaces.	Integration Architecture			Х			Approval Workflow Engine can be utilized for approvals and audit and then incorporated into the interface process.
30	The system shall provide the ability to integrate workflow capabilities with the State-specified system inbound and outbound interfaces.	Integration Architecture			Х			Approval Workflow Engine can be utilized for approvals and audit and then incorporated into the interface process.
31	The system must have single sign-on capability with the ability to integrate with various Directory Services, such as Active Directory, from all the Branches (Executive, Education, Judicial, Legislative, University of Hawaii). Must have the ability to support two-factor authentication with biometric, phone, simple messaging service (SMS), and smart card support required.	Integration Architecture	X					The system has the capability assuming the Identify Management system can Federate with all the deployed directory services.
32	The system shall provide the ability to encrypt sensitive data by column.	Security			Х			Use PeopleSoft Encryption Technology framework
33	The system shall provide the ability to encrypt sensitive data by row.	Security			Х			Use PeopleSoft Encryption Technology framework
34	The system shall provide the ability to encrypt sensitive data by field.	Security			Х			Use PeopleSoft Encryption Technology framework
35	The system shall provide the ability to define user security and authentication including, but not limited to controlling access by multiple levels (e.g. field, organization group, user roles, and chart of account attribute) and immediate suspension of user access.	Security	X					
36	The system shall provide the ability to produce an audit trail for all system transactions (e.g. add, change, delete) including, but not limited to source, content, user-ID, date and time stamp.	Security			Х			PeopleSoft delivers an audit framework that can be configured by table via PeopleTools.
37	The system shall provide timely security patches.	Security	Х					Oracle will provide patching as they are identified based on the Periodic Maintenance Plan.
38	The system shall provide role and permission list bases security model that support both row level and page level access	Security	Х					Utilize delivered PeopleSoft Roles and Permission List functionality.
39	The system shall provide configuration and support tools for configuration management	System Administration Toolkit				Х		This can be accomplished utilizing a 3rd party tool like PHIRE or STAT

APPENDIX C 4 Technical Architecture - 6 RFP-ERP-2020

Techni	cal Architecture					ponse reme			Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
40	The system shall provide configuration and support tools for Application development	System Administration Toolkit	Х						The application development tool for PeopleSoft is PeopleTools and much of the configuration can be supported via online web application.
41	The system shall provide configuration and support tools for stress testing	System Administration Toolkit	Х						Oracle can do stress testing if it is a requirement prior to go live. Detailed requirements will be needed prior to pricing.
42	The system shall provide configuration and support tools for regression testing	System Administration Toolkit	Х						Utilize PeopleSoft Test Framework delivered functionality
43	The system shall provide configuration and support tools for performance testing	System Administration Toolkit	Х						Oracle can do stress testing if it is a requirement prior to go live. Detailed requirements will be needed prior to pricing.
44	The system shall provide configuration and support tools for testing management	System Administration Toolkit				Х			This can be done by partnering with a 3rd party solution like TestRail or Zephyr.
45	The system shall provide Data obfuscation tools	System Administration Toolkit	Х						Masking has been included in the solution. State is responsible for identifying tables/rows that require masking.
46	The system shall provide configuration and support tools for automated scheduling	System Administration Toolkit	Х						Utilize PeopleSoft Process Scheduler.
47	The system shall provide utilities and tools to monitor resource utilization	System Administration Toolkit	Х						Utilize Peoplesoft Performance Monitor at application level and Oracle provides separate tools at database level.
48	The system shall provide a web development tool kit	System Administration Toolkit	Х						PeopleSoft App Designer would be used for all web development with Fluid functionality being used for small form factor.
49	The system shall provide toolkit manuals	System Administration Toolkit	Х						Oracle provides PeopleBooks via the web for PeopleSoft applications.
50	The system shall provide configuration and support tools for requirement traceability management	System Administration Toolkit				Х			Jira can be used as 3rd party tool to capture requirements or User Stories in agile methodology and trace back to Features created in the PeopleSoft application.
51	The system shall provide configuration and support tools for report generation scripts	System Administration Toolkit	Х						PeopleSoft provides a wide array of various report generation tools including BI Publisher, Nvision, Query Manager.
52	The system shall provide configuration and support tools for audit and system logging	System Administration Toolkit	Х						Audit and system logging is a function of PeopleSoft App Designer.
53	The system shall provide Extract, Transform, Load (ETL) tools	System Administration Toolkit	Х						PeopleSoft tools to use for ETL are Integration Broker, Application Engine, and PeopleCode.
54	The system shall provide report distribution tools	System Administration Toolkit	Х						Utilize PeopleSoft Report Manager functionality.

Techn	ical Architecture				Resp Requi				Offeror Comments
ID#	Requirements	Topic	Υ	G	_	3	_	N	
55	The system shall provide configuration and support tools for software license tracking	System Administration Toolkit			Х				There is no delivered module for software license tracking however a custom component could be built to perform this functionality.
56	The system shall provide configuration and support tools for Incident and Problem Management System	System Administration Toolkit				X			3rd party application could be used to track this like SalesForce or ServiceNow.
57	The system shall provide a customizable presentation layer (front end)	System Administration Toolkit	Х						Front end customization can be performed through PeopleSoft Branding functionality.
58	The system shall provide a configurable application layer (middle tier)	System Administration Toolkit	Х						
59	The system shall provide an optimized throughput database layer (back tier)	System Administration Toolkit	Х						
60	The system shall provide workflow admiration feature that allow tranactional re-routing as needed	System Administration Toolkit	Х						Utilize PeopleSoft Approval Workflow Engine.
61	The system shall provide an ad-hoc query tool (export capability to excel, csv, and xml)	System Administration Toolkit	X						PeopleSoft Query Manager and Query Viewer allow for export to excel, csv, and xml.
62	The system shall provide an ad-hoc query tool with schedule capability and distribution list feautres	System Administration Toolkit	Х						Ad hoc queries can be created via PeopleSoft Query Manager
63	The system shall provide a configurable delegation framework	System Administration Toolkit	Х						PeopleSoft Approval Workflow Engine has ability to configure an alternate User ID or Reassign Work to a different User ID.
64	The system shall provide an alert/notification framework (emails, worklists, alerts)	System Administration Toolkit	Х						Utilize PeopleSoft Alert Framework functionality.
65	The system shall provide mobile device form factor functionality	System Administration Toolkit	Х						Delivered PeopleSoft Fluid pages provide mobile form factor functionality and can be developed for customized pages if required.
66	The system shall provide inter module connectivity (i.e. AP -> GL)	System Administration Toolkit	Х						In PeopleSoft FSCM these are not separate modules, all integrated applications utilizing same database.
67	The system shall provide inter module connectivity administration	System Administration Toolkit	Х						Utilize PeopleSoft Integration Broker.
68	The system shall provide system performance alerts (i.e. hardware, memory, and throughput bottlenecks)	System Administration Toolkit	Х						Oracle monitoring will identify performance issues.
69	The system shall provide system performance alerts (i.e. hardware, memory, and throughput bottlenecks)	System Administration Toolkit	Х						Oracle monitoring will identify performance issues.
70	The system shall provide batch scheduling (individual processes along with scheduled job sets with email notifications for applicable staff in the event of failure	System Administration Toolkit	Х						PeopleSoft Process Scheduler and Process Monitor can be configured for automatic email notifications based on process status.

APPENDIX C 4 Technical Architecture - 8 RFP-ERP-2020

Solution	on Architecture			F	e Res <sub>l</sub> Requi feror l	reme	nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
1	The system shall be scalable and adaptable to meet future growth and expansion needs.	Scalability	Х						
2	The system shall provide the ability to handle concurrency issues as a result of increased user population.	Scalability	Х						
3	The system shall provide the ability for maintaining a consistent throughput with increased transaction volume and data growth.	Scalability	Х						
4	The system shall provide the ability for balancing the response time needs of mission critical business processes with other applications.	Scalability	X						We have included Business Process monitoring to support response time needs.
5	The system shall provide the ability for a cost-effective plan for implementing "Scale-up" systems in the event of unexpected growth.	Scalability	Х						
6	The system shall provide the ability to optimizing database indexing techniques.	Scalability	Х						The managed services continually reviews data base performance and recommends change which could include indexing to maintain acceptable response times.
7	The system shall provide highly configurable screens including, but not limited to repositioning fields, renaming fields, removing or inactivating unused fields, and allowing the addition of custom-defined fields.	System Flexibility	X						Latest version of PeopleSoft allows for page and field configuration via the delivered functionality of Page Configurator and Drop Zones.
8	The system shall provide the ability to accommodate long data fields (e.g. Hawaiian language names, hyphenated names).	System Flexibility	X						PeopleSoft does allow for hyphenated names to be stored in the database and as delivered First Name, Middle Name, and Last Name fields are 30 characters each but could be expanded if needed.
9	The system shall provide the ability to define business rules based on user-defined criteria (e.g. organizational level, account code, bargaining unit, location, program, grant).	System Flexibility			Х				PeopleSoft FSCM has some configurable business rules, however depending on what business rules are required, some may need to be customized.
10	The system shall provide the ability to create and/or modify user-defined business rules to validate data at the at the time of entry.	System Flexibility			Х				PeopleSoft FSCM has some configurable business rules, however depending on what business rules are required, some may need to be customized.
11	The system shall provide the ability to maintain the integrity of the data during implementation of changes.	System Flexibility	Х						All changes that are implemented to production have a detailed back out plan which includes data integrity.

Solutio	on Architecture			One Response per Requirement (Offeror Use Only)			nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
12	The system shall provide access to system functionality through, at least, the top three (3) web browsers.	System Flexibility	Х						Internet Explorer, Firefox, Chrome
13	The system shall provide access via HTML5 mobile application.	System Flexibility	Х						Yes, with PT 8.56 or greater.
14	The system shall provide the ability for online access by any site connected to the organization WAN.	System Flexibility	Х						True with FastConnect connection and the appropriate routing tables on the customer side.
15	The system shall provide the ability for remote, secure access by organization staff (i.e. web based VPN access) to all modules.	System Flexibility	Х						with FastConnect the customer users connect with a State VPN and the State would route the connections to the FastConnect supporting this application.
16	The system shall comply with all applicable State mandated security protocols and standards.	Security & Authentication	X						the State determines the security of the application and the services provided through Oracle Cloud Infrastructure and Managed Services.
17	The system shall provide adequate security and protection of data covered by regulatory or other compliance requirements (e.g. HSR Chapter 487J, Payment Card Industry Data Security Standard (PCI DSS).	Security & Authentication		Х					PCI DSS is not included currently. There was no requirement for storing credit card number. This can be included at additional cost.
18	The system shall provide the ability to use a single user sign-on for all modules with security configured for each module (i.e. user to gain access to the database associated with the application without re-entering the user ID and password). The single sign-on capability shall be compatible with the user's operating system sign-on.	Security & Authentication	X						If it is active directory, Single Sign On can be enabled with IDCS Federation.
19	The system shall support strong security for staff with administrative control (i.e. require the use of two-factor authentication for the remote users and users with administrative control of servers, routers, switches and firewalls).	Security & Authentication	X						State supports their VPN security and end remote users.
20	The system shall provide the ability to link the user logon ID to the employee or contractor Information including, but not limited to identification number, assigned locations, etc.	Security & Authentication	Х						Use of PeopleSoft EMPLID with associated User Profile.
21	The system shall provide the ability to integrate with external identity management solutions.	Security & Authentication	Х						IDCS can integrate with external solutions via federation.

Solutio	on Architecture		One Response per Requirement (Offeror Use Only)				nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
22	The system shall provide the ability to support 128-bit SSL or FIPS encryption, or higher, between the client browser and all application modules.	Security & Authentication	Х						This will be part of the implementation.
23	Provide encryption capability for certain data transmissions that require security protection.	Security & Authentication	Х						We will be implementing secure FTP for file transmissions.
24	The system shall provide secure remote access to the system (i.e. outside the State firewall) using a web browser or other Internet technology.	Security & Authentication	X						Any protected assets that are not available to the public domain will only be available via VPN. Any URLs that the State chooses to expose to the public internet will be secured with the user authentication method of their choice which could included IDCS.
25	The system shall support IPsec and/or Secure Sockets Layer with Extended Validation certificates and two-factor authentication for connecting to a service .	Security & Authentication	Х						This will be part of the implementation. IDCS can do MFA if the State chooses to purchase it.
26	The system shall provide redundancy and load balancing for firewalls, intrusion prevention, and other critical security elements.	Security & Authentication	Х						
27	The system shall provide protection against denial-of-service attacks against its Internet presence.	Security & Authentication	Х						
28	The system shall provide the ability to display, at logon, the last date and time the user accessed the system.	Security & Authentication	Х						Use delivered PeopleSoft application access logs.
29	The system shall provide date-sensitive security permissions (e.g. for time entry).	Security & Authentication	Х						Dynamic Role Queries can be created to add or remove role access as needed based on
30	The system shall allow an administrator to inactivate user access upon termination.	Security & Authentication	Х						Delivered PeopleSoft security administrator functionality.
31	The system shall provide the ability to suspend user access based on a table-driven parameter (i.e. employment status).	Security & Authentication	X						Using PeopleSoft Dynamic Role Query, all roles can be removed from a user based on table driven criteria thereby suspending access to the system.
32	The system shall provide integration between various modules (e.g. Human Resources, Security, Finance) to support the update of employee access and security profiles.	Security & Authentication	Х						Delivered PeopleSoft HCM to FSCM integration.
33	The system shall provide the ability to store all passwords encrypted without capability to unencrypt the passwords.	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.

Solutio	on Architecture		One Response per Requirement (Offeror Use Only)				nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
34	The system shall provide the ability to support using tokens and/or passwords for user logons.	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
35	The system shall provide the ability to support biometrics and biometrics plus password (e.g. fingerprint scan, fingerprint scan plus password) security.	Security & Authentication	Х						This is based on your identify management system.
36	The system shall provide the ability to require users to periodically change their password based on table-driven time parameters.	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
37	The system shall provide the ability to suspend user-access after a user-defined period (e.g. 90 days) of inactivity.	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
38	The system shall provide the ability to configure passwords with a minimum password length (e.g. eight characters).	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
39	The system shall provide the ability to configure passwords to require passwords to contain numbers, alphanumeric characters, or both based on user-defined criteria.	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
40	The system shall provide the ability to configure passwords to prevent trivial passwords (e.g. repeat characters, keyboard strings).	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
41	The system shall provide the ability to configure passwords to prevent re-use of passwords	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
42	The system shall provide the ability to configure passwords to require non-dictionary-based passwords	Security & Authentication			Х				Customization would need to be added to require non-dictionary-based passwords.
43	The system shall provide the ability to record the date and time the password was changed.	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.
44	The system shall provide the ability for an administrator to reset passwords for subsequent change by the user.	Security & Authentication	Х						Delivered PeopleSoft security administrator functionality.
45	The system shall provide self-service capability for users to reset passwords based on previously defined user security questions.	Security & Authentication	Х						Delivered PeopleSoft Security configuration.
46	The system shall provide the ability for an administrator to add and/or modify user security information using online screens with immediate profile update.	Security & Authentication	Х						Delivered PeopleSoft User Profile capability.
47	The system shall provide the ability to deny user access after a State- defined number of unsuccessful attempts to logon.	Security & Authentication	Х						Delivered PeopleSoft Security> Password Controls configuration.

Solutio	on Architecture			One Response per Requirement (Offeror Use Only)			nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
48	The system shall provide the ability to record, capture and transmit information, based on user-defined criteria, each authorized and/or unauthorized access attempt including, but not limited to user identification, workstation, IP address, date, time, transaction type, and type of access (e.g. read, modify).	Security & Authentication	Х						PeopleSoft capture all logon information via the PSACCESSLOG table which can be combined with a scheduled query to transmit the data to specified users or roles.
49	The system shall provide the ability to record and maintain past security profiles (i.e. history of security access for an employee) when changes are made to an employee's security profile.	Security & Authentication	Х						Configured audit records/triggers combined with reports via PeopleSoft Reporting Tools
50	The system shall provide the ability to assign application access rights for the entire suite of applications at a single point of entry.	Security & Authentication	Х						This is based on your groups/roles implementation.
51	The system shall provide the ability to support a decentralized security administration capability including, but not limited to component and organizational level.	Security & Authentication	Х						Delivered PeopleSoft Row Level Security.
52	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the system level	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
53	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the database level	Security & Authentication	Х						Delivered PeopleSoft database row security.
54	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Module level	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
55	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities)vto the Field level	Security & Authentication	X						Delivered PeopleSoft Page and Field Configurator provide ability to manage access at field level, reports and queries can be written with only select fields if the user is viewing only - for construction of queries the access is managed at table level.
56	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Inquiry level	Security & Authentication	Х						Provide users with only access to specified queries.
57	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Report level	Security & Authentication	X						Delivered PeopleSoft Query Security capability.

Solutio	on Architecture			One Response per Requirement (Offeror Use Only)			nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
58	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Approval level	Security & Authentication	Х						Delivered PeopleSoft Approval Workflow Engine capability.
59	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Transaction level	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
60	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) at the Table level	Security & Authentication	Х						Delivered PeopleSoft database row security.
61	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Individual level	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
62	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Work Unit level	Security & Authentication	Х						Delivered PeopleSoft department row security.
63	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Group level	Security & Authentication	Х						Groups can be defined by roles.
64	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Organization (e.g. department, division) level	Security & Authentication	Х						Delivered PeopleSoft department row security.
65	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the User Role (e.g. supervisor, data entry, review only) across all functional areas.	Security & Authentication	Х						Delivered PeopleSoft Role and Permission List security capability.
66	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the User Site (i.e. location) across all functional areas.	Security & Authentication	X						Delivered PeopleSoft department row security.
67	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Position across all functional areas.	Security & Authentication	X						Delivered PeopleSoft position row security.
68	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Period	Security & Authentication	Х						Delivered PeopleSoft contains Calendars that define open vs closed periods and ability to enter or prevent transactions within those periods.

Solutio	on Architecture			F	e Resp Requir feror l	remei	nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
69	The system shall provide the ability to control access to all activities (e.g. online transactions, batch processing, report writer, query, system utilities) to the Uniform Chart of Account attributes	Security & Authentication	Х						Delivered PeopleSoft Chartfield Security capability.
70	The system shall provide the ability to create and maintain security profiles to control access to Employee Level	Security & Authentication	Х						Delivered PeopleSoft User Profile component capability.
71	The system shall provide the ability to create and maintain security profiles to control access to Module	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
72	The system shall provide the ability to create and maintain security profiles to control access to Field	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
73	The system shall provide the ability to create and maintain security profiles to control access to Transaction Type	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
74	The system shall provide the ability to create and maintain security profiles to control access to Employee Group	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
75	The system shall provide the ability to create and maintain security profiles to control access to Standard Report	Security & Authentication	Х						Delivered PeopleSoft Query Security capability.
76	The system shall provide the ability to create and maintain security profiles to control access to Ad hoc Report	Security & Authentication	Х						Delivered PeopleSoft Query Security capability.
77	The system shall provide the ability to conform to the standard user configuration structures for the organization including, but not limited to user identification, passwords, user names, printer designation and assignments.	Security & Authentication	X						The structures can be accommodated but would require data conversion from legacy systems.
78	The system shall provide the ability to automatically create user identification and passwords, including requiring reset by the user during first logon.	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
79	The system shall provide the ability to automatically log users off the system when there has been no activity for a pre-defined period.	Security & Authentication	Х						Delivered PeopleSoft application security capabilities.
80	The system shall provide the ability to generate summary and detail reports including, but not limited to user access, usage logs, audit logs, failed and/or unauthorized access attempts based on user defined parameters (e.g. audit requirements).	Security & Authentication	X						Some delivered PeopleSoft security reports, however some queries may need to be configured to capture all the necessary usage data being requested.
81	The system shall allow an administrator to generate online inquiry and batch reports to review access profiles assigned to users.	Security & Authentication	Х						Delivered PeopleSoft Query Manager capability.
82	The system shall provide electronic signature capabilities and functionality.	Security & Authentication				Х			Can be accommodated with third party software such as Adobe Sign.

Solutio	on Architecture			F	e Res Requi feror	reme	nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
83	The system shall provide the ability to utilize encryption methods necessary to ensure the secure electronic transfer of information.	Security & Authentication	Х						Delivered PeopleSoft Integration Broker allows use of various security elements for transmissions to or from external systems, i.e. SSL encryption, WS-Security, Node Authentication, etc.
84	Vendor must provide a list of people that have access to the State of Hawaii's data	Security & Authentication	Х						Can be queried based on user role data.
85	Vendor must provide Compliance records and audit trail logs	Security & Authentication	Х						Configured audit report via PeopleSoft Reporting Tools.
86	Vendor must conduct Annual Penetration tests. The results of which must be shared with the State of Hawaii.	Security & Authetication	Х						Pen Tests have been included in the solution.
87	System must be able to restrict user access from specified IP networks	Security & Authentication	X						Blacklisting, IP ranges or networks can be accomplished in OCI for any publicly accessible resources.
88	Vendor must have a Security Operation Center that is responsible for the monitoring, detection, remediation, reporting, triage, and recovery of information and systems, which is staffed on a 7x24 basis	Security	X						
89	Vendor must list all security related organizations that is a member of.	Security	Х						https://www.oracle.com/cloud/sign- in.html?redirect_uri=https%3A%2F%2Fcloud. oracle.com%2Fcloud-compliance
90	The system shall provide the ability to generate an audit record for all records and transactions for User ID	Audit	X						Configured audit records/triggers combined with reports via PeopleSoft Reporting Tools.
91	The system shall provide the ability to generate an audit record for all records and transactions for update date/time stamp	Audit	Х						Configured audit records/triggers combined with reports via PeopleSoft Reporting Tools.
92	The system shall provide the ability to generate an audit record for all records and transactions for old field value and new field value	Audit	Х						Configured audit records/triggers combined with reports via PeopleSoft Reporting Tools.
93	The system shall provide user-defined audit features for all transactions in solution including, but not limited to all historical changes.	Audit	Х						Configured audit records and triggers.
94	The system shall provide the ability to prevent audit records from being deleted or altered, except as part of a system administration archival process.	Audit	Х						This can be done via defined role/permission access to audit records.
95	The system shall provide the ability for audit-tracking reports including, but not limited to user access, usage logs, and key organization data structures.	Audit	Х						Configured audit records/triggers combined with reports via PeopleSoft Reporting Tools.

Solutio	One Response per Requirement (Offeror Use Only)				t Offeror Comments				
ID#	Requirements	Topic	Υ	G	С	3	F	N	
96	The system shall provide the ability to archive and restore audit logs.	Audit	Х						Delivered PeopleSoft Data Archive Manager capability.
97	The system shall provide online access to the current year plus unlimited previous years of all types of data retained in the system, and shall provide archive capabilities thereafter.	Data Storage & Archiving	Х						Delivered PeopleSoft Data Archive Manager capability.
98	The system shall provide online access to data related to multi-year projects from inception to the end of the project including, but not limited to project information, with archive capabilities.	Data Storage & Archiving	X						Use of PeopleSoft database tables with data stored based on State data retention policies combined with PeopleSoft Data Archive Manager.
99	The system shall provide the ability to archive data to external storage media and support partitions, based on user-defined including, but not limited to number of years.	Data Storage & Archiving	Х						Delivered PeopleSoft Data Archive Manager capability.
100	The system shall provide a process to archive documents/data including, but not limited to the ability to adhere to State and federal retention policies.	Data Storage & Archiving	Х						Delivered PeopleSoft Data Archive Manager capability.
101	The system must be capable of associating all content to a predefined retention schedule (e.g. upon insertion into, or creation in the system, a retention must be associated with that content and all of its associated parts (e.g. metadata and digital file)) and must be capable of being updated as needed	Data Storage & Archiving	X						Delivered PeopleSoft Data Archive Manager capability.
102	The system should be capable of managing all content, to include final disposition or destruction of said content, according to its assigned retention schedule (e.g. the system should ensure that content cannot be destroyed prior to the time specified in the retention schedule.)	Data Storage & Archiving	X						Defined by the implementation. Oracle uses safe destruction of all customer media, periodically and at the end of the services.
103	The system should have a mechanism capable of selectively deleting content that has been entered in error with appropriate permission requirements.	Data Storage & Archiving	X						Delivered PeopleSoft component role/permission list capability where user has "Correct History" access for a specific component.
104	System logs should track all changes to the retention schedule assigned to content, destruction of content or transfer of content to the archives. This log should track affected content, date of action, type of action and user authorizing the action.	Data Storage & Archiving	X						Delivered PeopleSoft Data Archiver Manager capability. The State has not provided an Archive tool requirements and this will be determined by the capability of that tool.

Solutio	on Architecture		One Response per Requirement (Offeror Use Only)			nt		Offeror Comments	
ID#	Requirements	Topic	Υ	G	С	3	F	N	
105	The system should be capable of running routine reports that list all content eligible for destruction (i.e. those that have met the required length of time specified in the retention schedule) and then have appropriate functionality to destroy all, or a specified subset of the content that is eligible for destruction.	Data Storage & Archiving	X						Delivered PeopleSoft Data Archiver Manager capability. The State has not provided an Archive tool requirements and this will be determined by the capability of that tool
106	If the system is capable of automatically deleting content that has met its retention, the system must have a 'legal hold' mechanism that will suspend all destruction when required due to court orders or pending litigation.	Data Storage & Archiving	X						Delivered PeopleSoft Data Archiver Manager capability. The State has not provided an Archive tool requirements and this will be determined by the capability of that tool
107	The system should be able to selectively place content into a 'legal hold' based on specific parameters (e.g. retention code, content type, date range and/or user/creator).	Data Storage & Archiving	X						Delivered PeopleSoft Data Archiver Manager capability. The State has not provided an Archive tool requirements and this will be determined by the capability of that tool
108	The system must be capable of exporting all the content, including all the metadata entered by users as well as system generated metadata and any digital objects associated with the content, into non-proprietary file formats (e.g. xml/csv/txt and Tiff/PDF/JPG etc.) and all exported content must be linked either through naming conventions or metadata elements.	Data Storage & Archiving	X						Standard Function of the PeopleSoft application. Metadata console.
109	The system should have a mechanism of extracting that content, and all associated metadata, from the system on a pre-defined time schedule, as well as by ad hoc requests, in order to transfer that content (all metadata and associated digital file objects) to the state's digital archives repository, for content that is of permanent value (as listed on the retention schedule).	Data Storage & Archiving	X						Standard Function of the PeopleSoft application. Metadata console.
110	The system shall provide the ability to track and log system uptime and transaction response times in order to provide information for SLA monitoring.	System Capacity & Performance	X						Managed Services provides this reporting
111	The system shall the meet SLAs during the Deployment and Go-Live Support Phase (see "Appendix F, Service Level Agreement Requirements").	System Capacity & Performance						Х	SLAs are met post go live/stabilization.
112	The system shall provide full recovery and system backup capabilities for all online and batch transactions according to Statespecified timeframes.	Business Continuity and Disaster Recovery	Х						

Solutio	on Architecture		One Response per Requirement (Offeror Use Only)			Requirement Offeror Comments			Offeror Comments
ID#	Requirements	Topic	Y	G	С	3	F	N	
113	The system shall provide the ability to restore transactions from the database transaction log.	Business Continuity and Disaster Recovery			X				PeopleSoft Data Archive Manager provides the ability to restore data to transactional table using defined jobs ran through process scheduler.
114	The system shall provide software redundancy for software crash tolerance (i.e. server and client software shall maintain its integrity in case of power failures and abrupt shutdowns).	Business Continuity and Disaster Recovery	Х						1 HR RPO
115	The system shall provide software redundancy for redundancy in the application server tier	Business Continuity and Disaster Recovery	Х						1 HR RPO
116	The system shall provide software redundancy for redundancy in the database server tier	Business Continuity and Disaster Recovery	Х						1 HR RPO
117	The system shall provide software redundancy for restart and recovery capability after system failure with no loss of data or software components.	Business Continuity and Disaster Recovery	Х						1 HR RPO
118	The system shall provide software redundancy for roll-back capability	Business Continuity and Disaster Recovery	Χ						Transaction Rollbacks can be achieved via log replay.
119	The system shall provide software redundancy for cntegrity checking capability to identify the existence of program and/or system discrepancies and issue an alert to the appropriate systems operations team.	Business Continuity and Disaster Recovery	X						Standard monitoring
120	The system shall provide software redundancy for file protection capability to limit the types of operations (e.g. read, write, delete, data dictionary modification) that can be performed by individual users on given data or program files.	Business Continuity and Disaster Recovery	X						
121	The system shall provide software redundancy forincremental, differential, and full backups and restores of the database, core and customized software, software and database configuration options, user preferences and rights, etc.	Business Continuity and Disaster Recovery	X						

Solutio	lution Technology					ireme	e per ent Only)		Offeror Comments
ID#	Requirements	Topic	Y	G	С	3	F	N	
1	The system shall provide best practice workflow templates.	Workflow Processing	Х						Delivered PeopleSoft Approval Workflow Engine capability.
2	The system shall provide the ability to perform workflow management and approval hierarchies (e.g. approval paths based on item or document to be routed).	Workflow Processing	Х						Delivered PeopleSoft Approval Workflow Engine capability.
3	The system shall provide the ability to automate approval notifications.	Workflow Processing	Х						Delivered PeopleSoft Approval Workflow Engine capability.
4	The system shall provide workflow tools that integrate with e-mail for automated notifications (e.g. MS Exchange; SMTP) and the ability to perform approvals in e-mail.	Workflow Processing				X			PeopleSoft provides ability to send the automated email notifications, however would not provide the ability to approve in-email due to the user needing to log in to the application for authentication used for audit purposes. Third party application would be needed to accept email with digital signatures that could be used as the approval.
5	The system shall provide the ability to designate multiple approvers for a particular workflow step.	Workflow Processing	Х						Delivered PeopleSoft Approval Workflow Engine capability.
6	The system shall provide the ability for a secondary approver to view items requiring approval when the primary approver is unavailable or when the system administrator indicates the primary approver is unavailable.	Workflow Processing	Х						Delivered PeopleSoft Approval Workflow Engine capability.
7	The system shall provide configurable workflow alerts and escalation capabilities.	Workflow Processing	Х						Delivered PeopleSoft Approval Workflow Engine capability.
8	The system shall provide the ability to create custom workflows based on business rules including the enforcement of workflow rules, with task checklists, to ensure processes are completed correctly and within specified timeframes.	Workflow Processing	Х						Delivered PeopleSoft Approval Workflow Engine capability.
9	The system shall provide the ability to incorporate "checklists" into the workflow process based on the transaction type and/or business process (e.g. on-boarding), including status notifications.	Workflow Processing	X						Delivered PeopleSoft Approval Workflow Engine capability combined with Activity Guides, or custom checklists could be created within an approval component.
10	The system shall provide the ability to perform internal real- time message routing to broadcast information to a user- defined group of users.	Workflow Processing	Х						Delivered PeopleSoft Events and Notifications Framework capability.
11	The system shall provide the ability to track documents submitted for approval and review including, but not limited to a time/date stamp and user identification.	Workflow Processing	X						Delivered PeopleSoft Approval Workflow Engine capability allows for document attachments incorporated into the approval workflow.
12	The system shall provide data validation rules to ensure data validity at the time of entry.	Workflow Processing	Х						Delivered PeopleSoft component interface validations and custom validation rules can be added if needed.
13	The system shall provide reports including, but not limited to transaction volume, response time, amount of time a workflow step was in the user's control, and operational reporting.	Workflow Processing	X						Related application metadata (including Approval Workflow Engine tables for workflow timing) can be queried for structured reports.
14	The system shall provide the ability to perform automatic approval when transactions meet defined criteria.	Workflow Processing	Х						Automatic approval can be done via Self- Approval (requestor is also approver) based on defined criteria like transaction amounts.
15	The system shall provide the ability to utilize internal reporting functionality to generate charts and graphs based on report data within the system.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Kibana report visualizer capability.

Soluti	Solution Technology					irem	se per ent Only)		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
16	The system shall provide the ability to utilize internal reporting functionality to generate reports directly to MS Office, Hypertext Markup Language (HTML) or PDF formats, Open Doc, Open XML, including compatibility with prior versions of MS Office.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft BI Publisher capability.
17	The system shall provide the ability to utilize internal reporting functionality for desktop GUI interfaces (e.g. dashboard) that are easy to understand and navigate.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Dashboards capability for less complex data sets or Kibana report visualizer capability for more complex reporting.
18	The system shall provide the ability to utilize internal reporting functionality to drill-down capability to individual data elements	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Dashboards capability for less complex data sets or Kibana report visualizer capability for more complex reporting.
19	The system shall provide the ability to utilize internal reporting functionality to ad hoc and standard query capabilities based on user-defined criteria.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Query Manager.
20	The system shall provide the ability to utilize internal reporting functionality to create and maintain a report distribution mechanism with predefined reports (e.g. monthly reports that are specific by role, organization, and location via portal or Web).	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Report Manager.
21	The system shall provide the ability to utilize internal reporting functionality to view previously generated reports by all users or by specific users.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Report Manager.
22	The system shall provide the ability to utilize internal reporting functionality to schedule reports to run automatically.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Query Scheduler.
23	The system shall provide the ability to utilize internal reporting functionality for reporting by exception.	Reporting, Business Intelligence, & Data Warehouse	Х						Queries can be created based on defined exception criteria.
24	The system shall provide the ability to utilize internal reporting functionality to print preview of all reports before printing and have print screen and selective page(s) print functionality.	Reporting, Business Intelligence, & Data Warehouse	X						Delivered PeopleSoft Query and BI Publisher capability.
25	The system shall provide the ability to utilize internal reporting functionality for Uploading external data for analysis purposes.	Reporting, Business Intelligence, & Data Warehouse	X						Delivered PeopleSoft Excel to CI is a method to be able to upload data directly into tables that can be reported from, or custom process can be created for more complex data sets to upload into the system.
26	The system shall provide the ability to utilize internal reporting functionality for downloading report data and information to/from MS Excel.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Query capability.
27	The system shall provide the following types of report writing tools including user-friendly end-user reporting tool (i.e. does not require technical expertise) to generate reports from the transactional database.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Query Manager.
28	The system shall provide the following types of report writing tools including graphical report-writer tool	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Kibana report visualizer capability.

Solutio	ution Technology					ponse reme Use C	nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
29	The system shall provide the following types of report writing tools including capability to report from multiple databases.	Reporting, Business Intelligence, & Data Warehouse			Х				Use of database links into database views to combine the data for reporting. Depending on the type of reporting needed this could also be satisfied via a Datawarehouse with BI tool.
30	The system shall provide the ability to utilize third-party reporting tools.	Reporting, Business Intelligence, & Data Warehouse				Х			Oracle Analytics Cloud is recommended, however the implementation team also has experience implementing Qlik as a third party tool.
31	The system shall provide the ability to perform forecasting and trend analysis functions.	Reporting, Business Intelligence, & Data Warehouse				Х			For budget forecasting and trend analysis Oracle Analytics Cloud partnered with Oracle Autonomous Data Warehouse would be implemented.
32	The system shall provide the ability to compare forecast vs. actual data.	Reporting, Business Intelligence, & Data Warehouse				Х			For budget forecasting and trend analysis Oracle Analytics Cloud partnered with Oracle Autonomous Data Warehouse would be implemented.
33	The system shall provide the ability to use the same security profile as the transactional environment when accessing the report environment.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Query Security capability.
34	The system shall provide the ability to schedule batch functions.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Process Scheduler capability.
35	The system shall provide the ability for reports generated from batch processes/scheduled report_jobs to automatically be e-mailed to designated recipients.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Process Scheduler capability.
36	The system shall provide the ability to print to any printer on the State's network or from locally connected printers.	Reporting, Business Intelligence, & Data Warehouse	X						As a web based application, as long as the printer is accessible on the State network then any report generated from PeopleSoft can be printed to the defined printer.
37	The system shall provide an ad hoc reporting tool with the ability to access any standard delivered or user-defined fields/tables in the database.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Query Manager capability.
38	The system shall provide the ability to access data through industry standard tools (e.g. Excel, Crystal, Cognos).	Reporting, Business Intelligence, & Data Warehouse	X						PeopleSoft as delivered can generate output to Excel but database links can be set up directly with third party tools as well like Crystal and Cognos.
39	The system shall provide the ability to automate the extraction and loading of data to BI/DW and external databases.	Reporting, Business Intelligence, & Data Warehouse	X						Delivered PeopleSoft Integration Broker can message data to BI/DW and external databases.
40	The system shall provide the ability to integrate data contained within the system with forms.	Reporting, Business Intelligence, & Data Warehouse	Х						Delivered PeopleSoft Forms capability.
41	The system shall provide the ability to support the presentation of State financial information to the public via a secure portal including, but not limited to a searchable database, reporting, integrated with security.	Reporting, Business Intelligence, & Data Warehouse	X						Delivered PeopleSoft default user (guest account) capability with limited access to specified queries or reports, or via third party solution.
42	The system shall provide the ability to capture system- generated documents and store them in virtual folders.	Content/Document Management & Imaging	X						Delivered Docusign CLM capability.
43	The system shall provide the ability to store electronic forms.	Content/Document Management & Imaging	X						Delivered Docusign CLM capability.

Solution	lution Technology								Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
44	The system shall provide the ability to scan and store imaged documents and electronic files (e.g. photographs, other binary or American Standard Code for Information Interchange (ASCII) files) in virtual folders associated with any object in the system (e.g. property, person, complaint) in standard image formats (e.g. pdf, jpg, tif), including the ability to preserve the readable format of the documents when application versions of image viewers are upgraded.	Content/Document Management & Imaging				X			Documents can be scanned as pdf, jpg, or tif using desktop scanners or multi-functional devices/printers. Docusign CLM will store these files in virtual folders and does provide document viewer that does not alter original format.
45	The system shall provide content and document management functionality including Enabling indexing and searching of documents by a variety of user-defined	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
46	The system shall provide content and document management functionality with the ability to tag document (i.e. call EPS)	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
47	The system shall provide content and document management functionality to support for full text search	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
48	The system shall provide content and document management funptionality to provide built-in viewers/converters for a wide variety of file types.	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
49	The system shall provide content and document management functionality to provide check in/check out functionality for electronic documents.	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
50	The system shall provide content and document management functionality to provide notification features for files that are checked out (e.g. overdue, availability).	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
51	The system shall provide content and document management functionality to ensure version control of documents as they are changed or modified.	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
52	The system shall provide content and document management functionality to allow rollback to a previous version of a document.	Content/Document Management & Imaging				Х			Delivered Docusign CLM capability.
53	The system shall provide content and document management functionality to enable collaborative document creation and/or markup.	Content/Document Management & Imaging				Х			Docusign CLM not only allows you see previous versions of a document, it also supports comparison between versions.
54	The system shall provide content and document management functionality to enable attachment of documents to e-mails and e-mail distribution lists.	Content/Document Management & Imaging				X			Delivered Docusign CLM capability.
55	The system shall provide content and document management functionality to store location identification of paper documents (i.e. attributes shall minimally include folder, box, and physical location).	Content/Document Management & Imaging				X			Delivered Docusign CLM capability via customer defined metadata fields.
56	The system shall provide the ability to associate digital signatures and approvals with documents (e.g. employee acknowledgements). The system must be able to integrate with Adobe Echosign if e-signature is used.	Content/Document Management & Imaging			Х				Delivered Docusign Electronic Signature capability.
57	The system shall provide the ability to adhere to State and federal retention requirements in the content/ document management purge schedules including the ability to set automated deletions and to restrict deletions based on case-specific legal requirements (e.g. legal holds, e-discovery).	Content/Document Management & Imaging				Х			Docusign CLM has the capability to enforce any data retention policy that a customer may require. Users can create smart rules to autodelete a document after a certain period of time, as defined by purge schedule against specific metadata fields. By default,

Solution	on Technology			ı	Requi	ponse remer Use O	nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
58	The system shall provide attachment and document storage in Adobe PDF/A format and password protect any documents with PII, HIPPA, or other regulatory requirements.	Content/Document Management & Imaging				x			Docusign CLM can store and share all file types, including PDF/A. However, CLM does not support password protected documents automatically. Documents can be password protected outside of CLM and imported as attachment. Users reading the password protected document will need to download the file and provide password to open the file locally.
59	The system shall provide end-user interfaces capabilities with consistent look and feel, which conforms to industry standards, across all modules.	End-User Interface	Х						Delivered PeopleSoft Branding capability.
60	The system shall provide end-user interfaces capabilities customize views throughout all modules at the field and record level.	End-User Interface	Х						Delivered PeopleSoft Grid functionality.
61	The system shall provide end-user interfaces capabilities to enable the user to complete each step in the workflow process within a given screen (i.e. the end-user will not be required to navigate to multiple screens to complete a task(s) in the workflow).	End-User Interface	Х						Delivered PeopleSoft Activity Guide capability.
62	The system shall provide end-user interfaces capabilities with a method to "drill down" to related data as needed by job function.	End-User Interface	Х						Delivered PeopleSoft Related Content capability.
63	The system shall provide alternatives for the end-user to interact with the system including command-driven	End-User Interface			Х				As delivered, PeopleSoft does not have command-driven end-user interface, if this refers to operating system level commands. If this is required it would need to be customized.
64	The system shall provide alternatives for the end-user to interact with the system including menu-driven	End-User Interface	Х						Delivered PeopleSoft WorkCenter capability.
65	The system shall provide alternatives for the end-user to interact with the system including drop-down lists for selection of valid responses	End-User Interface	Х						Drop Down lists can be set up as needed for user interface options.
66	The system shall provide alternatives for the end-user to interact with the system including icon-based	End-User Interface	Х						Delivered PeopleSoft Fluid capability.
67	The system shall provide alternatives for the end-user to interact with the system including Touch Screen	End-User Interface	Х						Delivered PeopleSoft Fluid capability.
68	The system shall provide online, interactive help with support for hyperlink technology and other industry standard formats (e.g. HTML file formats).	End-User Interface	Х						Delivered PeopleSoft PeopleBooks capability.
69	The system shall provide the ability to present data to endusers minimizing the navigational effort required (e.g. customizable views) including, but not limited to the ability to accommodate both the casual and power users requiring different views.	End-User Interface	Х						Delivered PeopleSoft WorkCenter capability.
70	The system shall provide readily available data elements in order to complete a transaction or job function (i.e. whether to inquire/read only or data entry).	End-User Interface	Х						Delivered PeopleSoft Related Content capability or other options depending on the specific data need for the transaction.
71	The system shall provide the integration of information from multiple components (e.g. business area, work type) into a unified end-user display.	End-User Interface	Х						Delivered PeopleSoft WorkCenter capability.

Solutio	lution Technology					ponse reme Use C	nt		Offeror Comments
ID#	Requirements	Topic	Υ	G	С	3	F	N	
72	The system shall provide "out of the box" functionality which allows end-users entry and/or inquiry access (e.g. timesheet entry, transaction status) from mobile devices/PDAs.	End-User Interface	Х						Delivered PeopleSoft Fluid capability.
73	The system shall support multiple languages for specific transactions including, but not limited to time entry and public portal.	End-User Interface	Х						Delivered PeopleSoft Language Support capability.
74	The system shall meet Web Accessibility standards including, but not limited to the ability to support ADA compliance and Limited English Proficiency for the public portal. E.G. Section 508	End-User Interface	Х						PeopleSoft does support Section 508 compliance with some documented exceptions.
75	The system shall provide customizable online documentation and training materials such as context-sensitive help (e.g. mouse over help, search capability) including, but not limited to organization-specific business process documentation and process maps.	Data Entry Support & On- Line Help			Х				PeopleSoft has the ability to configure mouse over help for fields as needed and context sensitive help via PeopleBooks which can be customized as needed.
76	The system shall provide field level edit checks for transactions during data entry and provide immediate user feedback including, but not limited to error messages, potential possible corrective actions, warnings, data validation from external sources (e.g. GIS data for address validation, USPS for zip code validation).	Data Entry Support & On- Line Help				Х			PeopleSoft provides a certain amount of field level edit checks, however for address validation and USPS zip code validation there would need to be an integration with a third party that manages up to date lists of that data.
77	The system shall provide online help that displays data field definitions for all user-entered data fields.	Data Entry Support & On- Line Help	X						PeopleSoft has the ability to configure mouse over definitions for fields.
78	The system shall provide the ability to design a preferred sequence to make data-entry columns and fields match the order of information in organization source documents.	Data Entry Support & On- Line Help	X						Delivered PeopleSoft Grid capability.
79	The system shall provide the ability to support administrator-defined input validation for all user input (e.g. validating account distributions against the Uniform Chart of Accounts).	Data Entry Support & On- Line Help	X						As delivered, PeopleSoft does have input validation against defined valid value lists, but if more complicated business rule validation then it would need to be customized for the field.
80	The system shall provide the ability to support the addition of memo notes by users on any file or screen (e.g. through "text boxes") and attach documents.	Data Entry Support & On- Line Help	Х						Some delivered PeopleSoft FSCM modules have built in Note page capability, but any page can have Notepad functionality added.
81	The system shall provide the ability to describe the nature of data entry errors and potential solutions.	Data Entry Support & On- Line Help	Х						Delivered PeopleSoft Message Catalog capability.
82	The system shall provide the ability to allow data entry fields to default to the last entry.	Data Entry Support & On- Line Help	Х						Last Entry defaults are delivered for effective dated records.
83	The system shall provide the ability to auto-fill an entry based on the transaction and/or field entry.	Data Entry Support & On- Line Help			Х				Depending on the field requirements, may require customization.
84	The system shall provide the ability to restrict free form entry (e.g. require use of drop-down calendar for date field).	Data Entry Support & On- Line Help	Х						This is standard for delivered PeopleSoft wherever possible.
85	The system shall provide the ability to accept mass data entry from an external source, including the ability to load through automated interface.	Data Entry Support & On- Line Help	X						PeopleSoft Integration Broker capability.
86	The system shall provide the ability to perform intelligent spell checking of text fields.	Data Entry Support & On- Line Help	Х						PeopleSoft Application Designer Spell Check Feature.
87	The system shall provide online interactive help (e.g. system, website) including, but not limited to support for hyperlink technology and industry standard formats.	Data Entry Support & On- Line Help	X						Delivered PeopleBooks is the online interactive help for PeopleSoft, however if more robust help was required it would need to be customized.

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ID#	Requirements	Topic	Υ	G	С	3	F	N	
88	The system shall provide the ability for end-users to receive clear and non-technical error messages with the exact status of the transaction.	Data Entry Support & On- Line Help	X						PeopleSoft Message Catalog entries can be configured or updated with appropriate user directed messages.
89	The system shall provide the ability for end-users to receive clear and non-technical error messages with options for online help.	Data Entry Support & On- Line Help	X						PeopleSoft Message Catalog entries can be configured or updated with appropriate user directed messages.
90	The system shall provide the ability for end-users to receive clear and non-technical error messages with options for additional help including phone, fax number, and a preformatted e-mail problem report.	Data Entry Support & On- Line Help	X						PeopleSoft Message Catalog entries can be configured or updated with appropriate user directed messages.



# **Appendix D – Implementation Services Requirements**RFP-ERP-2020

## **Table of Contents**

1.0	Over	view of Document	3
		ementation Services	
	2.1	Project Planning	4
	2.2	Initial Analysis and Design	9
	2.3	Final Analysis and Design	14
	2.4	Configuration and Development	18
	2.5	Testing and Training	23
	2.6	Deployment and Go-Live Support	30
	2.7	Warranty Services	34
3.0	Minir	num List of Deliverables	35
•••			
List	of Ta		
Table	1.	Project Planning Roles and Responsibilities	4
Table	2.	Initial Analysis and Design Roles and Responsibilities	10
Table	3.	Final Analysis and Design Roles and Responsibilities	14
Table	4.	Configuration and Development Roles and Responsibilities	18
Table	5.	Testing and Training Roles and Responsibilities	23
Table	6.	Deployment and Go-Live Support Roles and Responsibilities	30
Table	7.	Warranty Roles and Responsibilities	34
Table	8.	Proposed Implementation Services Deliverables	35

#### 1.0 Overview of Document

This document clarifies the roles and responsibilities of the State of Hawaii (State) and the prime EFS System Integrator (Offeror) across the life-cycle of the multi-phase project, which consists of the following work activities:

- Implementation Services
   Project Planning
   Initial Analysis and Design
   Final Analysis and Design
   Configuration and Development
   Testing and Training
   Deployment and Go-Live Support
   Warranty
- Minimum List of Deliverables

### 2.0 Implementation Services

The purpose of the Implementation Services section is to describe the tasks and Deliverables expected to occur during this Phase of the Project and to define the expected roles and responsibilities of the State and the Offeror.

As noted in the RFP, each subsection below outlines the high-level roles and responsibilities of both the State and the Offeror overall and for each Deliverable. The State requires the Offeror to assume full management responsibility for the required Offeror and subcontractor Project personnel and associated Deliverables related to this Project.

## 2.1 Project Planning

Offerors shall respond "Yes" or "No" to each requirement in the table below. A "No" response without providing a comment may cause the Offer to be rejected.

Table 1. Project Planning Roles and Responsibilities

#	Project Planning Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.1.1	Provide a Project Manager (PM) to represent the Offeror in the management of the Project, interfacing with the State Project Manager (PM) in any decisions relating to the Project.	Х		Yes	PM will be in Hawaii and available onsite as needed.
2.1.2.	Assume and lead all day-to-day management of all Offeror personnel, including subcontractor personnel, and associated Deliverables related to the required services.	X		Yes	Day-to-day management of contract personnel will be handled by the PM along with management of associated Deliverables related to required services.
2.1.3	Provide a Project Manager to represent the State organization in this Project, interfacing with the Offeror's PM, and representing the State in any decisions relating to the Project.		Х	Yes	
2.1.4	Establish a program management office (PMO) for the Project by integrating with the State's current PMO.			Yes	A PMO will be established that provides governance of the project, creates project metrics for monitoring and reporting progress, and process to ensure knowledge transfer of the new system to the State.
2.1.5a	Create a Project Charter, or review and revise an existing Project Charter as necessary.		X		

#	Project Planning Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.1.5b	Provide a Project Schedule (e.g. in MS Project) that includes the following key components:  Tasks and activities required to successfully complete the Project  Schedule/milestone tracking and resource allocation  Critical path identification and dependencies Provide periodic updates (as mutually agreed upon by the State and the Offeror) to the Project Schedule.	X		Yes	A Project Schedule will be created using MS Project with tasks required to successfully complete the project, milestone tracking with resource allocation based on agile development methodology, and critical path with dependencies. Progress updates will be provided as mutually agreed upon by the State Project Manager and Na Ali'i Project Manager.
2.1.6	Establish a formal requirements management process that shall include:  Assumption definition, tracking, and traceability in a requirements traceability matrix (RTM)  Functional and Technical Requirement definition, tracking, traceability and verification	Х		Yes	A requirements management process will be created complete with RTM in one system management tool that traces the requirements to the system Features being developed.

#	Project Planning Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.1.7	Provide, update, and maintain a Project Management Plan (PMP) as mutually agreed upon by the State and the Offeror that includes the following key components:  Project initiation activities  Issue tracking, escalation and resolution  Change request approval, management and tracking  Deliverable/product review and approval and other acceptance criteria  Risk management, identification, quantification of impact, monitoring, and mitigation plans  Quality management  Relationships to other IT or business efforts	X		Yes	A Periodic Maintenance Plan will be created as agreed upon by stakeholders that includes the information listed and will be updated if and when any of the component items change.
	<ul> <li>Status and other reporting activities</li> <li>Status reporting templates (including Deliverable status reports, issues, risks, plan vs. actual status, etc.)</li> </ul>				
2.1.8	Provide and implement risk mitigation measures and contingency plans as high-priority risks are identified and monitored.	Х		Yes	A risk management process will be created that captures all risks and mitigation efforts for continuous tracking, monitoring, and reporting to the State.

#	Project Planning Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.1.9	Provide the initial Project Team Training Plan to document State Project Team "boot camp" training requirements and the approach the Offeror will use to prepare the State Project Team for the Initial Design and Analysis phase (both Functional and Technical Teams) so that the State Project Team can gain an in depth understanding of the EFS application modules scheduled for implementation, introduction to configuration, table structures, technical terminology, etc. as mutually agreed upon by the State and the Offeror.	X		Yes	A Project Team Training Plan will be created and provided to the State Project Team that will include an indepth review of the FSCM modules configured, background table structures, and operation with defined technical terminology.  Training for Project Team members, as well as for functional users and administrators, is available from Oracle University (OU) in its digital Learning Subscriptions. OU's Learning Subscriptions provide a modern platform for learning. Subscribers enjoy 12 months unlimited access to a rich learning ecosystem. Oracle experts update the contents in the subscriptions as products are updated and released. The learning subscriptions include learning paths by role, hands-on practice exercises, a mechanism for asking questions, certification exams, reporting, and more.
2.1.10	Provide a Communication Plan that shall be used to communicate with all Project stakeholders throughout the life of the Project, as mutually agreed upon by the State and the Offeror, including at a minimum the following activities:  Communication with internal and external stakeholders Formal kickoffs of phases Communication of milestones Team-building exercises		X	Yes	

#	Project Planning Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.1.11	Provide Weekly Status Reviews, Issues Logs, and Progress Reports at the sub-team level (e.g. functional teams, technical team, and deployment team).	X		Yes	The PMO will provide Weekly Status Reviews with updated project metrics that include ongoing risks and issues at each sub team level.
2.1.12	Provide Project Status Reports and conduct regularly scheduled status meetings reviewing Project progress, risk mitigation, issue resolution, Deliverable status, and next steps mutually agreed upon by the State and the Offeror.	X		Yes	The PMO will provide Project Status Reports with scheduled status meetings to review Project progress, risks and issues, and status of Deliverables. Along with this can be provided access to metrics dashboards for real time insight into task progress of development scrum teams via Atlassian's Jira system.
2.1.13	Use documentation repository provided by the State to store, organize, track, control and disseminate all information using documentation standards and naming convention.	Х		Yes	The team will use the State's documentation repository to store, organize, track, control and disseminate all related project documentation based on documentation standards provided.
2.1.14	Communicate Project scope change process and procedures to State stakeholders.		X	Yes	
2.1.15	Document impact analysis associated with proposed changes.	Х		Yes	The team will document and communicate to the State PM any impacts associated with Project changes.
2.1.16	Provide training materials for "boot camp" training.	Х		Yes	The team will provide training materials for "boot camp" training.  Student Guides and Activity Guides for Oracle courses can be accessed via the Oracle University Learning Subscriptions.

#	Project Planning Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.1.17	Provide State <b>Project Team Training</b> ("boot camp" training) to the Project Team and key SMEs to support the Initial Analysis and Design phase.	X		Yes	The Team will provide Project Team Training to the State Project Team along with the initial SMEs necessary to conduct Initial Analysis and Design.  Training for Project Team members and other stakeholders is available online from Oracle University (OU) in its digital Learning Subscriptions. OU's Learning Subscriptions provide a modern platform for learning. Subscribers enjoy 12 months unlimited access to a rich learning ecosystem. Oracle experts update the contents in the subscriptions as products are updated and released. The learning subscriptions include learning paths by role, hands-on practice exercises, a mechanism for asking questions, certification exams, reporting, and more.
2.1.18	Provide a Work Breakdown Structure that maps major tasks for all phases of project	Х		Yes	The team will provide a WBS for all major phases of the project.

## 2.2 Initial Analysis and Design

Offerors shall respond "Yes" or "No" to each requirement in the table below. A "No" response without providing a comment may cause the Offer to be rejected.

Table 2. Initial Analysis and Design Roles and Responsibilities

#	Initial Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.2.1	Act as primary point of contact with stakeholders and offices to refine functional and technical requirements, including scheduling State staff for interviews and workshops.		X	Yes	
2.2.2	Develop a detailed plan and schedule to conduct State interviews, group workshops, and surveys to refine, and prioritize detailed functional and technical requirements.	X		Yes	The team will incorporate analysis and design plan into the overall Project Schedule with key events as tasks and a prioritization of functional and technical requirements to focus on.
2.2.3	Conduct and document State interviews, group workshops, and surveys to refine, and prioritize detailed functional and technical requirements.	X		Yes	The team will conduct appropriate stakeholder meetings with identified SMEs for refining and prioritizing detailed functional and technical requirements.
2.2.4	Provide periodic updates to refine, clarify and prioritize the detailed functional and technical requirements including "to-be" process flows, use cases, and business re-engineering opportunities.	X		Yes	As further requirement analysis and refinement is achieved, the team will update the necessary design documentation for business reengineering opportunities.
2.2.5	Coordinate, schedule and communicate with all functional and technical SMEs for planning sessions.		Х	Yes	
2.2.6	Conduct and document functional and technical planning sessions to establish system(s) configuration.	X		Yes	The team will conduct planning sessions for system configuration and document functional and technical designs.
2.2.7	Develop and document operational and technical requirements (technical as well as performance) around the current IT infrastructure (desktop, network, directories, and any dependent systems) to allow the State to perform any mitigations.	Х		Yes	The team will document any operations and technical requirements around current IT infrastructure to allow State to perform any mitigations necessary.

#	Initial Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.2.8	Provide a <b>Technical Architecture Strategy</b> (e.g. including application, database, network, infrastructure, system management, security, administration).	Х		Yes	Oracle will provide a Technical Architecture Strategy based on Oracle Cloud Infrastructure.
2.2.9	Conduct business process analysis and reengineering focused on the adoption of standard, best-practice business processes implicit within the proposed solution.	X		Yes	The team will provide business process re-engineering to incorporate best-practices for the proposed solution.
2.2.10	Analyze, validate and provide recommendations regarding any proposed enhancements to the application based on existing laws, policies, and other government regulations.	X		Yes	The team will provide the analysis and recommendations for enhancements to the delivered application provided the applicable laws, policies, and other government regulations the State determines the system must meet as requirements.
2.2.11	Assess whether the solution is compliant with State's digital records retention policies.	X		Yes	The team can assess compliance with State's digital record retention policies provided the State provides policy documentation. Additional OCI storage fees may apply.
2.2.12	Work with the State's Uniform Chart of Accounts (UCOA) consultant to demonstrate how the proposed UCOA structure will be implemented in the application, including field definitions and usage; and reporting. The design shall use information from the State's preliminary UCOA documents.	Х		Yes	The team will work with the UCOA consultant to determine how best to implement within the application based on information provided from State's preliminary UCOA documentation.
2.2.13	Assess needs and develop the design for a Business Intelligence (BI)/Data Warehouse (DW) solution which addresses the State's reporting requirements.	X		Yes	The team will provide assessment for a BI/DW solution to address the State's reporting requirements.
2.2.14	Provide BI/DW recommendations on an integrated versus federated implementation approach.	X		Yes	The team will provide recommendations on an integrated vs federated BI/DW implementation approach.

#	Initial Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.2.15	Provide the Configured Environment (pre- development and/or sandbox) required to support fit-gap activities.	Х		Yes	The team and Oracle will provide the Configure Environment to support fit-gap activities.
2.2.16	Conduct and document assessments of detailed functional requirements and generate a fit-gap analysis, including affected systems recommendations and alternative design scenarios, etc.	X		Yes	The team will conduct and document a fit-gap analysis based on functional requirements which would include impacted systems recommendations and alternative design scenarios where applicable.
2.2.17	Provide a State-wide <b>EFS Implementation Strategy</b> document which outlines the proposed approach for implementation, including timelines for deployment across all phases; and staffing plan for the Offeror and the State.	X		Yes	The team will provide a State-wide EFS Implementation Strategy which would document implementation and deployment approach across all phases and associated staffing plans.
2.2.18	Provide the Initial System Design Document, including "to-be" business process flows, business process fit-gap analysis, updated and validated RTM (e.g. updated requirements fit-gap), RICEFW, data dictionary, and role-based access control.	Х		Yes	The team will provide the Initial System Design Document with "to-be" business process flows with fit-gap analysis, updated and validated RTM, RICEFW, data dictionary, and role-based access control.
2.2.19	Facilitate interviews, group workshops, etc. to obtain and gain consensus on design.	Х		Yes	The team will facilitate design meetings to obtain and gain consensus.
2.2.20	Define and document the system's security and privacy features, including role-based access controls.	Х		Yes	The team will define and document the system security and privacy features which would include role and permission list based controls.
2.2.21	Provide a Business Process Re-engineering Plan to address the business process and organizational change management activities necessary to successfully implement the system in the State.	Х		Yes	The team will create a Business Process Re-Engineering Plan coordinate business process and organizational change management activities needed for the successful implementation of the system in the State.

#	Initial Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.2.22	Provide and document a Business Process and Organizational Change Management Plan.	X		Yes	The team will provide a Business Process and Organizational Change Management Plan for the system implementation in the State.
2.2.23	Perform and document an Organizational Readiness Assessment to identify opportunities and resistance to changes.	X		Yes	The team will perform and document an Organizational Readiness Assessment to identify opportunities and resistance to changes.
2.2.24	Perform and document a discovery of Time & Attendance data collection requirements throughout the jurisdictions.	X		Yes	The team will provide a discovery of Time & Attendance data collection requirements throughout the State jurisdictions.

# 2.3 Final Analysis and Design

Table 3. Final Analysis and Design Roles and Responsibilities

#	Final Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.3.1	Act as primary point of contact with stakeholders and offices to refine functional and technical requirements, including scheduling State staff for interviews and workshops.		Х	Yes	
2.3.2	Develop a plan and schedule to conduct State interviews, group workshops, and surveys to finalize the detailed functional and technical requirements.	X		Yes	The team will incorporate finalization of detailed functional and technical requirements into the overall Project Schedule with key events as tasks.
2.3.3	Conduct and document State interviews, group workshops, and surveys to finalize the detailed functional and technical requirements.	X		Yes	The team will conduct appropriate stakeholder meetings with identified SMEs for finalizing detailed functional and technical requirements.
2.3.4	Provide final updates to refine, clarify and prioritize the detailed functional and technical requirements including "to-be" process flows, use cases, and business re-engineering opportunities.	X		Yes	As requirement analysis and refinement is finalized, The team will update the necessary design documentation for business re-engineering opportunities.
2.3.5	Coordinate, schedule and communicate with all functional and technical SMEs for planning sessions.		Х	Yes	
2.3.6	Conduct and document final functional and technical planning sessions to establish system(s) configuration.	Х		Yes	The team will conduct final planning sessions for system configuration and document functional and technical designs.

#	Final Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.3.7	Develop and document operational and technical requirements (technical as well as performance) around the current IT infrastructure (desktop, network, directories, and any dependent systems) to allow the State to perform any mitigations	Х		Yes	The team will document any operations and technical requirements around current IT infrastructure to allow State to perform any mitigations necessary.
2.3.8	Conduct business process analysis and reengineering focused on the adoption of standard, best-practice business processes implicit within the proposed solution.	X		Yes	The team will provide business process re-engineering to incorporate best-practices for the proposed solution.
2.3.9	Assess needs and design BI/DW solution which supports the analysis and report requirements defined in functional requirements.	X		Yes	The team will provide assessment for a BI/DW solution to address the State's reporting requirements.
2.3.10	Provide the Configured Environment (pre- development) required to support the final fit-gap activities.	X		Yes	The team will provide the Configure Environment to support final fit-gap activities.
2.3.11	Conduct and document assessments of detailed functional requirements and update the fit-gap analysis, including affected systems recommendations and alternative design scenarios, etc.	Х		Yes	The team will conduct and document a final fit-gap analysis based on functional requirements which would include impacted systems recommendations and alternative design scenarios where applicable.
2.3.12	Conduct and document assessments of detailed technical infrastructure requirements and generate a fit-gap analysis, including network infrastructure, desktops, etc.	Х		Yes	Oracle will provide assessments of detailed technical infrastructure requirements and generate a fit-gap analysis.
2.3.13	Ensure alignment of the system architecture with the State's technical architecture preferences.	Х		Yes	Oracle will ensure alignment of system architecture with State's technical architecture preferences.
2.3.14	Perform and document system security planning and create a formal <b>Security Plan</b> in accordance with State's security requirements and regulations.	X		Yes	The team will provide an assessment of the implemented system and ongoing annual refresh of the assessment with recommendations to meet the State's security requirements and regulations.

#	Final Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.3.15	Provide a Final System Design Document, including "to-be" business process flows, final business process fit-gap analysis and documentation, validated detailed functional and technical requirements, configuration settings, and requirements traceability matrix.	Х		Yes	The team will provide the Final System Design Document with "to-be" business process flows with fit-gap analysis, updated and validated RTM for functional and technical requirements, and configuration settings.
2.3.16	Facilitate interviews, group workshops, etc. to obtain and gain consensus on design.	X		Yes	The team will facilitate design meetings to obtain and gain consensus.
2.3.17	Define and document the system's security features.	X		Yes	The team will define and document the system security and privacy features which would include role and permission list based controls.
2.3.18	Provide and apply appropriate business process and organizational change management templates and guidance while ensuring processes are in place for communication.	Х		Yes	The team will provide business process and organizational change management templates and guidance, including helping State ensure communications processes are in place.
2.3.19	Lead business process and organizational change management activities.		Х	Yes	
2.3.20	Assess effectiveness of business process and organizational change management activities.	X		Yes	The team will perform an assessment of the business process and organizational change management activities.
2.3.21	Provide a <b>System Security Plan</b> detailing the methodology and approach to the implementation of system security throughout the application.	X		Yes	The team will provide a System Security Plan that details the approach and methodology for system security implementation.
2.3.22	Provide recommendations for ongoing business process and organizational change management activities.	Х		Yes	The team will provide recommendations for ongoing business process and organizational change management activity improvements.

#	Final Analysis and Design Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comments
2.3.23	Provide a Communication Plan detailing the approach to communicating to the entire organization the progress for the Project.	Х		Yes	The team will provide a Communication Plan that details the communications approach to the entire organization on the progress of the Project.
2.3.26	Implement business process and organizational change management recommendations.		X	Yes	
2.3.27	Provide a <b>Business Intelligence Plan</b> detailing the approach to meeting the State reporting requirements.	X		Yes	The team will provide a Business Intelligence Plan which will detail the approach on how to meet the State reporting requirements.
2.3.28	Provide and document the System Landscape Architecture, Technical and Business Design Plan which includes hardware specifications (e.g. make, model, CPU, memory), server configuration, system diagrams, database design, SAN storage requirements, high availability design, and Disaster Recovery infrastructure and procedures, as it relates to current State IT Governance policies and standards.	X		Yes	A System Landscape Architecture identifying cloud components utilized, Technical and Business Design Plan which includes all the detailed system infrastructure specifications as outlined as relates to State IT Governance policies and standards will be provided.
2.3.29	Develop procedures for data replication and disaster recovery.	Х		Yes	Oracle will provide our standard procedures for data replication and disaster recovery.
2.3.30	Provide a <b>Data Conversion Strategy</b> , including identification of the methodology and tools for the conversion of State legacy database information.	X		Yes	The team will provide a Data Conversion Strategy which will include methodology and tools to be used for conversion of State legacy database information.
2.3.31	Implement Knowledge Transfer Plan for the State Project Team throughout all Phases as well as to State support personnel in support of developing a Level 1 and Level 2 support team prior to deployment.			Yes	The team will implement a Knowledge Transfer Plan to support Level 1 and Level 2 support teams prior to deployment.

## 2.4 Configuration and Development

Table 4. Configuration and Development Roles and Responsibilities

#	Configuration and Development Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.4.1	Establish and document the Detailed Functional and Technical Specifications, including requirements documents, use cases, and logical, data flow diagrams, architecture documents and physical data models inclusive of forms, reports, interfaces, conversions, enhancements, and workflow (FRICEW).	X		Yes	The team will provide the Detailed Functional and Technical Specifications detailing the FRICEW as applicable.
2.4.2	Perform all necessary technical design, configuration, testing, or scripting, of systems as required to provide and implement the functional and technical requirements.	X		Yes	The team will perform all necessary technical design, configuration, development, testing, or scripting of systems to meet the State's functional and technical requirements.
2.4.3	Perform all necessary technical design, configuration, testing, or scripting, of temporary and permanent interfaces as required to provide and implement the functional and technical requirements.	Х		Yes	The team will perform all necessary design, configuration, development, testing, or scripting of temporary and permanent interfaces to implement the State's functional and technical requirements.
2.4.4	Develop and document custom reports (as required to provide and implement functional and technical requirements).	Х		Yes	The team will document and develop any custom reports
2.4.5	Manage all configuration and interface development efforts using State-approved tools and methodologies adhering to defined standards and guidelines.	Х		Yes	The team will manage all configuration and interface development efforts using State-approved tools and methodologies adhering to provided standards and guidelines.
2.4.6	Provide configuration management tools.	Х		Yes	The team will provide tools for configuration management.

#	Configuration and Development Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.4.7	Provide software development audit trail capabilities (e.g., developer ID, time).	Х		Yes	PeopleSoft App Designer Change Control provides the capability to capture software development audit trails.
2.4.8	Coordinate and communicate with State partners, owners of external systems, and/or third-party service providers regarding interfaces.	X		Yes	The team will coordinate and communicate with State partners, owners of external systems, and/or third-party service providers regarding interfaces.
2.4.9	Work with State partners, owners of external systems, and/or third-party service providers to collect information required to develop and document a detailed interface design and approach according to State standards.	Х		Yes	The team will work with State partners, owners of external systems, and/or third-party service providers to collection information required to develop and document detailed interface design and approach according to provided State standards.
2.4.10	Conduct code reviews to ensure customized software and interfaces comply with coding standards to reduce defects.	X		Yes	The team will conduct code reviews to ensure customized software and interfaces are in compliance with coding standards to minimize defects.
2.4.11	Review and approve results of Offeror code reviews at the State's discretion.		Х	Yes	
2.4.12	Define and document configuration management policies and procedures consistent with industry best practices.	Х		Yes	The team will define and document configuration management policies and procedures consistent with industry best practices.
2.4.13	Perform configuration management activities throughout the Project.	Х		Yes	
2.4.14	Tag and maintain an inventory of hardware and maintain an inventory of software.	Х		Yes	

#	Configuration and Development Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.4.15	Label all hardware to correspond with appropriate diagrams and include description of function.	Х		Yes	The team will provide a BOM identifying all cloud components utilized and the specific services on each of the components.
2.4.16	Ensure software license compliance.	X		Yes	
2.4.17	Schedule releases (e.g. configuration changes).	Х		Yes	
2.4.18	Manage documentation of changes to the underlying environment via use of library management version control and turnover management.			Yes	
2.4.19	Review configuration management results.		X	Yes	
2.4.20	Provide a Role-to-Position Mapping document to map the end-user roles to the positions within the organization.	Х		Yes	
2.4.21	Provide a <b>Data Conversion Plan</b> , including identification of roles and responsibilities for Offeror and State staff, and policies and procedures to ensure controls are in place in accordance with State rules and regulations.	Х		Yes	
2.4.22	Specify Extract, Transform, and Load (ETL) tools for data conversion.	Х		Yes	
2.4.23	Provide ETL tools.	X		Yes	
2.4.24	Install and configure ETL tools (EFS environments).	Х		Yes	
2.4.25	Assist with installation and configuration of ETL tools (legacy environments).	Х		Yes	

#	Configuration and Development Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.4.26	Provide an Integration, Parallel, User Acceptance, Regression, Stress, and Security Test Plans that provides the detailed approach that shall be taken to fully test all components of the system including test control and approval processes, test participants, how testing will interface with the configuration management process, and test documentation expectations for the following test types: unit, integration, end-to-end, interface, user acceptance, data conversion, performance (including stress and volume), availability, disaster recovery (including failover), regression, and security.	X		Yes	
2.4.27	Provide a <b>Business Continuity Plan</b> that describes the approach to perform disaster recovery activities and align with the Service-Level Agreements (SLAs) as mutually agreed upon by the State and the Offeror.	X		Yes	Operational backups and Disaster Recovery services with annual testing is included in the proposed solution.
2.4.29	Provide an End-User Training Plan.	Χ		Yes	
2.4.30	Vendor must provide a-Data governance structure plan.	Х		Yes	

2.4.31	Vendor must detail their plan/procedure for	Х	Yes	Oracle maintains strict restrictions over
	the handling of the disposal of records			the internal or external distribution of
	(electronic, paper) that contain PII data.			any kind of media that contains
				customer protected data in accordance
				with Oracle's Information Protection
				Policy, Oracle Media Sanitization and
				Disposal Policy, Oracle Services
				Privacy Policy, and Oracle Records
				Retention Policy. Oracle Media
				Sanitization and Disposal Policy
				establishes guidelines for secure
				erasure of information from all types of
				electronic media, where current usage
				of the media is finished and a decision has to be made regarding recycling or
				destruction. The policy is intended to
				protect Oracle resources and
				information from security threats
				associated with the retrieval and
				recovery of information on electronic
				media.
				Sensitive information in hard copy
				paper form is required to be disposed
				of in a shredder, or secure disposal
				container. Electronic data is erased or
				disposed of in accordance with
				Oracle's Media Sanitization and
				Disposal Policy.
				Examples of electronic storage media
				include, but are not limited to, the
				following:
				Internal and external hard disks -
				server, laptop, and desktop drives
				Solid state devices - USB memory
				sticks, SD cards, phones,
				Smartphones, tablets, PDAs, compact
				flash
				Magnetic media – backup tapes, video
				or audio tapes

#	Configuration and Development Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
					Optical media – CD or DVD ROMs and +-RW
2.4.32	Vendor must detail their plan/procedure for the handling of external requests for anything related to the State of Hawaii data			Yes	
2.4.33	Vendor must provide their Data Protection, or Data Loss Prevention (DLP) plan	Х		Yes	Please see Oracle's Data Protection Controls here: https://www.oracle.com/corporate/sec urity-practices/corporate/data- protection/technical-controls.html

## 2.5 Testing and Training

Table 5. Testing and Training Roles and Responsibilities

#	Testing and Training Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.5.1	Provide automated testing tools and procedures for testing including integration, UAT, end to end, regression, performance, stress, etc.	X		Yes	
2.5.2	Document/create standards and procedures for the use of the tools that support all testing activities.	X		Yes	
2.5.3	Install, configure, and implement the testing application software, hardware, data, desktops, etc.	Х		Yes	

#	Testing and Training Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.5.4	Create Test Scripts, Test Cases, and Test Data, and perform all appropriate testing (e.g., unit, integration, end-to-end, interface,—data conversion, performance (including stress and volume), regression, and security. Assist with user acceptance testing.	Х		Yes	
2.5.5	Assist with testing (integration and end-to-end). Provide guidance and input to Test Scripts, Test Cases, and Test Data. Perform user acceptance testing.		Х	Yes	
2.5.6	Test the capability of failover to secondary DR site.	Х		Yes	Disaster Recovery services that include an annual test are included in the solution.
2.5.7	Test the capability to move back to primary data center after deployment on secondary DR data center.	X		Yes	Disaster Recovery services that include an annual test are included in the solution.
2.5.8	Provide the Configured Hardware Environments (testing) to test and/or demonstrate the functionality has been satisfied.	X		Yes	
2.5.9	Provide Configured Hardware Environments (testing) Documentation, including specification of hardware, network, storage, utilities, licensees, and other required infrastructure.	X		Yes	Oracle is proposing to host in the Oracle Cloud Infrastructure. Beyond the documentation provided publicly about Oracle Cloud no additional documentation can be provided.
2.5.10	Provide and document test results in a Documented Successful Testing Results deliverable.	Х		Yes	
2.5.11	Validate the system for compliance with the Security Plan.	Х		Yes	The team will review the security plan and determine the requirements for compliance.

#	Testing and Training Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.5.12	Manage the State functional, integration, user acceptance, and regression test environments and associated test data including creation and maintenance during the testing period.	Х		Yes	
2.5.13	Review testing results for compliance with policies, procedures, plans, and test criteria and metrics (e.g. defect rates, progress against schedule).		Х	Yes	
2.5.14	Coordinate the scheduling of user acceptance testing (e.g. gain user involvement, establish and define acceptance criteria, set high-level test objectives, establish high-level test scenarios).		X	Yes	
2.5.15	Facilitate and support user acceptance test as prescribed by the State, including: establishing adequate test environment based on user acceptance criteria; preparing data to support test scenarios within modified system as well as managing the relationship with all interfaced systems necessary to conduct test; troubleshooting; supporting users to progress through scenarios; simulating interfaces or working with integrated systems to conduct end-to-end tests; supporting batch processing; exercising functionality; converting production data, and reporting results.	X		Yes	
2.5.16	Conduct user acceptance testing.		X	Yes	
2.5.17	Use a Defect Tracking System (provided by the Offeror) for purposes of allowing the State to initiate, track, and report all testing defects (e.g. integration, end to end, and user acceptance testing).	X		Yes	

#	Testing and Training Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.5.18	Notify Offeror in the event the State notices a discrepancy between the State's requirements and the requirements document or other Offeror Deliverables.		Х		
2.5.19	Correct defects found as a result of testing efforts.	X		Yes	
2.5.20	Create data conversion extracts from legacy/existing data files in a format specified by the Data Conversion Plan.		Х		
2.5.21	Provide coding of automated data conversion extracts from legacy/existing data files, using techniques that are consistent with the development standards.	X		Yes	Industry standards are followed.
2.5.22	Extract legacy data for purposes of transformation and loading into new application files structures.		Х	Yes	
2.5.23	Transform and load cleansed legacy data.	Х	0	Yes	
2.5.24	Review the data and the data cleansing metrics as delineated in Data Conversion Plan, for data currently residing in State databases.		Х	Yes	
2.5.25	Perform data cleansing (cleansing of data that cannot be cleansed automatically).		Х	Yes	
2.5.26	Coordinate and execute manual data loads if required.	Х		Yes	
2.5.27	Provide converted legacy data for transactional testing during integration, end to end, user acceptance, etc. test events.	Х		Yes	
2.5.28	Perform Data Conversion from existing system(s) to the new system, by electronic or manual methods and track data conversion status and notifications.	Х		Yes	

#	Testing and Training Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.5.29	Provide tool for obfuscation of data (subject to approval by the State).	X		Yes	In addition to standard ETL obfuscation is included and masking services fees have been provided if masking is needed.
2.5.30	Provide tool for automated comparison of payroll and financial accounting calculation results between legacy and new system (subject to approval by the State).	X		Yes	
2.5.31	Provide knowledge transfer materials including dialogue scripts, for Level 1 support for the system.	X		Yes	
2.5.32	Provide <b>Training Curriculum Document</b> , including the course outlines and schedules for end-user training.	Х		Yes	Oracle University's (OU) complete catalog of courses can be found online at education.oracle.com
2.5.33	Provide Enhanced Training Materials.	X		Yes	More information is needed to understand "Enhanced" training however, Oracle University has a significant catalog of courses as provided in the link in 2.5.32.

	Feror Offeror Comment sponse
2.5.34 Provide Final Training Materials, including end-user documentation, standard templates and online training, to support end-user training.  Yes	The Peoplesoft Learning Subscription brings together all the essential training required to understand the complete product suite, from the Tools and the tool set, down to each and every application, including Campus Solutions.  As new PeopleSoft Applications features are released, subscription content is refreshed with new, relevant training content. These real-time updates ensure your expertise evolves right alongside the product.  PeopleTools provides the underlying technology for PeopleSoft applications. All PeopleSoft applications are built, deployed, and maintained using PeopleTools, which comprises over 400 tools, utilities, and technologies.  From your developer to your system administrator to your implementer and business analyst, your team members can benefit from a variety of training topic areas within the comprehensive PeopleSoft Learning Subscription.

#	Testing and Training Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.5.35	Tailor the standard training templates to incorporate State-specific business processes.	Х		Yes	When training is delivered as a Private Event - typically for ten or more students who can attend training at the same time - there is an opportunity to tailor the material by removing content that is not relevant or adding in needed content from existing courses. Oracle University will work with State of Hawaii to determine how best to tailor the training materials to meet learner needs.
2.5.36	Conduct Enhanced Training for the system.	Х		Yes	More information is needed to understand "Enhanced" training however, Oracle University has a significant catalog of courses as provided in the link in 2.5.32.
2.5.37	Participate in Enhanced Training for the system.		Х	Yes	
2.5.38	Conduct End-User Training for the system.	X		Yes	The PeopleSoft Learning Subscription provides curriculum plans for the End User and Implementation Team Member roles.
2.5.39	Support end-user training for the system		X	Yes	
2.5.40	Participate in end-user training for the system.		X	Yes	
2.5.41	Provide the Configured Environments (Training) to support training as defined in End-User Training Plan.	X		Yes	OU's lab environment is used for hands-on exercises performed during OU's PeopleSoft training; customer environments are not used for training delivered by OU.

#	Testing and Training Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.4.42	Provide Configured Environments (Training) Documentation, including specification of hardware, network, storage, utilities, licensees, and other required infrastructure.	X		Yes	The team will provide a BOM or Oracle Cloud Infrastructure resources and what is installed.
2.5.43	Create and maintain the State training data as required by the State.	X		Yes	The team will provide the initial training data and future revisions of documentation will be maintained by the State.
2.5.44	Provide detailed <b>Technical Documentation</b> including the technical and architectural documents, diagrams, and specifications.	Х		Yes	
2.5.45	Survey end-users following End-User Training for End-User training effectiveness reports.		X	Yes	
2.5.47	Provide the End-User Survey and develop End-User Training Effectiveness Reports.	X		Yes	OU's PeopleSoft Learning Subscription includes several certification paths and exams, including certification for PeopleSoft Financial Management.

## 2.6 Deployment and Go-Live Support

Table 6. Deployment and Go-Live Support Roles and Responsibilities

#	Deployment and Go-Live Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.6.1	Provide initial and Final Detailed Deployment Plan.	X		Yes	
2.6.2	Provide the Configured Environments (production and disaster recovery).	Х		Yes	

#	Deployment and Go-Live Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.6.3	Provide Configured Environments (production and disaster recovery) Documentation, including specification of hardware, network, storage, utilities, licensees, and other required infrastructure.	X		Yes	The team will provide a BOM for Oracle Cloud Infrastructure resources and what is installed.
2.6.4	<b>Provide Go/No-go Documentation</b> , including the Production Cutover Plan and the Go-Live Checklist).	X		Yes	
2.6.5	Conduct Go/No-go Meeting.	X		Yes	
2.6.6	Perform deployment and support activities with parties as directed by the State Project Manager.	X		Yes	
2.6.7	Provide <b>System and User Documentation</b> , including functional, technical and architectural specifications, operational documentation (e.g. batch schedule, runtime procedures).	X		Yes	Functional Services, which creates a customer run book including the required documentation, is part of the proposed services.
2.6.8	Provide a <b>Production Support Plan</b> to cover the Post Go-Live Support prior to Warranty, the Warranty Period, and the M&O Support period. The plan should include the proposed organizational structure, roles and responsibilities and estimated level of effort for the Offeror and the State.	X		Yes	Functional Services, which creates a customer run book including the required documentation, is part of the proposed services.
2.6.9	Assist with a Decommissioning and Archiving Plan for legacy data and systems.	X		Yes	
2.6.10	Provide recommended operations and administration procedures related to the deployment.	X		Yes	
2.6.11	Approve production deployment go/no-go decisions.		Х	Yes	
2.6.12	Deploy application into production.	X		Yes	
2.6.13	Track deployment status and notification.	X		Yes	

#	Deployment and Go-Live Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.6.14	Escalate and resolve issues with Offeror post- production support team.	100	Х	Yes	
2.6.15	Provide 12 weeks of post go-live deployment support prior to final acceptance.	X		Yes	
2.6.16	Provide Successful Deployment Documented deliverable.	X	ě	Yes	
2.6.17	Provide the configuration and customization documentation and readable source code and object (executable) code for the system in the configuration management system.	X		Yes	
2.6.18	Perform Phase Closeout including system tuning activities, assessment of knowledge transfer tasks, transfer Project artifacts to Project repository, lessons learned document, update design documents, and transition support to the State as appropriate.	Х		Yes	
2.6.19	Develop help desk scripts (level 1 and 2 help desk).	Х		Yes	
2.6.20	Maintain help desk scripts.	4	Χ	Yes	
2.6.21	Provide Level 1 Help Desk—simple (with coordination of user support activities including "how to" support) and user account and password administration.		Х	Yes	
2.6.22	Provide Level 2 Help Desk	X		Yes	
2.6.23	Provide Level 3 Help Desk for the system- related incidents and problems.	Х		Yes	
2.6.24	Assist the State in the development of support organization.	Х		Yes	
2.6.25	Provide support organization to advise and assist business end-users and staff in the use of systems and State specific policies.		Х	Yes	

#	Deployment and Go-Live Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.6.26	Respond to escalated trouble ticket items in accordance with established procedures.	X		Yes	
2.6.27	Establish priority of trouble ticket items / service requests.	132	Х		
2.6.28	Maintain "end state" system architecture documentation.	X		Yes	
2.6.29	Provide maintenance and repair policies and procedures.	X		Yes	Service management practices follow ITIL 3 standards.
2.6.30	Provide technical and functional support to the State IT staff and other groups as directed by the State.	Х		Yes	
2.6.31	Provide Organizational Change Management Effectiveness Assessment Report.	Х		Yes	
2.6.32	Perform diagnostics on software and services.	Х		Yes	
2.6.33	Provide Final Acceptance Documented deliverable that includes a checklist of all Project closeout activities and validates that support has been provided for the duration of the Minimum Support Period (see below).	X		Yes	

#### **Final Acceptance**

Go-Live and Support will occur for a specified period of time, as detailed in the tables below and prior to Final Acceptance. The purpose is to stabilize the system after each Phase and minimize the impact of any early system issues. The Offeror Go-Live Support team will closely monitor the newly deployed system and user activity; assign appropriate resources to resolve issues; rapidly detect and escalate issues as required; and quickly resolve and communicate resolution. Four levels of priority will be assigned to issues identified during the Go-Live Support period: Critical, High, Medium and Low (see "Appendix F, Service Level Agreement Requirements," Priority Definitions). The Offeror is responsible for application availability and usability, including reports, interfaces and development. Prior to the end of the Go-Live Support period for each implementation Project and wave, the Offeror and the State will jointly assess the status of the implementation and review the status of outstanding issues and adherence to SLAs. The purpose of the assessment will be to provide written verification in the Final Acceptance Documented Deliverable that the EFS System operates as expected after each

Project and wave implementation. Final Acceptance will be granted at the end of the Go-Live Support period and when 100% of the Critical and High issues have been resolved.

### 2.7 Warranty Services

Offerors shall respond "Yes" or "No" to each requirement in the table below. A "No" response without providing a comment may cause the Offer to be rejected.

Table 7. Warranty Roles and Responsibilities

#	Configuration and Development Support Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.7.1	Provide processes and procedures for tracking and reporting the status of all warranty services.			Yes	Oracle offers Service Level Agreements that will be tracked through the life of the services.
2.7.2	Perform system fixes for problems that the Offeror was responsible for providing.	X		Yes	
2.7.3	Perform data fixes for errors that the Offeror was responsible for, including but not limited to improperly converted files or tables.	Х		Yes	
2.7.4	Test the system to ensure that no regression errors are introduced.	Х		Yes	Ongoing regression testing services has been priced.  These tests can encompass manual and automated testing.
2.7.5	Approve all warranty service fixes with formal sign-off.		Х	Yes	
2.7.6	Update all documentation and related files/Deliverables associated with Warranty Services.	Х		Yes	

Warranty Services are the activities associated with repairing defects that are discovered within the Warranty Period of twelve (12) months of a system component or enhancement being accepted by the State in the production environment. Warranty Services include the applicable life cycle support activities necessary to repair errors/defects to enable programs and enhancements to perform in accordance with the documented specifications and documented operational functionality.

The Offeror shall repair the configuration and customized code provided by Offeror during the Warranty Period, at no charge to the State provided that:

- The problem encountered occurs within twelve (12) months of the acceptance of such provided component.
- II. The root cause analysis indicates the problem is in the system not meeting requirements where the Offeror has responsibility (e.g., a problem caused by configured or customized COTS software or hardware component not meeting requirements, a defect in the configuration or code created by the Offeror, a problem with the system not meeting SLAs).

Full correction of the system defect is to be completed by the Offeror unless otherwise approved by the State, and the corrected code shall be appropriately tested to verify that no regression errors are introduced.

The Offeror shall warrant against "version locking" due to customization of the system.

Services include updating all appropriate documentation. The Offeror shall provide monthly reports showing the amount of warranty work (i.e., number of defects and hours to correct).

It is the State's policy to try to resolve all Warranty work controversies by mutual agreement without litigation. In appropriate circumstances, informal discussions between the State and the Offeror can aid in the resolution of differences by mutual agreement and are encouraged. If such informal discussions do not resolve the controversy, individuals who have not participated substantially in the matter in controversy may be brought in to conduct discussions if this is feasible.

#### 3.0 Minimum List of Deliverables

The following Table 8 provides a listing of key proposed Deliverables that must be provided at a minimum. The Deliverables in the list below include the formal Deliverables that are required in the Payment Schedule on Tab 7, Payment Schedule – Implementation Services in "Appendix M, Cost Workbook." However, there may be other work products that are part of the Project artifacts that are required for Project delivery but that are not formally tied to individual payments. Strategy Deliverables are considered Contract-wide Deliverables and should cover the entire State EFS Project while Plans will be delivered multiple times throughout each Project Phase. Strategy Deliverables should be reviewed and updated during the development of Plan Deliverables. Deliverables may be leveraged from one Project Phase to another by reviewing and updating, as applicable.

The Offeror shall add to the list provided below in alignment with its proposed methodology and work plan:

 Table 8.
 Proposed Implementation Services Deliverables

Name of Deliverable	Deliverable Group
Project Schedule	Project Planning

Name of Deliverable	Deliverable Group		
Project Team Training Plan	Project Planning		
Project Team Training	Project Planning		
Communication Strategy	Project Planning		
Configured Environments (sandbox and development)	Project Planning		
Project Charter	Project Planning		
Project Management Plan	Project Planning		
Business Process Organizational Change Management Strategy	Project Planning		
Initial System Design Document	Initial Analysis and Design		
Requirements Traceability Matrix	Initial Analysis and Design		
Technical Architecture Strategy	Initial Analysis and Design		
EFS Implementation Strategy	Initial Analysis and Design		
Business Process Re-engineering Plan	Initial Analysis and Design		
Knowledge Transfer Strategy	Initial Analysis and Design		
Business Process Organizational Change Management Plan	Initial Analysis and Design		
System Landscape, Technical and Business Design Strategy	Initial Analysis and Design		
Organizational Readiness Assessment	Initial Analysis and Design		
End-User Training Strategy	Initial Analysis and Design		
System Security Strategy	Initial Analysis and Design		
Project Status Reports (including deliverable status reports, issues, risks, plan vs. actual status, etc.)	All Phases		
Time & Attendance Data Collection Discovery	Initial Analysis and Design		

Name of Deliverable	Deliverable Group
Data Conversion Strategy	Final Analysis and Design
Final System Design Document	Final Analysis and Design
Knowledge Transfer Plans	Final Analysis and Design
Business Intelligence Plan	Final Analysis and Design
Communication Plan	Final Analysis and Design
Business Continuity Strategy	Final Analysis and Design
Detailed Functional and Technical Specifications, including requirements documents, use cases, and logical, data flow diagrams, architecture documents and physical data models inclusive of forms, reports, interfaces, conversions, enhancements, and workflow (FRICEW)	Configuration and Development
Test Plans: Integration, Parallel, User Acceptance, Regression, Stress, Security, and End-to-End	Configuration and Development
Test Scripts, Test Cases and Test Data	Configuration and Development
Data Conversion Plan	Configuration and Development
Data Governance Structure Plan	Configuration and Development
Organizational Readiness Assessment	Configuration and Development
System Security Plan	Configuration and Development
Data Loss Prevention Plan	Configuration and Development
PII Data Handling Plan	Configuration and Development
External Requests Plan	Configuration and Development
Data Loss Prevention Plan	Configuration and Development
Role to Position Mapping	Configuration and Development
Business Continuity Plan	Configuration and Development

Name of Deliverable	Deliverable Group
End-User Training Plan	Testing and Training
Training Curriculum Document	Testing and Training
Documented Successful Testing Results	Testing and Training
Enhanced Training Materials	Testing and Training
Final Training Materials	Testing and Training
Technical, System, and User Documentation (including technical and architectural specifications, etc.)	Testing and Training
End-User Training	Testing and Training
System and User Documentation	Deployment and Go-Live Support
Production Support Plan	Deployment and Go-Live Support
Go/No-go Meeting and Go/No-go Documentation	Deployment and Go-Live Support
Final Detailed Deployment Plan	Deployment and Go-Live Support
Organizational Change Management Effectiveness Assessment	Deployment and Go-Live Support
Phase Closeout (to include System Tuning, Knowledge Transfer Assessment, Project Artifacts in Repository, Lessons Learned, Update Blueprint, Impact Assessment, and Transition Support to COE and Shared Services, M&O Services Staff	Deployment and Go-Live Support
Successful Deployment Document (Final Migrated Data)	Deployment and Go-Live Support
Support Phase	Deployment and Go-Live Support



Appendix E – Ongoing Services Requirements RFP-ERP-2020

# **Table of Contents**

٥.ا	Overvi	ew of Document	1
2.0	Ongoi	ng Services	1
2.	.1 Hos	ting (For SaaS and Offeror-Hosted Options)	1
	2.1.1	Hosting Services	2
2.	.2 Mai	ntenance and Operations Support	5
	2.2.1	System Operations and Administration	5
	2.2.2	System Monitoring	<u>8</u> 6
	2.2.3	Incident and Problem Management (Level 1 and Level 2)	<u>10</u> 8
	2.2.4	ERP System Problem Management Services (Level 2 and Level 3)	<u>14<del>12</del></u>
	2.2.5	Root Cause Analysis	<u>15</u> 14
	2.2.6	User Account Management	<u>17<del>16</del></u>
	2.2.7	Security Administration	<u>17<del>16</del></u>
	2.2.8	Storage Management	<u>22<del>20</del></u>
	2.2.9	Output Management	<u>26<del>23</del></u>
	2.2.10	Batch – Job Control and Scheduling	<u>29<del>25</del></u>
	2.2.11	EFS Router Remote Access	<u>30</u> 27
	2.2.12	Database Administration	<u>31<del>28</del></u>
	2.2.13	OS, Application and Database Backup and Recovery	<u>35</u> 31
	2.2.14	Change and Release Management	<u>37</u> 33
	2.2.15	Configuration Management	<u>39</u> 36
	2.2.16	Capacity Management	<u>41</u> 37
	2.2.17	Performance Management	<u>43</u> 39
	2.2.18	Disaster Recovery	<u>44</u> 41
	2.2.19	Break Fix Support Services	<u>47</u> 43
	2.2.20	Continuous Improvement Services	<u>47</u> 44
	2.2.21	Minor Enhancements and Ad-Hoc Requests	<u>49</u> 45
	2.2.22	Documentation	<u>50</u> 46
	2.2.23	Service Management and Quality Assurance (QA)	<u>51</u> 47
	2.2.24	Service Level Reporting	<u>53</u> 49
2.	.3 Bus	iness Process Outsourcing (Optional)	<u>54</u> 50
2.	.4 Pro	ject Team Facilities(Optional)	<u>55</u> 50

#### **List of Tables**

Table 1.	Hosting Services - Roles and Responsibilities	2
Table 2.	EFS Operations and Administration – Roles and Responsibilities	5
Table 3.	System Monitoring – Roles and Responsibilities	<u>8</u> 7
Table 4.	Incident and Problem Management (Level 1 and Level 2) - Roles and Responsibilities	<u>10</u> 9
Table 5.	ERP SystemProblem Management (Level 2 and Level 3) – Roles and Responsibilities	<u>14</u> 12
Table 6.	Root Cause Analysis – Roles and Responsibilities	<u>16</u> 15
Table 7.	User Account Management – Roles and Responsibilities	<u>17</u> 46
Table 8.	Security Administration - Roles and Responsibilities	<u>18</u> 17
Table 9.	Storage Management – Roles and Responsibilities	<u>22</u> 21
Table 10.	Output Management – Roles and Responsibilities	<u>26</u> 23
Table 11.	Batch – Job Control and Scheduling – Roles and Responsibilities	<u>29</u> 25
Table 12.	Remote Access Facilities – Roles and Responsibilities	<u>30</u> 27
Table 13.	Database Administration – Roles and Responsibilities	<u>31</u> 28
Table 14.	OS and Application and Database Backup and Recovery – Roles and Responsibilities	<u>35</u> 32
Table 15.	Change Management and Release Management - Roles and Responsibilities	<u>37</u> 33
Table 16.	Configuration Management Roles and Responsibilities	<u>40</u> 36
Table 17.	Capacity Planning – Roles and Responsibilities	<u>41</u> 37
Table 18.	System Performance Tuning and Management – Roles and Responsibilities.	<u>43</u> 39
Table 19.	Disaster Recovery - Roles and Responsibilities	<u>44</u> 41
Table 20.	Break Fix Support Services - Roles and Responsibilities	<u>47</u> 43
Table 21.	Continuous Improvement Services - Roles and Responsibilities	<u>48</u> 44
Table 22.	Minor Enhancements and Ad-Hoc Requests – Roles and Responsibilities	<u>49</u> 45
Table 23.	Documentation – Roles and Responsibilities	<u>50</u> 46
Table 24.	Service Management and Quality Assurance - Roles and Responsibilities	<u>52</u> 47
Table 25.	Service Level Reporting- Roles and Responsibilities	<u>54</u> 49
Table 26.	Business Process Outsourcing - Roles and Responsibilities	<u>54</u> 50
Table 27.	Project Team Facilities - Roles and Responsibilities	<u>55</u> 51

#### 1.0 Overview of Document

This document defines the roles and responsibilities of the State of Hawaii (State) and the Offeror for Ongoing Services:

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□ Host	ting Se	ervices
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- □ Maintenance and Operations (M&O) Services
- Business Process Outsourcing (BPO) Services
- □ Project Team Facilities

### 2.0 Ongoing Services

The purpose of the Ongoing Services section is to describe the tasks and Deliverables the Offeror shall provide to the State throughout the duration of the Contract and to define the expected roles and responsibilities of the State and the Offeror. The following areas are included in the Ongoing Services:

- Hosting Services or SaaS Services, as applicable
- M&O Services
- BPO Services
- Project Team Facilities

As noted in the RFP, each subsection below outlines the high-level roles and responsibilities of both the State and the Offeror. The State would like the Offeror to assume full management responsibility for the required Offeror and subcontractor personnel and associated services.

## 2.1 Hosting (For SaaS and Offeror-Hosted Options)

Hosting Services Requirements are applicable to SaaS and Offeror-Hosted options and include the services and activities required to provide and support centralized sandbox, development, testing, training, production, and disaster recovery (DR) environments for the State's EFS. The hosted environment includes, but is not limited to, datacenter backbone network, servers, disk storage, tape storage, monitoring tools, security tools, and systems software that support centralized EFS business applications and databases. Track server utilization so that increases and decreases in utilization are noted and appropriate remedial actions are taken, if necessary.

#### 2.1.1 Hosting Services

Table 1. Hosting Services - Roles and Responsibilities

#	Hosting Services - Roles and Responsibilities	Offeror	State	Proposed Hosting Option (SaaS, Offeror- Hosted)	Offeror Response (Y/N)	Offeror Comment
2.1.1.1	Provide a primary Tier III (or higher) data center for hosting of the EFS.	Х		Hosted	Yes	Oracle data center
2.1.1.2	Provide a secondary Tier III (or higher) alternate data center for production and DR purposes.	Х		Hosted	Yes	Oracle data center
2.1.1.3	Provide appropriate onsite contact personnel who have authorized access to rooms and racks for equipment for scheduled installation time, in accordance with security procedures.	Х		Hosted	Yes	Oracle data center management
2.1.1.4	Provide and install all necessary power distribution boxes, conduits, grounding, surge, equipment racks, and lightning protection and associated hardware.	Х		Hosted	Yes	Oracle Cloud Infrastructure
2.1.1.5	Provide necessary building alterations to meet wiring and any other site requirements.	Х		Hosted	Yes	Oracle data center management
2.1.1.6	Ensure that the environmental conditions for chosen equipment meet the manufacturer's requirements.	Х		Hosted	Yes	Oracle data center management
2.1.1.7	Provide Infrastructure as a Service (laaS) capabilities including:					

#	Hosting Services - Roles and Responsibilities	Offeror	State	Proposed Hosting Option (SaaS, Offeror- Hosted)	Offeror Response (Y/N)	Offeror Comment
2.1.1.8	<ul> <li>Providing virtualized server environments.</li> </ul>	X			Yes	Oracle Cloud Infrastructure will be provisioned with VMs
2.1.1.9	<ul><li>Provisioning of servers and operating systems.</li></ul>	X		Hosted	Yes	Oracle Cloud Infrastructure will be provisioned with OS as required.
2.1.1.10	■ Provisioning of storage on demand.	X		Hosted	Yes	Oracle Cloud Infrastructure will be provisioned for storage requirements.
2.1.1.11	<ul> <li>Provisioning of server, network and storage with no single point of failure.</li> </ul>	X		Hosted	Yes	Oracle Cloud Infrastructure supports this requirement.
2.1.1.12	Pre configured access to Internet Service Provider (ISP) and State Wide Area Network (WAN) demarcation points.	Х		Hosted	Yes	OCI manages all connectivity within the Oracle Data Centers and will work with customers to configure their connections to their environments.
2.1.1.13	<ul> <li>Capability to replicate (in real or near real time) data to the alternate datacenter (see SLAs in "Appendix F, Service Level Agreement Requirements").</li> </ul>	Х		Hosted	Yes	Oracle will provide a Disaster Recover service.
2.1.1.14	The capability to recover the application and data at the remote DR data center with minimal manual involvement.	Х		Hosted	Yes	Oracle will provide a Disaster Recover service
2.1.1.15	The capability to migrate an application for the DR data center back to the primary data center with minimal manual involvement.	X		Hosted	Yes	Oracle will provide a Disaster Recover service that will migrate back when the primary data center is returned to sufficient function.

#	Hosting Services - Roles and Responsibilities	Offeror	State	Proposed Hosting Option (SaaS, Offeror- Hosted)	Offeror Response (Y/N)	Offeror Comment
2.1.1.16	Provide data center security and privacy to meet the State security requirements.	X		Hosted	Yes	Oracle will work with you to determine if additional services are required to meet your security requirements.
2.1.1.17	Provide firewall administration.	Х		Hosted	Yes	Oracle manages the firewalls within the Cloud Infrastructure
2.1.1.18	Provide data center Local Area Network (LAN) management.	Х		Hosted	Yes	Oracle manages the networks within the Cloud Infrastructure
2.1.1.19	Monitor applications and servers for availability as well as transaction and response time performance.	Х		Hosted	Yes	Business transaction monitoring is included in the services.
2.1.1.20	Provide high availability redundant network circuits connecting the hosting data centers to the State's Next-Generation Network (NGN) to meet network response time and high availability SLAs (see SLAs in "Appendix F, Service Level Agreement Requirements").	Х		Hosted	Yes	This will require a minimum of 2 FastConnects per data center.
2.1.1.21	Align with IT Service Management industry-accepted best-practice principles such as Information Technology Infrastructure Library (ITIL), Control Objectives for Information and related Technology (CobIT) or similar standard principles.	X		Hosted	Yes	Oracle follows ITIL and other Industry Standard best practices in the delivery of services.

#	Hosting Services - Roles and Responsibilities	Offeror	State	Proposed Hosting Option (SaaS, Offeror- Hosted)	Offeror Response (Y/N)	Offeror Comment					
2.1.1.22	Coordinate with and provide support to the State's Level 1, Level 2, and Level 3 help desks for incident and service request management and provide Hosting Services support and assistance as necessary to ensure maximum EFS uptime.	X		Hosted	Yes	Oracle application management services <a agreement="" appendix="" f,="" href="https://htms.as.service-level-&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;2.1.1.23&lt;/td&gt;&lt;td&gt;Support the DR and failover strategy and annual DR testing.&lt;/td&gt;&lt;td&gt;Х&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Hosted&lt;/td&gt;&lt;td&gt;Yes&lt;/td&gt;&lt;td&gt;Oracle has included Disaster&lt;br&gt;Recovery with an annual test.&lt;br&gt;That test can be either destructive or&lt;br&gt;non-destructive.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;2.1.1.24&lt;/td&gt;&lt;td&gt;Adhere to the Hosting Services SLAs specified in " level="" requirements."<="" service="" td=""><td>Х</td><td></td><td>Hosted</td><td>Yes</td><td></td></a>	Х		Hosted	Yes	

# 2.2 Maintenance and Operations Support

### 2.2.1 System Operations and Administration

Table 2. EFS Operations and Administration – Roles and Responsibilities

#	EFS Operations and Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.1.1	Define administrative computing systems requirements and policies (e.g. usage, monitoring agents).	Х		Yes	Oracle will install monitoring agent that report on system usage and resources through Oracle portals and reporting.

#	EFS Operations and Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.1.2	Develop procedures for performing systems administration that meet requirements and adhere to defined policies.	X		Yes	Oracle services are based on ITIL and best practice framework and standard operating procedures that are well documented.
2.2.1.3	Review and approve systems administration procedures.		X	Yes	
2.2.1.4	Establish, implement and maintain technical support policies and procedures that support the State's operation and support requirements.	X		Yes	Oracle services are based on ITIL and best practice framework and standard operating procedures that are well documented.  Oracle assumes the requirements as Identified in this RFP.
2.2.1.5	Set up and manage end-user accounts, perform access control, manage files and disk space (for in scope operating system (OS) and system software) in accordance with the State requirements.	X		Yes	Oracle will set up roles that define end user capabilities. The State's responsibility is to match their users to the roles. This will be included in the implementation activities. Oracle manages the Oracle support roles in the management of the system.
2.2.1.6	Install and configure OS per EFS requirements.	Х		Yes	Oracle will install the Operating System based on Oracle's best practice standards, ISO 27002 for OS hardening. Oracle assumes the requirements as Identified in this RFP.
2.2.1.7	Perform system or component configuration changes necessary to support computing services.	Х		Yes	Following a defined change management process.

#	EFS Operations and Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.1.8	Provide agreed EFS support services.	X		Yes	Provided the support services are defined and agreed upon in the scope and agreement. Oracle has the capability to provide extensive support services extending to the functional services, this may incur additional fees.
2.2.1.9	Install EFS components.	Х		Yes	Oracle will install the in scope components.
2.2.1.10	Configure EFS components.	Х		Yes	Oracle will configure the in scope components.
2.2.1.11	Maintain and monitor EFS components.	Х		Yes	Oracle will install monitoring agents and will maintain and monitor components of the system.
2.2.1.12	Register developer keys.	Х		Yes	Customer needs to manage COBAL licensing
2.2.1.13	Perform required EFS services in line with agreed procedures (e.g. system stop and start, monitoring changes, job scheduling changes, EFS component patching (support package, plug-ins), EFS upgrade (version change or enhancement pack installation, EFS copy, database copy, EFS client copy, specific backup or restore).	Х		Yes	As in scope.
2.2.1.14	Perform required EFS services in line with agreed procedures (e.g. database upgrade or patching, EFS kernel patching).	Х		Yes	All support activities are based on mutually agreed process.
2.2.1.15	Coordinate and perform EFS support services according to agreed procedure.	Х		Yes	All support activities are based on mutually agreed process.

#	EFS Operations and Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.1.16	Perform any other system-oriented tasks as they may appear in regular operation and/or with new EFS releases.	Х		Yes	Oracle will perform services as identified in the Oracle Services Descriptions an Scope of the agreement.
2.2.1.17	Install and maintain EFS parameters according to best practices.	Х		Yes	Oracle uses best practices in the delivery of services.

# 2.2.2 System Monitoring

Table 3. System Monitoring – Roles and Responsibilities

#	System Monitoring – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.2.1	Propose monitoring policies, procedures and standards that meet EFS best practices and the State requirements including:	Х			
2.2.2.2	Monitoring of buffers, database buffers, table space fragmentation, database space, unusual growth and propose solution in case of alert.	Х		Yes	Oracle will propose industry best practices.
2.2.2.3	Monitoring of system logs, update error, database corruption, jobs, and propose solution in case of alert.	Х		Yes	Oracle will propose industry best practices.
2.2.2.4	Monitoring of alert notification interface (e.g. Simple Mail Transfer Protocol (SMTP), send mail), and propose a solution in case of an alert.	Х		Yes	Oracle will propose industry best practices.

#	System Monitoring – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.2.5	Monitoring of transaction and trace logs, network event logs and traces, garbage collector, memory and CPU utilization, indexes, etc., and propose a solution in case of an alert.	Х		Yes	Oracle will propose industry best practices.
2.2.2.6	Monitoring of middleware (e.g. workflows, in- and out-bound queues) and report to the State according to agreed procedure.	Х		Yes	Oracle will propose industry best practices.
2.2.2.7	Monitoring of end-to-end transaction response time to allow measurements against SLAs (see "Appendix F, Service Level Agreement Requirements").	X		Yes	The Setate will need to define an end to end transaction. Oracle has included Business Transaction Monitoring in the proposed services.
2.2.2.8	Review and agree with monitoring procedures.		X	Yes	
2.2.2.9	Implement agreed to monitoring policies, procedures and standards.	Х		Yes	
2.2.2.10	Provide console monitoring, troubleshooting, repair and escalation of problems in the hosted environment.	Х		Yes	
2.2.2.11	Monitor all EFS components as agreed in above mentioned monitoring policies, procedures and standards.	Х		Yes	As agreed upon between Oracle and the State.
2.2.2.12	Provide preventive measures for proactive monitoring and self-healing capabilities to limit outages that impact service delivery.	Х		Yes	Oracle monitoring and alerting support this requirement.
2.2.2.13	Monitor batch and job scheduling.	Х		Yes	
2.2.2.14	Proactively monitor table spaces.	Х		Yes	
2.2.2.15	Monitor defined interfaces.	Х		Yes	Oracle will alert on interfaces that error or stall.
2.2.2.16	Monitor long running jobs or processes and shortage of available processes, and report to the State according to agreed to procedures.	Х		Yes	Oracle will monitor batch and jobs and alert on up/down status as well as long running processes and propose improvements

#	System Monitoring – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.2.17	Monitor, identify and report EFS problems and availability from the perspective of the end user.	X		No	The system monitoring typically identifies issues with availability and auto alerts to the engineering queues for resolution however, this is based on the monitoring parameters and not end user experience.
2.2.2.18	Resolve or assist in resolving application problems in accordance with SLAs (see "Appendix F, Service Level Agreement Requirements"), and escalate as required.	Х		Yes	Please see Appendix F

# 2.2.3 Incident and Problem Management (Level 1 and Level 2)

Table 4. Incident and Problem Management (Level 1 and Level 2) - Roles and Responsibilities

#	Incident and Problem Management (Level 1 and Level 2)- Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.3.1	Propose incident and problem management policies, procedures and standards.	Х		Yes	Oracle has a robust and mature incident management process that includes problem and root cause analysis.
2.2.3.2	Review the State's incident and problem management policies, procedures and standards; propose changes to meet the State requirements and organization.	Х		Yes	Oracle will follow the Oracle standards. Oracle needs to understand what the States standards and requirements are.
2.2.3.3	Adapt and implement incident and problem management procedures per the State requirements.	Х		Yes	Oracle will follow the Oracle standards. Oracle needs to understand what the States standards and requirements are.
2.2.3.4	Establish operations and service management quality assurance and control programs.	Х		Yes	Oracle has mature and established standard operating procedures and quality programs for delivery of services.

#	Incident and Problem Management (Level 1 and Level 2)- Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.3.5	Approve operations and service management quality assurance and control programs.		Х	Yes	Oracle will create an operational run book which matches services management practices of the State and Oracle and the defined integration points.
2.2.3.6	Perform quality assurance and quality control programs.	Х		Yes	
2.2.3.7	Establish incident/problem classification by priority.	¥	Х	Yes	Oracle follows the Oracle incident/problem process. The customer defines all initial severity levels based on business impact.
2.2.3.8	Establish incident/problem workflow, escalation, communication and reporting processes that help to achieve the SLAs (see "Appendix F, Service Level Agreement Requirements").	Х		Yes	Oracle will manage all incident/problem through our process including Service Level Agreements.
2.2.3.9	Review and approve incident/problem classification, prioritization, workflow, communication, escalation and reporting processes.		Х		Oracle follows the Oracle incident/problem process. The customer defines all initial severity levels based on business impact.  At the beginning of the services Oracle will work with the State to create a communications plan that includes these components.
2.2.3.10	Manage entire incident/problem lifecycle including detection, diagnosis, State status reporting, repair and recovery.	Х		Yes	
2.2.3.11	Ensure incident resolution activities conform to defined change control procedures.	Х	5	Yes	
2.2.3.12	Manage efficient workflow of incidents including the involvement of third-party providers (e.g. public carriers, ISP).	Х		Yes	Where third parties are involved with the Oracle scope.
2.2.3.13	Coordinate end-user support activities with the Offeror.		Х	Yes	

APPENDIX E 11 RFP-ERP-2020

#	Incident and Problem Management (Level 1 and Level 2)- Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.3.14	Coordinate any EFS incident management reporting, tracking, escalation and resolution activities with the State.	Х		Yes	
2.2.3.15	Provide the State with access and input capabilities to Offeror's incident and problem management tracking system to allow for incident and related problem monitoring and ad hoc reporting.	X		Yes	My Oracle Support is the single repository for tracking and visibility to all system status.
2.2.3.16	Coordinate and take ownership of EFS related problem resolution with the State and third-parties.	Х		Yes	As it relates to the Oracle scope.
2.2.3.17	Perform Root Cause Analysis (RCA) of incidents, document findings and take corrective actions for in scope services. Resolve problem and/or substantiate that all reasonable actions have been taken to prevent future reoccurrence.	Х		Yes	Oracle performs Root Cause Analysis on all Severity 1 incidents and repeated Severity 2 incidents. Corrective action and
2.2.3.18	Periodically review the status of open incidents and related problems and the progress being made in addressing problems.		Х	Yes	
2.2.3.19	Conduct incident and problem management review sessions and provide listing and status of same categorized by problem impact.	Х		Yes	
2.2.3.20	Participate in incident and problem management review sessions and provide listing and status of same categorized by problem impact.		Х	Yes	
2.2.3.21	Identify and recommend possible enhancement opportunities for improved operational performance and potential cost impact.	Х		Yes	
2.2.3.22	Authorize closure of the State initiated Critical and High priority incidents.		Х	Yes	
2.2.3.23	Approve minor enhancement projects to implement operational improvements.		Х	Yes	
2.2.3.24	Super User Support				

APPENDIX E 12 RFP-ERP-2020

#	Incident and Problem Management (Level 1 and Level 2)- Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.3.25	Answer end-user "how-to" questions (i.e. the most basic type of questions).		Х	Yes	
2.2.3.26	Deliver end-user refresher training.		X	Yes	
2.2.3.27	Log incidents with the help desk or directly into the incident and problem management system (e.g. self service).		Х	Yes	
2.2.3.28	Capture and log enhancement requests.		X	Yes	
2.2.3.29	Escalate to Level 1 help desk or EFS Support Center.		Χ	Yes	
2.2.3.30	Help Desk (Level 1)				
2.2.3.31	Perform password and end-user id resets.		Х	Yes	
2.2.3.32	Troubleshoot, manage, track and report problems end users experience with desktop applications, hardware, and software.		Х	Yes	
2.2.3.33	Troubleshoot, manage, track and report problems end users experience specific to the operational environment.		Х	Yes	
2.2.3.34	Troubleshoot, manage, track and report problems end users experience with EFS.		X	Yes	
2.2.3.35	Perform initial triage in order to troubleshoot, manage, track and report problems end users experience with EFS.		Х	Yes	
2.2.3.36	Escalate to Level 2 support to manage, track and report problems end users experience with EFS.		Х	Yes	
2.2.3.37	Provide ongoing communication to end user as to the status of issue and resolution (i.e. should also be available as self service).		Х	Yes	
2.2.3.38	Perform problem escalation, review and reporting.		X	Yes	

APPENDIX E 13 RFP-ERP-2020

#	Incident and Problem Management (Level 1 and Level 2)- Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.3.39	Maintain Level 1 problem escalation procedures.		X	Yes	
2.2.3.40	Maintain Level 2 application support escalation procedures.	Х		Yes	Oracle Level 2 support for in scope services.

### 2.2.4 ERP System Problem Management Services (Level 2 and Level 3)

Table 5. ERP System Problem Management (Level 2 and Level 3) – Roles and Responsibilities

#	ERP System Problem Management (Level 2 and Level 3) – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.4.1	Initiate problem resolution priority and assign resources.	Х		Yes	
2.2.4.2	Analyze EFS problems.	Х		Yes	
2.2.4.3	Provide ongoing updates on problem resolution status.	Х		Yes	
2.2.4.4	Coordinate Level 2/3 application problem management for the EFS.	Х		Yes	
2.2.4.5	Track and report incidents and problems.	Х		Yes	Yes, as in scope
2.2.4.6	Troubleshoot, manage, track and report operational problems with disk sub-systems, operating system, network, etc.	Х		Yes	Yes, as in scope
2.2.4.7	Troubleshoot, manage, track and report operational problems that are result of database and application issues.	Х		Yes	
2.2.4.8	Troubleshoot, manage, track, and report desktop application installation issues.	Х		Yes	
2.2.4.9	Escalate problems as necessary according to incident and service management procedures.	Х		Yes	

#	ERP System Problem Management (Level 2 and Level 3) – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.4.10	Coordinate with and provide support to the State's help desk for incident and service request management.	Х		Yes	
2.2.4.11	Provide Level 2 technical support and assistance as necessary to ensure maximum EFS uptime.	Х		Yes	
2.2.4.12	Establish, staff and operate a Level 3 EFS support help desk responsible for:  Receive and log incidents received from Level 1 and Level 2 help desks.  Categorize and log IT inquiries/problems/requests.  Determine inquiry/problem request/resolution requirements.  Resolve inquiry/problem according to SLAs.  Escalate to EFS software vendor(s), if necessary).  Identify problem characteristics and, if possible, root cause.  Notify the State Level 1 and Level 2 help desk, as required.  Monitor problems until problem is resolved.  Provide ongoing communication and reporting on the status of problems.  Communicate resolution status and provide closure notification.  Perform trend analysis of incidents and problems and report findings on a monthly basis.	X		Yes	

# 2.2.5 Root Cause Analysis

Table 6. Root Cause Analysis – Roles and Responsibilities

#	Root Cause Analysis – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.5.1	Provide RCA policies, procedures and standards.	Х		Yes	
2.2.5.2	Develop procedures for performing RCA that meet requirements and adhere to defined policies.	Х		Yes	As part of this offering Oracle provides RCA on any reproducible Severity 1 and repeated Sev 2 incidents based on an agreed upon policy.
2.2.5.3	Approve RCA procedures.		X		As mutually agreed upon.
2.2.5.4	Conduct proactive trend analysis to identify recurring problems.	Х		Yes	
2.2.5.5	Track and report recurring problems or failures and provide associated consequences of problems, including business impact to the State.	х		Yes	
2.2.5.6	Recommend solutions to address recurring problems or failures.	Х		Yes	
2.2.5.7	Approve solutions to address recurring problems or failures.		Х	Yes	
2.2.5.8	Identify root cause of the State defined Critical and High Priority Incidents and recommend appropriate resolution action.	Х		Yes	Oracle will provide RCA for Severity 1 and repeated Severity 2 incidents.
2.2.5.9	Approve solutions to address Critical and High Priority Incidents.		Х	Yes	
2.2.5.10	Provide status reports detailing the RCA and the procedure for correcting recurring problems of Critical and High Incidents until closure, as defined by the State.	Х		Yes	As defined by the State and Oracle as agreed upon.

### 2.2.6 User Account Management

Offerors shall respond "Yes" or "No" to each requirement in the table below. A "No" response without providing a comment may cause the Offer to be rejected.

Table 7. User Account Management – Roles and Responsibilities

#	User Account Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.6.1	Manage and perform EFS User Account (UA) maintenance, including:  New UAs  UA refresh  UA copy (e.g. complete UA copy)  Cross-instance UA copy  UA deletion	X		No	Oracle does not create new user accounts. Oracle will create the roles during implementation and the State is responsible for end user management and determining user roles.
2.2.6.2	Approve EFS UA maintenance.		X	Yes	See above
2.2.6.3	Perform setup and monitoring of security and authorization configuration.	Х		No	See above
2.2.6.4	Define access privileges.	Х		No	See above
2.2.6.5	Assign new UAs.	Х		No	See above
2.2.6.6	Define procedure to provide access keys, VPN, etc.	Х		No	See above

#### 2.2.7 Security Administration

Table 8. Security Administration - Roles and Responsibilities

#	Security Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.7.1	Define EFS security requirements, standards, procedures and policies including regulatory requirements.		х	Yes	Oracle services support regulatory and security requirements. More information is needed and the State must define the needs and services that meet their objectives.
2.2.7.2	Assist in developing security standards, policies, and procedures including, but not limited to integration of industry best practices.	х		Yes	
2.2.7.3	Conduct risk assessment to identify control or security gaps.	Х	,	Yes	
2.2.7.4	Provide security plan and infrastructure based on security requirements, standards, procedures, policies, incorporating federal, State, and local requirements and risks.	х		Yes	Oracle services support regulatory and security requirements. More information is needed and the State must define the needs and services that meet their objectives.
2.2.7.5	Review and approve security plans.		Х	Yes	
2.2.7.6	Implement physical and logical security plans consistent with the State security policies and industry standards.	х		Yes	Oracle services support regulatory and security requirements. More information is needed and the State must define the needs and services that meet their objectives.
2.2.7.7	Establish access profiles and policies for adding, changing, enabling/disabling, and deleting logon access of State employees, agents and subcontractors.		Х	Yes	
2.2.7.8	Perform logon/security-level access changes at the OS and system software level as detailed in profiles and policies.	х		Yes	Oracle services support regulatory and security requirements. More information is needed and the State must define the needs and services that meet their objectives.
2.2.7.9	Report security violations to the State per approved policies.	Х	_	Yes	

#	Security Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.7.10	Resolve security violations internal to the State.		X	Yes	
2.2.7.11	Review all security patches relevant to the environment and classify the need and speed in which the security patches should be installed as defined by the State security policies.	x		Yes	Oracle reviews all security patches and recommends patch rollout based on impact of the security patch to the environment.
2.2.7.12	Install security patches.	Х		Yes	
2.2.7.13	Perform periodic security audits.		Х	Yes	
2.2.7.13A	Perform on-demand and unannounced penetration testing.		Х	Yes	
2.2.7.14	Provide documentation of the performance by an experienced third-party consultancy of external penetration tests on, at least, a quarterly basis, and internal network security audits at least annually. The audits should be against International Organization for Standardization (ISO) 27001/2 and in compliance with Statement on Standards for Attestation Engagements (SSAE16).	Х		Yes	Oracle has included quarterly Penetration testing in the proposed services.
2.2.7.15	Provide documented requirements (e.g. design and audit procedures) for network security to ensure that other customers will not compromise its shared-service infrastructure.	х		Yes	The Oracle Cloud Infrastructure is well documented in how logical networking isolates a customer environment from other customer information.
2.2.7.16	Maintain all documentation required for security audits, internal controls and control testing.	Х	2	Yes	
2.2.7.17	Place and support systems with particularly sensitive data in controlled access areas. Only end users with authorized access permission will be allowed to enter these areas.	х		Yes	All Oracle customer environments are located in locked cages. Customer end users of the system do not have access to the areas.

#	Security Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.7.18	Assist with third-party security audits.	Х		Yes	As it relates to the Oracle scope and coordinated based on the Oracle agreement.
2.2.7.19	Perform prompt removal of end users when access is no longer required.	х		No	End users access support is not included in the services.  Oracle support is role based and staff is removed promptly through HR and Identity Management systems.  The State is responsible for their users.
2.2.7.20	Review of the end user access list at least every 90 days to ensure terminated staff accounts or unused end user accounts have been removed from the EFS.		X	Yes	
2.2.7.21	Provide a documented policy for "hardening" the underlying virtualized infrastructure that its services run on.	Х		Yes	
2.2.7.22	Provide validated and documented procedures for configuration management, patch installation and malware prevention for all servers and PCs involved in service delivery.	Х		Yes	
2.2.7.23	Provide documented set of controls to ensure the separation of data and security information among customer applications.	Х		Yes	
2.2.7.24	Provide review of the security of applications and any supporting code (e.g. AJAX, ActiveX controls, Java applets) used.	Х		Yes	
2.2.7.25	Provide content monitoring and filtering, or data loss prevention inappropriate for data flows.				More information needed to respond.
2.2.7.26	Provide adequate protection of data that is covered by regulatory or other compliance requirements.	Х		Yes	The State is responsible for making sure the controls provided by Oracle meet their regulatory needs.

#	Security Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.7.27	Provide documented procedures to perform background checks on personnel with administrative or other privileged access to servers, applications or customer data.	X		Yes	Oracle performs background checks on employees.
2.2.7.28	Provide documented procedures for superuser privilege management and database activity monitoring controls or the equivalent to detect inappropriate behavior by personnel with administrative access.	X		Yes	
2.2.7.29	Provide documented process for evaluating security alerts from the OS and application vendors, shielding systems from attack until patched, and installing security patches and service packs.	X		Yes	Oracle will monitor and patch applications in scope
2.2.7.30	Provide and execute documented procedures for security monitoring and log management functions, and use write-once technology or other secure approaches for storing audit trails and security logs.	X		Yes	
2.2.7.31	Provide documented established procedures for vulnerability management, intrusion prevention, incident response, incident escalation, and investigation.	Х		Yes	
2.2.7.32	Demonstrate that the security staff average more than four years of experience in information and network security.	Х		Yes	All personnel with security roles are qualified to deliver services.
2.2.7.33	Demonstrate that more than 75% of the Offeror's security staff has security industry certification (e.g. Certified Information Systems Security Professional, Global Information Assurance Certification, or equivalent).	X		Yes	All personnel with security roles will have certifications that qualify them for the services they deliver.
2.2.7.34	Demonstrate that staff has vendor certification for the specific firewall equipment they will manage.	Х		Yes	

#	Security Administration – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.7.35	Provide documented identity management and help desk procedures for authenticating callers before resetting access controls, establishing and/or deleting accounts.	X		No	Customer responds to level 1 helpdesk / authenticating end users.  If we are integrating with an Identity Management System the responsibility for authenticating would be in this system.  Oracle support is ticket based and customer resources contacting the Oracle support will use customer CSI and must be authorized.

### 2.2.8 Storage Management

Table 9. Storage Management – Roles and Responsibilities

#	Storage Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.8.1	Recommend techniques and procedures to ensure disk storage resources are utilized in an efficient and cost-effective manner, as well as meeting business requirements.	х		Yes	
2.2.8.2	Maintain and improve storage resource efficiency and space requirements.	Х	5	Yes	
2.2.8.3	Regularly review backup and recovery procedures to demonstrate recoverability. Verify that actual practices are in concert with State business requirements and procedures and report the results.	Х		Yes	Oracle backup and recovery procedures will meet the requirements as defined in the RFP.  More information is needed on state business requirements and procedures if they are outside the RFP information.

#	Storage Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.8.4	Provide data storage and data management services (e.g. RAID array, SAN, NAS, tape, optical).	X		Yes	
2.2.8.5	Provide data backup and restoration services in accordance with State-established policies.	X		Yes	Oracle backup and recovery procedures will meet the requirements as defined in the RFP.  More information is needed on the Setate's business requirements and procedures if they are outside the RFP information
2.2.8.6	Secure backup media in independently certified, U.L. Class II media storage vaults that meet the design and construction requirements of National Fire Protection Association (NFPA)232, Standard for the Protection of Records.	X		Yes	Oracle will provide operational backups of the environment that are stored in Object storage resources in the Oracle Cloud Infrastructure. Distributed, durable object storage features includes;  Highly available and scalable Access via API, HDFS Plugin, SDK, console, or CLI Archive storage option Encryption at rest by default using AES 256 Automatic monitoring Self-healing
2.2.8.7	Perform periodic incremental and full tape backups/exchange backup tapes with storage at an off-site facility.	Х		Yes	Tape is not the solution model for Cloud Infrastructure. If DAGs the State requires this we can discuss this as an alternate solution. Oracle will perform management of the ACS solution
2.2.8.8	Provide input processing activities (e.g. loading third-party media, receipt, and/or transmission of batch files).	Х		No	Tape is not the solution model for Cloud Infrastructure Oracle will perform management of the ACS solution.

APPENDIX E 23 RFP-ERP-2020

#	Storage Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.8.9	Maintain a tape library management system and transport tapes to the production area as needed.	Х		No	Tape is not the solution model for Cloud Infrastructure Oracle will perform management of the ACS solution
2.2.8.10	Maintain data set placement and manage data catalogs.	Х		No	Tape is not the solution model for Cloud Infrastructure Oracle will perform management of the ACS solution
2.2.8.11	Manage file transfers and other data movement activities.	Х		No	Tape is not the solution model for Cloud Infrastructure Oracle will perform management of the ACS solution
2.2.8.12	Manage input media availability to meet processing service levels.	Х		No	Tape is not the solution model for Cloud Infrastructure Oracle will perform management of the ACS solution
2.2.8.13	Manage the media inventory to ensure that adequate media resources are available.	Х		No	Tape is not the solution model for Cloud Infrastructure Oracle will perform management of the ACS solution
2.2.8.14	Acquire and manage consumables (e.g. tape, disks) in support of the State's backup requirements for the data center.	Х		No	In the cloud infrastructure backups and archives are stored in the cloud object or archive storage resources.
2.2.8.15	Plan, execute and report on the replacement of media in the scratch tape pool before 80% of its expected life (i.e. as defined by the media manufacturer) on a going-forward basis.	Х		No	This is not a cloud model of archive storage. If DAGs the State requires this we can discuss this as an alternate solution.  Oracle will manage the backup and archive files on the Oracle Cloud Infrastructure based on the customer Archive solution.
2.2.8.16	Monitor and control storage performance according to storage and data management policies.	Х		Yes	Oracle Cloud Storage

APPENDIX E 24 RFP-ERP-2020

#	Storage Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.8.17	Monitor and demonstrate compliance with the State's retention and storage requirements.	Х		Yes	Oracle will retain customer requested backups in archive storage for the duration required. Archive storage resources will be required and may be additional based on the size of storage needed.
2.2.8.18	Monitor the execution of utilities that report on fixed/pool record capacity for the EFS and provide reports, as necessary.	Х		Yes	Capacity management is part of the services.
2.2.8.19	Effectively track, manage, communicate and resolve all tape exceptions.	Х		No	Tape is not the solution model for Cloud Infrastructure. If DAGs the State requires this, we can discuss this as an alternate solution.
2.2.8.20	Ensure all replaced media (e.g. tapes and disk storage are cleared of data, pursuant to NIST 800-88 requirements. Any media no longer required should be destroyed or shredded in a similar fashion.	Х		Yes	Oracle follows NIST for data destruction.
2.2.8.21	Exchange backup tapes with off-site storage facility.	Х		No	Tape is not the solution model for Cloud Infrastructure. If DAGs the State requires this, we can discuss this as an alternate solution.
2.2.8.22	Provide secure off-site storage for designated media and transport media to off-site location as required.	Х		No	Tape is not the solution model for Cloud Infrastructure. If DAGs the State requires this, we can discuss this as an alternate solution.
2.2.8.23	Periodically test and verify validity of tapes.	Х		No	Oracle periodically tests backups.
2.2.8.24	Perform periodic audits to ensure proper cataloging of media.	Х		Yes	Oracle uses the Oracle Cloud Infrastructure and asset software to log and monitor all assets.

#	Storage Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.8.25	Report disk space and tape utilization.	X		Yes	Tape is not the solution model for Cloud Infrastructure. If DAGs-the State requires this, we can discuss this as an alternate solution.  Oracle does report on capacity of resources.
2.2.8.26	Manage tape storage service provider.	Х		No	Tape is not the solution model for Cloud Infrastructure. If DAGs requires this we can discuss this as an alternate solution.
2.2.8.27	Perform recoup for EFS production databases on a regular basis and verify that roll-in is done after verifying reports.	X		Y	The State can request to restore data up to twice per month. Oracle will validate that the data was restored appropriately. The State can/should do a spot check of that restore.
2.2.8.28	Perform restores of test systems in accordance with State approved policies and procedures.	Х		Υ	Oracle standard services can be reviewed with the State.
2.2.8.29	Schedule and execute implementation of additional DASD required for EFS.	Х		Y	All customer data is stored in a remote storage frame.

### 2.2.9 Output Management

Table 10. Output Management – Roles and Responsibilities

#	Output Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.9.1	Develop and document output management (OM) requirements and policies, including transport, delivery locations and schedule requirements.	Х		No	Oracle will set up printer ports within the application to support the State's managed printers.

#	Output Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.9.2	Define business requirements for printer, fax and OM.		Х	Yes	Oracle will set up printer ports within the application to support the State's managed printers.
2.2.9.3	Define application requirements for printer, fax and OM.	Х		Yes	Oracle will set up printer ports within the application to support the State's managed printers.
2.2.9.4	Define technical requirements for printer, fax and OM.	Х		Yes	Oracle will set up printer ports within the application to support the State's managed printers.
2.2.9.5	Approve technical requirements for printer, fax, and OM		Х	Yes	Oracle will set up printer ports within the application to support the State's managed printers.
2.2.9.6	Develop and document OM procedures that meet requirements and adhere to defined policies.	Х		Yes	Oracle will set up printer ports within the application to support the State's managed printers.
2.2.9.7	Review and approve OM procedures.		Х	Yes	
2.2.9.8	Procure OM equipment.	Х		No	Oracle ACS does not procure customer equipment.
2.2.9.9	Configure, monitor, test and manage OS printer / fax / OM queues and spool files.	Х		No	Oracle ACS does not manage customer equipment.
2.2.9.10	Ensure that output devices are functioning, including performing or coordinating routine maintenance.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.11	Maintain printer / fax / OM application parameters.	Х		No	Oracle ACS does not manage customer equipment.
2.2.9.12	Manage application printer / fax / OM processes and output queues at the application layer.	Х		Yes	
2.2.9.13	Perform spool administration and logical printer management inside the system.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.14	Investigate and resolve application related printer / fax / OM problems.	Х	2	No	Oracle ACS does <u>not</u> manage customer equipment.

#	Output Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.9.15	Investigate and resolve infrastructure related printer / fax / OM problems.	X		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.16	Provide OM device maintenance and service.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.17	Provide technical team with output device IP address / technical configuration.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.18	Cancel output jobs at O/S level.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.19	Configure printer / fax / OM profile parameters in the application.	Х		Yes	
2.2.9.20	Support and maintain printer / fax / output application.	Х		Yes	
2.2.9.21	Support and maintain printer / fax / output integration components on the application.	Х		Yes	
2.2.9.22	Support and maintain printer / fax / output integration components on the server.	Х		No	Oracle ACS does not manage customer equipment.
2.2.9.23	Support and maintain printer / fax / output integration server.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.24	Provide print OM and distribution.	Х		No	Oracle ACS does not manage customer equipment.
2.2.9.25	Separate and organize printed output materials accordingly.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.26	Ensure that printed output is delivered to the State specified delivery locations according to schedule.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.
2.2.9.27	Acquire and manage consumables (e.g. paper, print ribbons, ink, and tapes) and coordinate acquisition of additional materials, as needed.	Х		No	Oracle ACS does <u>not</u> manage customer equipment.

### 2.2.10 Batch - Job Control and Scheduling

Table 11. Batch - Job Control and Scheduling - Roles and Responsibilities

#	Batch – Job Control and Scheduling - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.10.1	Define job scheduling requirements, application software interdependencies, and rerun requirements for all production jobs.	Х		Yes	
2.2.10.2	Define requirements and maintain documentation of all job scheduling and re-run requirements.	Х		Yes	
2.2.10.3	Define test and demand batch scheduling requirements.	Х		Yes	
2.2.10.4	Utilize and manage scheduling tools for automating job execution (e.g. job workflow processes interdependencies, rerun requirements, file exchange functions, and print management).	Х		Yes	
2.2.10.5	Produce and distribute job schedule.	Х		Yes	
2.2.10.6	Create, maintain and update code required for job control and scheduling.	Х		Yes	
2.2.10.7	Identify job scheduling changes to improve application job stream effectiveness.	Х		Yes	
2.2.10.8	Provide job scheduling, job execution, reporting and resolution, taking into account infrastructure and EFS interdependencies.	Х		Yes	
2.2.10.9	Execute test and demand batch jobs on appropriate systems.	Х		Yes	
2.2.10.10	Maintain database of job scheduling, contact, rerun, and interdependencies.	Х		Yes	
2.2.10.11	Perform quality control on test-to-production results.	Х		Yes	

#	Batch – Job Control and Scheduling - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.10.12	Perform job monitoring.	X		Yes	
2.2.10.13	Monitor failed job.	X		Yes	
2.2.10.14	Assess impact of failed jobs.	Х		Yes	Jointly with the State.
2.2.10.15	Provide notification to end users of failed jobs.	Х		Yes	The State's primary contact will be notified.
2.2.10.16	Recover/resolve from failed jobs.	Х		Yes	
2.2.10.17	Validate job results and re-run per instructions.	Х		Yes	
2.2.10.18	Terminate/cancel jobs per requests or pre- defined procedures.	Х		Yes	
2.2.10.19	Provide job rejection analysis with error notification to the end user.	Х		Yes	The State's primary contact will be notified.
2.2.10.20	Provide quality control for reprocessing activities (e.g. batch reruns).	Х		Yes	
2.2.10.21	Provide schedule status.	Х		Yes	
2.2.10.22	Notify the State and maintain a history of job completion results.	Х		Yes	

#### 2.2.11 EFS Router Remote Access

Table 12. Remote Access Facilities – Roles and Responsibilities

#	Database Management Administrations - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.11.1	Define remote access (RA) policies and procedures.	X		No	ACS does not manage customer remote access.
2.2.11.2	Approve RA policies and procedures	2,	X	Yes	

#	Database Management Administrations - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.11.3	Participate in defining and accept RA policies and procedures.	X		No	ACS does not manage customer remote access.
2.2.11.4	Install, test, and provide technical support, administration and security administration for RA hardware and software.	Х		No	ACS does not manage customer remote access.
2.2.11.5	Perform system or component configuration changes necessary to support remote access services.	Х		No	ACS does not manage customer remote access.
2.2.11.6	Monitor and report EFS Router intrusions attempts.	Х		No	ACS does not manage customer remote access.

#### 2.2.12 Database Administration

Table 13. Database Administration – Roles and Responsibilities

#	Database Management Administrations - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.12.1	Define authorization requirements for users, roles, schemas, etc.	Х		Yes	Oracle access is role based through Oracle's HR and IDM systems.
2.2.12.2	Approve authorization requirements for users, roles, schemas, etc. service request.		X	Yes	For the State's users.
2.2.12.3	Provide security administration including managing role and user database permissions in accordance with approved State policies and procedures.	Х		Yes	Oracle uses Oracle standards and role based access. The State approves the States resources.
2.2.12.4	Perform database restores from export dumps or backups.	Х	S	Yes	Oracle takes database backups for operational services such as restore.
2.2.12.5	Create/refresh databases (e.g. development, quality assurance (QA), and training) from production data.	Х		Yes	Oracle will refresh per the services scope entitlements.

#	Database Management Administrations - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.12.6	Execute authorization change requests.	X		Yes	
2.2.12.7	Define database creation, configuration, upgrade, patches and refresh requirements.	Х		Yes	
2.2.12.8	Execute database creation, configuration, upgrades, patches and refresh.	Х		Yes	
2.2.12.9	Execute all database system level changes (e.g. initialization parameters).	Х		Yes	
2.2.12.10	Execute all schema changes for all database instances.	Х		Yes	
2.2.12.11	Define database data definition requirements for applications (e.g. MAC for tables, triggers, and attributes).	Х		Yes	
2.2.12.12	Execute database data definition requirements for applications (e.g. MAC for tables, triggers, and attributes).	Х		Yes	
2.2.12.13	Maintain documentation for all database instance parameters and system settings.	Х		Yes	
2.2.12.14	Maintain consistency of non-sizing and non- platform specific database parameters and system settings across all like instances (i.e. consistency must be maintained according to established development to QA to production life cycle).	Х		Yes	
2.2.12.15	Define database definition and manipulation requirements for applications and developer schemas.	Х		Yes	As in scope.
2.2.12.16	Execute database data definitions for non-managed applications and developer schemas.	Х		No	Non managed applications are not in scope.
2.2.12.17	Define and execute database performance and tuning scripts in order to keep databases running at optimal performance for the State's workload.	Х		Yes	As in scope.

#	Database Management Administrations - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.12.18	Perform database tuning and optimizations.	X		Yes	
2.2.12.19	Perform database capacity utilization analysis.	X		Yes	
2.2.12.20	Perform database imports/exports.	Х		Yes	Based on change management.
2.2.12.21	Utilize and administer appropriate database management tools across all database instances (i.e. performance metrics and historical data must be available for trending and reporting over a minimum of 6 months).	Х		Yes	
2.2.12.22	Identify locking conflicts, latch contention, and rollback requirements, etc. for all database instances.	Х		Yes	
2.2.12.23	Report locking conflicts, latch contention, rollback requirements, etc. for all database instances, and resolve as required.	Х		Yes	
2.2.12.24	Provide technical assistance and subject matter expertise to the State and third-party vendor support, as requested by the State.	Х		Yes	
2.2.12.25	Provide data dictionary expertise, end user data assistance, data warehouse metadata definition, data mapping functions, and creation of data cubes.	х		Yes	
2.2.12.26	Monitor database and generate automatic trouble tickets for problems.	Х		Yes	
2.2.12.27	Open, track, and manage to resolution all database problems.	Х		Yes	
2.2.12.28	Plan and coordinate database upgrades and patches.	Х		Yes	
2.2.12.29	Patch database software as needed according to established development to QA to production lifecycle.	Х		Yes	
2.2.12.30	Manage database communication software configuration, installation, and maintenance.	Х	3	Yes	

#	Database Management Administrations - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.12.31	Provide database storage management.	Х		Yes	
2.2.12.32	Approve database backup schedules, retention periods, and backup levels (e.g. full, incremental, or differential).		Х	Yes	
2.2.12.33	Define and execute the State's database backup and recovery policies.	Х		Yes	Oracle provides regular backup and recovery policies that govern the services.
2.2.12.34	Perform EFS database administration, including:	Х			
2.2.12.35	<ul> <li>Scheduled database maintenance and support</li> </ul>	Х		Yes	
2.2.12.36	■ Table management and reorganization	X		Yes	
2.2.12.37	■ Index analysis	Х		Yes	
2.2.12.38	<ul> <li>Creation and management of tables and indexes</li> </ul>	Х		Yes	
2.2.12.39	■ Growth analysis	Х		Yes	
2.2.12.40	■ File localization	Х		Yes	
2.2.12.41	■ File systems distribution	Х		Yes	
2.2.12.42	Schedule database specific related jobs (e.g. running database statistics).	Х		Yes	
2.2.12.43	Perform database copies and application database refreshes.	Х		Yes	
2.2.12.44	Backup of database archive of logs.	Х		Yes	
2.2.12.45	Provide and configure database storage management systems.	Х		Yes	

### 2.2.13 OS, Application and Database Backup and Recovery

Table 14. OS and Application and Database Backup and Recovery - Roles and Responsibilities

#	OS, Application and Database Backup and Recovery - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.13.1	Define and approve EFS backup and restore strategy.		X	Yes	
2.2.13.2	Develop and implement EFS data backup and restore procedures in accordance with approved State strategy.	X		Yes	Oracle backup includes: Database and code tree Daily backups retained for one week Weekly backups retained for four weeks Archive logs Daily backups retained for one day Oracle will need to review and approve State requirements.
2.2.13.3	Define backup times, schedules, and point of restore based upon the State requirements.	Х		Yes	Oracle will need to review and approve State requirements.
2.2.13.4	Approve requirements for backup times and schedules.		Х	Yes	
2.2.13.5	Create and maintain backup scripts.	Х		Yes	
2.2.13.6	Maintain backup architecture (e.g. tape library and drives).	Х		No	Oracle Cloud Infrastructure uses Object storage and not tape backups.
2.2.13.7	Test central/remote application backup and restore procedures based on State approved guidelines.	Х		Yes	Oracle will need to review and approve State requirements.
2.2.13.8	Perform complete/incremental backup.	Х		Yes	
2.2.13.9	Monitor the backup processes.	Х		Yes	

#	OS, Application and Database Backup and Recovery - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.13.10	Verify the backup media integrity.	X		Yes	All backups are performed to spinning discs.
2.2.13.11	Notify the State when a backup has failed.	X	Ĭ	Yes	
2.2.13.12	Label backup media.	Х		Yes	Oracle uses asset software to classify and identify all assets.
2.2.13.13	Maintain backup library.	X		Yes	In electronic form.
2.2.13.14	Synchronize EFS backup and restore tape rotation.	Х		No	All backups are performed to spinning discs.
2.2.13.15	Prepare application and database for restore processes.	Х		Yes	
2.2.13.16	Restore single and/or multiple objects from the EFS backup media.	Х		Yes	
2.2.13.17	Restore complete and/or incremental EFS backup as required.	Х		Yes	
2.2.13.18	Monitor the EFS restore process.	X		Yes	
2.2.13.19	Store copies of the backups in a vault and/or off-site facility.	Х		No	All backups are performed to spinning discs in Oracle Infrastructure.
2.2.13.20	Roll forward from the archive logs after a restore (i.e. point in time recovery).	Х		Yes	
2.2.13.21	Validate the integrity and the consistency of the restored information.	Х	1	Yes	
2.2.13.22	Validate the integrity and the consistency of restored information at the database layer.	Х		Yes	
2.2.13.23	Validate the integrity and the consistency of restored information at the application layer.	Х		Yes	
2.2.13.24	Validate the integrity and the consistency of restored information at the OS layer.	Х		Yes	
2.2.13.25	Perform business-level validation of the integrity and consistency of the restored data.		Х	Yes	

#	OS, Application and Database Backup and Recovery - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.13.26	Notify the State when the restore has been completed.	X		Yes	

### 2.2.14 Change and Release Management

Table 15. Change Management and Release Management - Roles and Responsibilities

#	Change and Release Management Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.14.1	Provide EFS change and release management procedures and standards based on State policies.	Х		Yes	Oracle will work with the State change standards as long as they meet or exceed the Oracle change best practices.
2.2.14.2	Approve change classifications (e.g. impact, priority, risk) and change authorization process.		Х	Yes	
2.2.14.3	Review and approve EFS change and release management policies, procedures and standards; propose changes to meet the State requirements and organization.		Х	Yes	
2.2.14.4	Maintain overall accountability for the EFS change management activities.	Х		Yes	
2.2.14.5	Implement standard procedures and methods for each type of change including application services, interfaces, hardware, operating systems, databases, storage, network, batch schedule changes, etc.	х		Yes	
2.2.14.6	Document and classify proposed changes to the EFS, which include cost and risk impact and back-out plans for changes; and establish release management plans for major changes.	Х		Yes	

#	Change and Release Management Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.14.7	Develop and maintain a schedule of planned changes to be reviewed and approved, as required, by the State.	Х		Yes	
2.2.14.8	Authorize, approve, and/or alter scheduled changes for any change requests.		Х	Yes	
2.2.14.9	Review release management details and alter, as appropriate, to meet the needs of the State (e.g. back out plan, go/no go decision).	х		Yes	
2.2.14.10	Notify the State of changes, including the timing and impact of the change.	Х		Yes	
2.2.14.11	Coordinate change requests across service providers.	Х		Yes	
2.2.14.12	Manage SWAT teams for critical incidents related to the EFS.	Х		Yes	
2.2.14.13	Resolve incidents that fall across the various domains.	Х		Yes	
2.2.14.14	Develop a business contingency plan (e.g. a back out plan) for each release.	Х		Yes	
2.2.14.15	Document and coordinate the change management and release management schedules across the EFS, OS, hardware, database management system storage, network, facilities, etc.	Х		Yes	
2.2.14.16	Implement change and adhere to approved detailed release plans.	Х		Yes	
2.2.14.17	Report on the status of scheduled changes (e.g. EFS, server, OS, infrastructure, network, integration changes, and batch job schedule).	х		Yes	

#	Change and Release Management Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.14.18	Schedule and conduct change management and release management meetings to include review of planned changes and the results of changes.	Х		Yes	
2.2.14.19	Verify the changes implemented meet the objectives established by introducing the change and resolve any negative impacts.	Х		Yes	
2.2.14.20	Monitor EFS changes and report the results of changes and impacts.	Х	v.	Yes	
2.2.14.21	Assess impact of EFS production changes, prior to and after the implementation of changes.	Х		Yes	
2.2.14.22	Assess impact of OS changes prior to and after the implementation of the changes.	Х	2	Yes	
2.2.14.23	Administer the version control system as it relates to release management of the State's custom configuration, extensions, etc.of the EFS.	Х		Yes	
2.2.14.24	Modify configuration database, asset management items, and service catalog, if applicable, to reflect any implemented changes.	Х		Yes	
2.2.14.25	Maintain master copies of new versions of the EFSs in a secured software library and update configuration databases, accessible to the State.	Х		Yes	Oracle stores this in electronic format. Upon request, Oracle will provide a download link for all licensed software.

### 2.2.15 Configuration Management

Table 16. Configuration Management Roles and Responsibilities

#	Configuration Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.15.1	Define configuration management policies.		Х	Yes	Oracle has defined configuration management policies that can be provided to the State for review.
2.2.15.2	Establish processes and procedures for tracking configuration changes.	Х		Yes	Oracle uses best practices Oracle configuration of the environment.
2.2.15.3	Approve configuration management processes and procedures.		Х	Yes	Oracle has defined configuration management policies that can be provided to the State for review.
2.2.15.4	Utilize and maintain configuration management tools.	Х		Yes	
2.2.15.5	Establish interfaces to problem and incident management, change management, technical support, maintenance and asset management processes.	х		Yes	Oracle uses My Oracle Support and interfaces between the supported application and incident managem4ent system are included in the proposed services.
2.2.15.6	Establish guidelines for physical and logical separation between development, QA, and production and the process for deploying and back out of configuration items.	х		Yes	This is standard configuration best practice.
2.2.15.7	Approve guidelines for physical and logical separation between development, QA, and production and the process for deploying and back out of configuration items.		Х	Yes	
2.2.15.8	Establish configuration baselines as reference points for rebuilds, and provide ability to revert to stable configuration states.	Х		Yes	
2.2.15.9	Establish process for verifying the accuracy of configuration items, adherence to configuration management processes and identify deficiencies.	Х		Yes	

#	Configuration Management - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.15.10	Provide the State with configuration management reports as required and defined by the State.	Х		Yes	Oracle will require to review what the State has defined.
2.2.15.11	Audit configuration management process and the accuracy of the configuration data.		X	Yes	

### 2.2.16 Capacity Management

Table 17. Capacity Planning – Roles and Responsibilities

#	Capacity Planning – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.16.1	Establish a comprehensive capacity management planning process.	Х		Yes	
2.2.16.2	Utilize and implement tools that allow for the effective capacity management monitoring/trending of IT infrastructure, systems software and other IT components.	X		Yes	
2.2.16.3	Identify future business requirements that will alter capacity requirements; determine capacity management trends and provide reports to the State.	X		Yes	
2.2.16.4	Manage capacity plan based on requirements (e.g. number of users and new applications).	Х		Yes	
2.2.16.5	Gather business requirements for additional users, new applications, etc.	Х		Yes	
2.2.16.6	Utilize application capacity requirements to define database modifications and issue appropriate change requests.	Х		Yes	

#	Capacity Planning – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.16.7	Utilize application capacity requirements to define OS modifications and issue appropriate change requests.	X		Yes	
2.2.16.8	Utilize application capacity requirements to define disk sub-system modifications and issue appropriate change requests.	Х		Yes	
2.2.16.9	Utilize application capacity requirements to define network modifications and issue appropriate change requests.	Х		Yes	
2.2.16.10	Assess capacity impacts when adding, removing or modifying applications.	Х		Yes	
2.2.16.11	Perform monitoring of activities of IT resources (e.g. application, OS, server, database, network, disks, desktops, and laptops) usage to enable proactive identification of capacity and performance issues.	Х		Yes	Only the components in scope which exclude end user configurations.
2.2.16.12	Capture trending information and forecast future State capacity requirements.	Х		Yes	
2.2.16.13	Assess incidents and problems related to throughput performance.	Х		Yes	
2.2.16.14	Recommend changes to system (e.g. components) to improve service performance.	Х		Yes	
2.2.16.15	Assess impact, risk, and cost of capacity changes.	Х		Yes	
2.2.16.16	Maintain capacity levels to optimize the use of existing IT resources and minimize the State's costs to receive the services at the contracted service levels.	Х		Yes	

#	Capacity Planning – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.16.17	Ensure adequate capacity exists within the IT environment to meet service level agreements (SLAs) requirements (see "Appendix XXX, Service Level Agreement Requirements"), taking into account daily, weekly and seasonal variations in capacity demands.	X		Yes	Adequate capacity is available assuming the State has purchased the needed credits to consume.
2.2.16.18	Provide utilization and capacity reporting.	X		Yes	

### 2.2.17 Performance Management

Table 18. System Performance Tuning and Management – Roles and Responsibilities

#	System Performance Tuning and Management – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.17.1	Develop and document service component performance requirements.	Х		Yes	
2.2.17.2	Approve service component performance requirements.		X	Yes	
2.2.17.3	Develop and document performance management procedures that meet policies, procedures and requirements.	х		Yes	Oracle needs to understand what the policies procedures and requirements are.
2.2.17.4	Approve performance management procedures.		Х	Yes	
2.2.17.5	Perform service component tuning to maintain optimum performance in accordance with change management procedures.	Х		Yes	
2.2.17.6	Manage service component resources (e.g. devices and traffic) to meet defined availability and performance SLAs (see "Appendix XXX, Service Level Agreement Requirements").	х		Yes	Oracle will provide services to meet our Services Level Agreements.

#	System Performance Tuning and Management – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.17.7	Provide regular monitoring and reporting of service component performance, utilization and efficiency (e.g. proactive system monitoring).	X		Yes	
2.2.17.8	Proactively evaluate, identify and recommend configuration or changes to configuration (e.g. hardware usage, index creation, index reorganization) which will enhance performance.	x		Yes	
2.2.17.9	Develop improvement plans as required to meet SLAs.	Х		Yes	
2.2.17.10	Authorize improvement plans.	100	Х	Yes	
2.2.17.11	Implement improvement plans and coordinate with third-parties, as required.	Х		Yes	As related to the Oracle Scope
2.2.17.12	Provide technical advice and support to the application maintenance and development staff, as required.	Х		Yes	

# 2.2.18 Disaster Recovery

Table 19. Disaster Recovery - Roles and Responsibilities

#	Disaster Recovery - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.18.1	Define the State's IT service continuity and disaster recovery (DR) strategy, policies, and the State' emergency management requirements and scenarios for the ERP System.		X	Yes	

#	Disaster Recovery - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.18.2	Recommend best practice IT service continuity and DR strategies, policies and procedures.	X		Yes	
2.2.18.3	Define the State's data (e.g. file system, database, and flat files) replication, backup and retention requirements.		Х	Yes	
2.2.18.4	Develop and maintain a detailed DR plan to achieve State requirements. The DR plan shall include, but not be limited to back-ups, storage management, and contingency operations to provide for recovering the State's EFS within an established recovery timeframes.	Х		Yes	Oracle will work with the State to develop the DR plan. Oracle will focus on restoration of the application.
2.2.18.5	Determine key infrastructure components to support the DR strategy.	Х		Yes	
2.2.18.6	Implement DR infrastructure in alternate DR data centers and establish all network connectivity.	Х		Yes	
2.2.18.7	Identify appropriate resources, including an appropriately-qualified emergency coordinator, that support State's emergency preparedness requirements.	х		Yes	
2.2.18.8	Establish processes to ensure IT service continuity, DR and emergency management plans are kept up-to-date and reflect changes in the State's environment and requirements.	х		Yes	
2.2.18.9	Review and approve DR plan.		X	Yes	
2.2.18.10	Establish IT service continuity and DR test requirements.	Х		Yes	With the State
2.2.18.11	Assist the State in IT service continuity, DR and emergency management activities, as requested.	Х		Yes	

#	Disaster Recovery - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.18.12	Perform scheduled IT service continuity, DR and emergency management tests per Stateapproved policies and procedures.	Х		Yes	The offering includes 1 test per year.
2.2.18.13	Coordinate involvement of State personnel for IT services continuity and DR testing.		X	Yes	
2.2.18.14	Track and report IT service continuity and DR test results to the State.	Х		Yes	
2.2.18.15	Develop action plan to address any issues arising from IT service continuity and DR testing results.	Х		Yes	
2.2.18.16	Implement approved action plan and provide ongoing status until the State's requirements are met.	Х		Yes	
2.2.18.17	Initiate the IT service continuity and DR plan in the event of State IT service continuity and DR event and notify all third-party service providers pursuant to the DR policies and procedures.		X	Yes	Oracle will initiate a DR event since this will be managed and maintained in an Oracle data center.
2.2.18.18	Initiate the emergency operations center plan in response to the State-declared Emergency.		Х	Yes	
2.2.18.19	Initiate the IT service continuity and DR plan in the event of a third-party service provider DR situation and notify the State per DR policies and procedures.	Х		Yes	
2.2.18.20	Coordinate with the State during a State-declared IT service continuity and DR situation, a State-declared emergency requiring third-party service provider support of the State emergency operations center, as well as any third-party service provider-declared IT service continuity and DR situation per approved policies and procedures.	Х		Yes	

## 2.2.19 Break Fix Support Services

Offerors shall respond "Yes" or "No" to each requirement in the table below. A "No" response without providing a comment may cause the Offer to be rejected.

Table 20. Break Fix Support Services - Roles and Responsibilities

#	Break Fix Support Services – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.19.1	Design, build and test application fixes.	X		Yes	Oracle will implement fixes relevant to Oracle provided services. The State is responsible for validating the relevant functionality.
2.2.19.2	Design, build and test infrastructure fixes.	Х		Yes	
2.2.19.3	Perform User Acceptance Testing and approve fixes.		Х	Yes	
2.2.19.4	Perform unit testing of fixes.	Х		Yes	
2.2.19.5	Integration and system testing of fixes.	Х		Yes	
2.2.19.6	Coordinate migration of changes to production following the proposed change and release procedures.	Х		Yes	
2.2.19.7	Provide on-site support for the first two occurrences of each of the following cycles: quarter-end, calendar year-end, and fiscal year-end.	Х		Yes	Provided COVID-19 safe protocols provide for on-site services.

# 2.2.20 Continuous Improvement Services

Table 21. Continuous Improvement Services - Roles and Responsibilities

#	Continuous Improvement Services - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.20.1	Assist the State in defining the State future projects and requirements for EFS hosting (e.g. system strategy, availability, capacity, performance, and IT continuity services).	Х		Yes	
2.2.20.2	Document all requirements in State-approved format (e.g. system specifications, data models, network design schematics) including acceptance criteria.	Х		Yes	Oracle need to review and agree to the State approved format.
2.2.20.3	Approve all requirements documents.		X	Yes	
2.2.20.4	Develop design specifications.	Х			
2.2.20.5	Review and approve design specifications.		X	Yes	
2.2.20.6	Perform engineering functions required to implement design plans for additional or new products and services.	Х		Yes	As in scope
2.2.20.7	Implement approved EFS related changes.	Х		Yes	As in scope
2.2.20.8	Conduct annual planning for technology refresh in compliance with software vendor licensing, specifications and upgrades.	Х		Yes	As in scope
2.2.20.9	Keep all Documentation current as break-fix services are completed and upgrades are deployed (system, training, and user). Also continuous process improvement services, i.e., making minor enhancements as requested by the State.	Х		Yes	Following approved change management processes.

# 2.2.21 Minor Enhancements and Ad-Hoc Requests

Table 22. Minor Enhancements and Ad-Hoc Requests – Roles and Responsibilities

#	Minor Enhancement and Ad-Hoc Requests  – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.21.1	Capture and verify service request (e.g. new report and configuration change).	X		Y	
2.2.21.2	Maintain backlog of requests.	Х		Y	
2.2.21.3	Create conceptual and functional Design.	Х		Y	Based on the State requirements.
2.2.21.4	Create technical design and document the design.	Х		Y	Based on the State requirements.
2.2.21.5	Estimate effort, perform application impact assessment, and determine if the request is within the minor enhancement level of effort of 80 hours.	Х		Y	
2.2.21.6	Review and approve ad hoc requests.		X	Υ	
2.2.21.7	Create and review application configuration change/modification plans.	Х		Y	
2.2.21.8	Conduct walk-through review of configuration change/modification.	Х		Y	
2.2.21.9	Program, compile and document configuration changes/modifications.	Х		Y	
2.2.21.10	Perform unit testing on all changes.	Х		Υ	
2.2.21.11	Perform string testing.	Х		Υ	
2.2.21.12	Perform integration testing.	Х		Υ	
2.2.21.13	Perform regression testing.	Х		Υ	
2.2.21.14	Perform user acceptance testing for all changes.		Х		

#	Minor Enhancement and Ad-Hoc Requests  - Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.21.15	Plan and manage end-user training and adoption of modifications.	Х		Y	End User training will be delivered by OU.
2.2.21.16	Deliver end-user training.		Х	Υ	Consumed via the web4
2.2.21.17	Update user documentation and training materials.	0,	Х	Y	
2.2.21.18	Maintain technical architecture documentation.	Х		Υ	
2.2.21.19	Evaluate impact on applications DR plan and coordinate and update the change in the DR plans, if applicable.	Х		Y	
2.2.21.20	Evaluate impact on system capacity and performance.	Х		Y	

#### 2.2.22 Documentation

Table 23. Documentation – Roles and Responsibilities

#	Documentation – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.22.1	Create and modify existing documentation.	х		Yes Oracle will document existing documentation specific to this implementation and current status well as Oracle modified status.	
2.2.22.2	Maintain overall accountability for management of documentation.	Х		Yes	
2.2.22.3	Update existing documentation as required in order to enhance or improve quality of documentation.	Х		Yes	Where mutually agreed on.

#	Documentation – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.22.4	For EFS and in-scope application functionality, update existing documentation in order to enhance or improve quality of documentation.	Х		Yes	Oracle will document existing documentation specific to this implementation and current status as well as Oracle modified status.
2.2.22.5	Update existing EFS documentation as required in order to enhance or improve the quality of the documentation.	Х		Yes	Oracle will document existing documentation specific to this implementation and current status as well as Oracle modified status.
2.2.22.6	Update existing document for infrastructure (e.g. operating system, disk, and network) in order to enhance or improve the quality of the documentation.	Х		Yes	Oracle will document existing documentation specific to this implementation and current status as well as Oracle modified status.
2.2.22.7	Document problem/request resolution in the help desk tool utilized by the State.	Х		Yes	Oracle uses My Oracle Support. Oracle needs to understand the help desk tool utilized by the State and the feasibility of populating status.
2.2.22.8	Create new documentation for enhancements.	X		Yes	
2.2.22.9	Create user documentation for enhancements.	Х		No	
2.2.22.10	Create technical documentation for enhancements.	Х		Yes	
2.2.22.11	Create documentation to address existing gaps in documentation of current application configuration and functionality.	Х	2	Yes	This needs further definition and agreement between Oracle and the State.

# 2.2.23 Service Management and Quality Assurance (QA)

Table 24. Service Management and Quality Assurance - Roles and Responsibilities

#	Service Management and QA- Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.23.1	Propose account management structure, planning and procedures.	X		Yes	
2.2.23.2	Review account management structure, planning and procedures and propose changes to align with the State requirements and organization.		X	Yes	
2.2.23.3	Maintain and implement account management structure, planning and procedures accordingly.	Х		Yes	
2.2.23.4	Develop a service order process that clearly defines how to order change or delete services.	Х		Yes	
2.2.23.5	Recommend criteria and formats for administrative, service activity and SLA reporting.	Х		Yes	
2.2.23.6	Approve criteria and formats for administrative, service activity and SLA reporting.		Х	Yes	
2.2.23.7	Develop and implement customer satisfaction program for tracking the quality of service delivery.	Х		Yes	This is included for the overall service not to the end user level.
2.2.23.8	Provide reporting (e.g. statistics, trends, audits).	Х		Yes	
2.2.23.9	Receive business requests, monitor and report progress to business.		Х	Yes	
2.2.23.10	Prioritize and approve major project or service requests.	3	Х	Yes	
2.2.23.11	Approve requests requiring EFS configuration changes.		X	Yes	
2.2.23.12	Maintain prioritization of project or major service requests.		X	Yes	

#	Service Management and QA- Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.23.13	■ Schedule and lead super user meetings		Х	Yes	
2.2.23.14	■ Attend super user meetings		X	Yes	
2.2.23.15	Maintain and document EFS SLAs.		X	Yes	
2.2.23.16	■ Super user team meetings		X	Yes	
2.2.23.17	<ul> <li>Maintain and document application and database SLAs</li> </ul>		Х	Yes	
2.2.23.18	<ul> <li>Maintain and document SLAs for infrastructure and support components</li> </ul>	<i>y</i>	Х	Yes	
2.2.23.19	Perform quality assurance and quality control programs.		Х	Yes	
2.2.23.20	Establish operations and service management quality assurance and control programs.	3	Х	Yes	
2.2.23.21	<ul> <li>Assess and document stakeholder expectations</li> </ul>		Х	Yes	
2.2.23.22	<ul> <li>Perform quality management assessment reviews and communicate to stakeholders</li> </ul>		Х	Yes	
2.2.23.22	<ul> <li>Monitor progress against quality management assessment action items</li> </ul>		Х	Yes	
2.2.23.23	Provide application SLA reporting based on agreed upon form and format.	Х		Yes	

# 2.2.24 Service Level Reporting

Table 25. Service Level Reporting-Roles and Responsibilities

#	Service Level Reporting – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.2.24.1	Approve and document SLAs and reporting cycles.		X	Yes	
2.2.24.2	Document SLA requirements and agreements.		Х	Yes	
2.2.24.3	Report on service performance improvement results.	Х		Yes	
2.2.24.4	Measure, analyze, and provide management reports on performance relative to requirements.	Х		Yes	
2.2.24.5	Develop SLA improvement plans where appropriate.	Х		Yes	
2.2.24.6	Review and approve improvement plans.		X	Yes	
2.2.24.7	Implement improvement plans.	Х		Yes	
2.2.24.8	Review and approve SLA metrics and performance reports.		Х	Yes	

# 2.3 Business Process Outsourcing (Optional)

Table 26. Business Process Outsourcing - Roles and Responsibilities

#	Business Processing Outsourcing – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.3.1	Print and distribute paychecks and deposit advices.	X		No	Optional and not included in the proposed solution.
2.3.2	Print and distribute vendor checks.	Х		No	Optional and not included in the proposed solution.

#	Business Processing Outsourcing – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.3.3	Generate Internal Revenue Service (IRS) related forms and reports including, but not limited to 941, W-2, W-2C, 1099.	Х		No	Optional and not included in the proposed solution.
2.3.4	Establish printing services in Hawaii on the Island of Oahu.	Х		No	Optional and not included in the proposed solution.

# 2.4 Project Team Facilities(Optional)

Table 27. Project Team Facilities - Roles and Responsibilities

#	Project Team Facilities – Roles and Responsibilities	Offeror	State	Offeror Response	Offeror Comment
2.4.1	Provide Project Team Facilities sufficient to support co-located Offeror and State staff during the execution of Implementation Services (e.g. conference rooms, furniture, testing and training labs; workstations, printers, Internet and network connectivity).	X		No	Optional and not included in the proposed solution.
2.4.2	Establish Project Team Facilities within the Civic Center, downtown Honolulu, Hawaii	X		No	Optional and not included in the proposed solution.



# **Appendix F – Service Level Agreement Requirements**RFP-ERP-2020

APPENDIX F 1 RFP-ERP-2020

#### 1.0 Overview

The State owns the EFS configuration, custom developed/bolt-on applications, and any data entered into EFS by the State. The Offeror shall meet Service Level Agreement (SLAs) commitments and requirements during Implementation and Ongoing Services at all times. SLAs will be evaluated on the sufficiency of descriptions and definitions, breadth of solution coverage, commitment to meeting industry standards, reporting capability, clarity of performance standards and service credit calculations, and ability to meet other SLA requirements in this RFP.

## 2.0 Implementation and Ongoing Services SLAs

#### 2.1 Offeror Solution SLAs

The Offeror shall provide all SLAs applicable to their proposed solutions, including but not limited to system availability, recovery time, incident response time, and incident resolution time and so forth, in successful achievement of service level requirement goals for this RFP.

### 2.2 Go-Live Support and M&O (Maintenance and Operations) Services SLAs

The Definitions and SLAs in the table below apply to both Go-Live Support

Table 1. EFS Availability Definitions

Definition	The percentage of total time during which all functions of the EFS is available to the State except for scheduled maintenance.
Pre-Scheduled Downtime Requirements	All pre-scheduled system downtime, unless otherwise agreed upon in advance by the State, will occur:
	<ul> <li>For the Production systems with 24x7x365 requirements—all pre- scheduled maintenance shall be performed based on the State's business needs and during approved maintenance windows only.</li> </ul>
	b. For non-Production systems having non-24x7x365 requirements—pre- scheduled maintenance shall be performed based on the State's business needs and during approved maintenance windows only.

**Table 2. General System Availability Definitions** 

General System Availability Service Classes			
SLA Classification	System Type		
Services Class 1	Production system environment		
Services Class 2	Test environment		
Services Class 3	Development environments		

APPENDIX F 1 RFP-ERP-2020

Following is the expectation of the State for Go-Live and M&O SLAs. Offerors shall respond "Yes" or "No" to each requirement in the table below. "No" response shall provide a comment. If the SLAs below do not fit Offeror's SLA policy, Offeror may provide explanation in the comment or attach a separate document as needed to clearly describe Offeror's proposed process. Offeror shall include, at minimum, same requested information or equivalent information.

Urgency	Impact	Offeror Response	Offeror Comment
<ul> <li>Level 1 - Emergency - System outage on Service Class 1.</li> <li>SLA for responding to Defect call is 15 minutes, includes acknowledging Defect, logging Defect in the Problem Report Database and providing a ticket/tracking number to the caller.</li> <li>SLA for reporting assessment or resolution and estimated fix date/time for all System components is 2 clock hours.</li> <li>SLA for using best efforts to correct Defect associated with System component is 12 clock hours.</li> <li>SLA for correction of Defect or workaround associated with System component is 24 clock hours.</li> <li>Note: This includes all layers (application, database, and connectivity).</li> </ul>	Critical	Yes	Oracle standard for Severity 1 is notification in 15 minutes, update to the customer every hour where material progress has been made and target is 4 hours resolution for an (unplanned outage caused by Infrastructure and/or component) and 24 hours (Service Interruption (functional failure)).
<ul> <li>Level 2 - Disabled, No Workaround – A System function or System component does not work as required, and no acceptable workaround is available.</li> <li>SLA for responding to Defect call is 15 minutes, includes acknowledging Defect, logging Defect in the Problem Report Database and providing a ticket/tracking number to the caller.</li> <li>SLA for reporting assessment or resolution and estimated fix date/time for all System components is 2 clock hours for Service Class 1 and 4 hours for Service Class 2 or 3.</li> <li>SLA for using best efforts to correct Defect associated with System component is 24 clock hours.</li> <li>SLA for correction of Defect or workaround associated with System component is 48 clock hours.</li> <li>Note: This includes all layers (application, database, and connectivity).</li> </ul>	Critical	Yes	Oracle standard for Severity 2 production is notification in as soon as possible, updates where material progress has been made and target is 96 hours resolution.  This does not include Application bugs.

APPENDIX F 2 RFP-ERP-2020

<ul> <li>Level 3 - Disabled, Workaround – A System function or System component does not work as required, but a workaround that is acceptable to State is available.</li> <li>SLA for responding to Defect call is 1 hour, includes acknowledging Defect, logging Defect in the Problem Report Database and providing a ticket/tracking number to the caller.</li> <li>SLA for reporting assessment or resolution and estimated fix date/time for all System components is 8 clock hours for Service Class 1 and 12 hours for Service Class 2 or 3.</li> </ul>	High	Yes	Based on business impact, this could be considered an Oracle Severity Level 2. The customer sets all initial severity levels.  Oracle does not provide and SLA on Severity 3 and Severity 4 Service Requests.
<ul> <li>SLA for using best efforts to correct Defect associated with System component is 5 calendar days.</li> </ul>			
SLA for correction of Defect associated with System component is 8 calendar days.  Note: This includes all layers (application, database, and connectivity).			
<ul> <li>Level 4 - Minor - Non-critical but having a negative effect on one or more System functions or System components.</li> <li>SLA for responding to Defect call is 1 hour, includes acknowledging Defect, logging Defect in the Problem Report Database and providing a ticket/tracking number to the caller.</li> <li>SLA for reporting assessment or resolution and estimated fix date/time for all System components is 24 clock hours for all Service Classes.</li> <li>SLA for using best efforts to correct Defect associated with System component is 8 calendar days.</li> <li>SLA for correction of problem associated with System component is 11 calendar days.</li> <li>Note: This includes all layers (application, database, and connectivity).</li> </ul>	Medium	Yes	Based on business impact, this could be considered an Oracle Severity Level 2. The customer sets all initial severity levels.  Oracle does not provide and SLA on Severity 3 and Severity 4 Service Requests.

APPENDIX F 3 RFP-ERP-2020

#### 2.3 System Operations and Administration SLAs

Offerors shall respond with a description of the service that is provided for each item in the table below.

Table 3. EFS Operations and Administration SLAs

#	System Operations and Administration SLAs	Offeror Response
2.3.1	EFS upgrade, enhancement pack, etc.	This is a scheduled change request activity and will follow the change process.
2.3.2	EFS copy (cloning)	This is a scheduled change request activity and will follow the change process.
2.3.3	EFS Patches, etc.	This is a scheduled change request activity and will follow the change process.
2.3.4	Incident related (unplanned) Stop/Start	See the Severity Level table First report (human or automated) Stops at service restoration. (If Oracle is waiting on customer to validate that time is not included.)
2.3.5	Scheduled (planned) Stop/Start	Scheduled changes fall within the change management window.
2.3.6	Performance Tuning	Ongoing activity. Any material changes to the environment will be documented through the change management process.

#### 2.4 Backup and Restore SLAs

Offerors shall implement and maintain backup and restoration capabilities for all data, applications, and component configurations. Offerors shall perform incremental backups, full backups, and full archive backups according to the industry best backup and restore practice. Recovery procedures will be capable of restoring service delivery for failed data, applications, and component configurations according to the Restore SLAs. Furthermore, it is required that EFS backup/restore procedures must guarantee data integrity across landscapes.

Oracle will make operation backups regularly to support the management of the system. For the Services, Oracle will:

- 1. Configure the Services for automated backup, including configuration of OCI components.
- Assist You to recover database and application functionality from backups as required.

#### Backups typically include:

- · Database and code tree
  - Daily backups retained for one week
  - Semiweekly backups retained for four weeks
- Archive logs

- Daily backups retained for one day
- Semiweekly backups retained for four weeks

Oracle has not included an archive solution that retains data longer than listed above. Disaster Recovery services will retain data that is in the system. See the responses below. The State can determine the type of archiving they require and Oracle will propose the necessary resources to support it.

#### 2.5 Disaster Recovery SLAs

Offerors shall respond with a description of their disaster recovery methods and timeframe in the table below. The State would prefer a disaster recovery site <u>not</u> located in the Hawaiian Islands, to mitigate a local natural disaster.

Table 4. Disaster Recovery SLAs

#	Service Type	Service Measure	Performance Requirement	Offeror Response
2.5.1	Disaster Recovery – recovery of application and systems in a separate disaster recovery location(s)	Recovery Time	48 Hours	Oracle provides Disaster Recovery Services with a 1 hour RPO and 12 hour RTO. Oracle will work with you to develop your Disaster Recovery Plan and will execute the test annually. Remediation and updating the documentation are included in the service.

#### 3.0 SLA Performance Standards and Service Credits

Offeror shall describe method of applying service credits for non-compliance with any of the SLAs provided, including requirements described in this document, and how those service credits are applied to future service and maintenance costs.

#### Oracle Severity Level Definitions:

SR Severity Level	Severity Level Assignment Definition
Severity Level 1	Critical Business Impact: The problem causes complete loss of service for the environment. Work cannot reasonably continue, the operation is mission critical to your business, and the situation is an emergency. A severity Level 1 problem has one or more of the following criteria:  • Data Corrupted

	A crucial function is not available
	<ul> <li>System hangs indefinitely, causing unacceptable or indefinite delays for resources or response</li> </ul>
	System crashes, and crashes repeatedly after restart attempts
Severity Level 2	Significant Business Impact: Incidents that result in part of the environment being down causing severe loss of service. No acceptable workaround is available; however, business operations in the environment can continue to be conducted in a restricted manner.
Severity Level 3	<b>Some Business Impact:</b> The problem causes minor loss of service for the environment. The impact is an inconvenience, which may require a workaround to restore functionality.
Severity Level 4	Minimal Business Impact: The problem causes no loss of use of the Applications environment. The result is a minor error, incorrect behavior, or a documentation error that does not impede the operation of the system within the Application environment.

#### Managed Applications Service Levels:

Oracle is committed to providing our Cloud Services customers a top-quality cloud service, backed by solid service levels. Oracle's base service levels reflect the industry-standard metrics by which Oracle's service to you can be measured.

- Application Availability: Oracle's service level commitments feature application availability, that is, the percentage of time when the Oracle application is available for use by your employees. The application is intended to be available on a 24x7 basis with certain exclusions, such as periodic maintenance.
- Resolution Time: Oracle's service level commitments also feature a resolution close time, which is the length of time it takes to resolve and close a Severity 1 Service Request, or to create a work-around that allows the Service Request to be downgraded to a lower level of impact. This commitment applies only to the most important outages, and it excludes outages involving customizations or bug fixes to the base application code.
- Performance against Statement of Work service level allows customers to receive a credit if Oracle fails to perform the services in accordance with the Advanced Customer Services specifications in the schedules.

APPENDIX F 6 RFP-ERP-2020

Service Level	Service Level Target	Credit Criteria	Credit %
Application Availability	99.7%	>= 99.0% and < 99.7%	2%
		< 99.0%	5%
Service Request Resolution Time Severity Level 1	<ul> <li>4 hours (Unplanned Outage caused by Infrastructure and/or component)</li> <li>24 hours (Service Interruption (functional failure))</li> </ul>	90% of SRs resolved within target	3%
Service Request Resolution Time Severity Level 2	96 hours	90% of SRs resolved within target	2%
Performance Against Delivery Policies	Performance of Managed Cloud Services in accordance with the Oracle Managed Cloud Service Delivery Policies for Oracle Public Cloud	As described in the applicable schedule	

Oracle believes these service levels will deliver exceptionally reliable service to you. ACS has high standard service levels for our managed services and commits to helping you reduce your closure time issues.

#### SLA policy includes:

- **Service Level Target**. The level of performance under the applicable Service Level that Oracle endeavors to achieve on a monthly basis.
- Credit Criteria. If the monthly performance measured for a Service Level is below the Service Level Target, then the credit criteria are used to determine the applicable Service Level Credit.
- Service Level Credit %. The percentage of monthly fees for the Services to be credited based on the credit criteria.

The aggregate maximum Service Level Credit is ten percent (10%) of the total fees paid for the Services for the month in which the Service Level Credit accrued.

The Service Level Credit for Performance Against Delivery Policies Service Level is ten percent (10%) of the fees paid for the Services for the month in which the Service Level Credit accrued, MINUS any Service Level Credit calculated under the corresponding Application Availability Service Level in connection with the Services provided in such month, MINUS any Service Level Credit earned under the Service Request Resolution Time Service Levels in connection with the Services provided in such month.



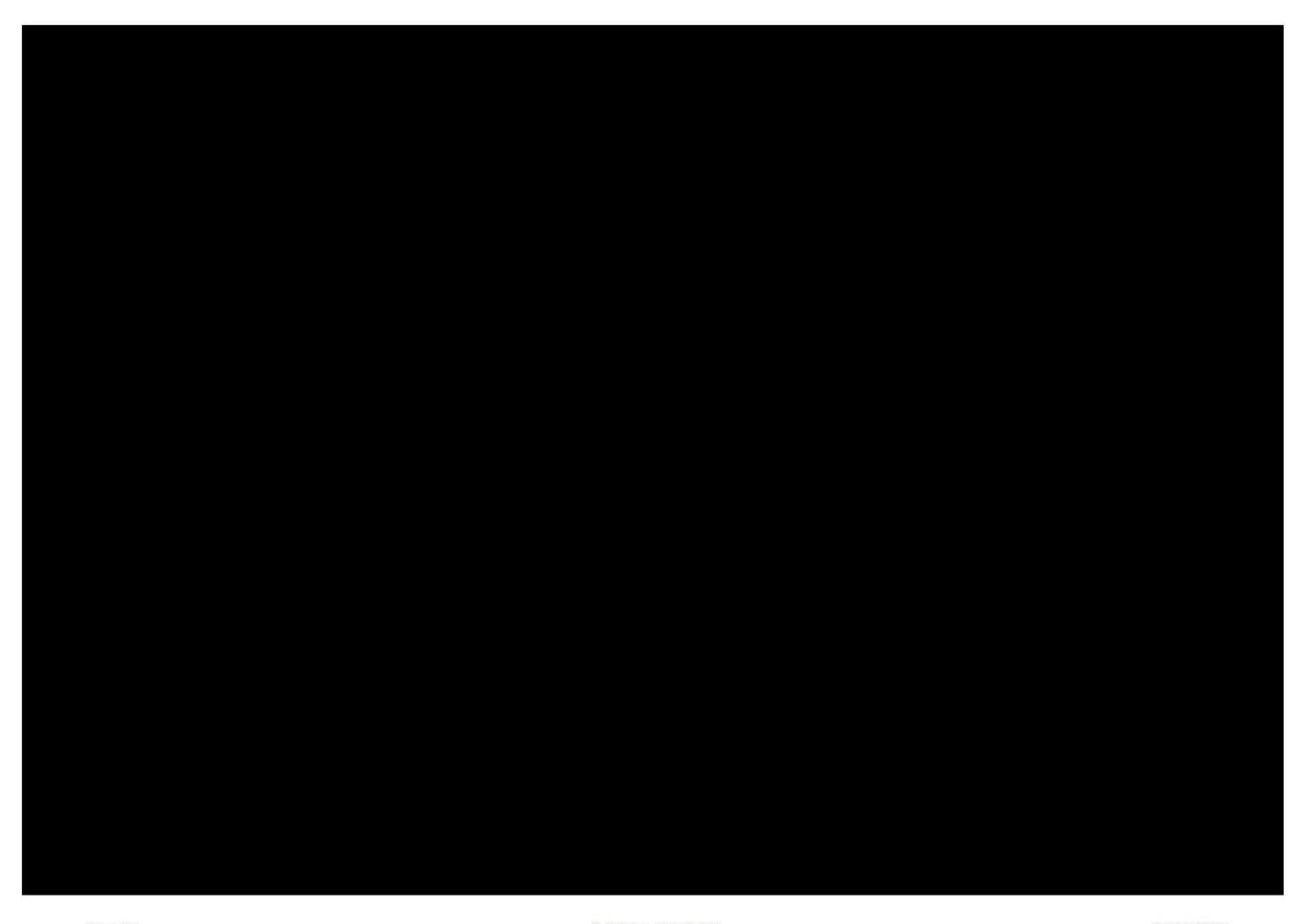
Appendix L: Cost Workbook RFP-ERP-2020



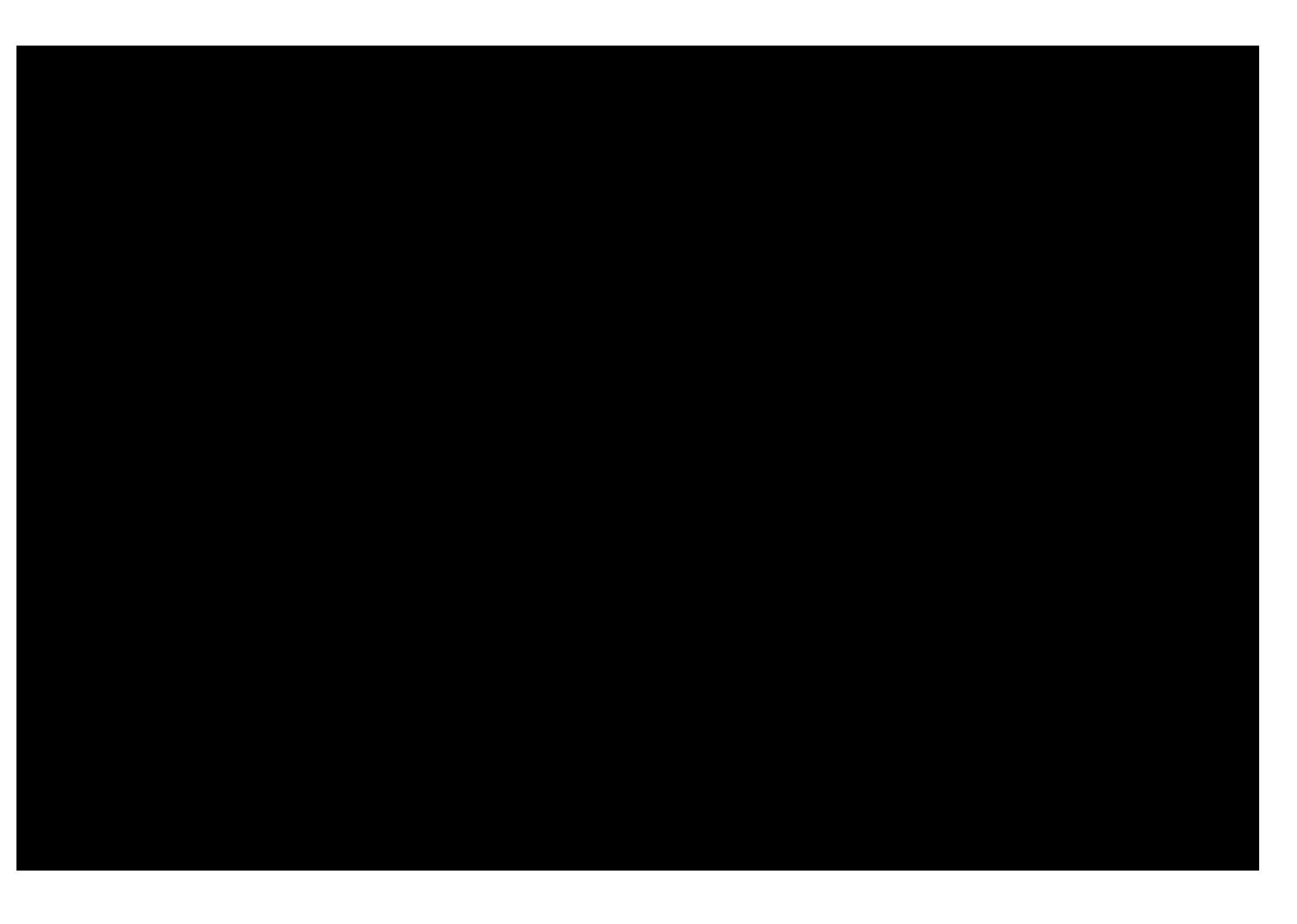




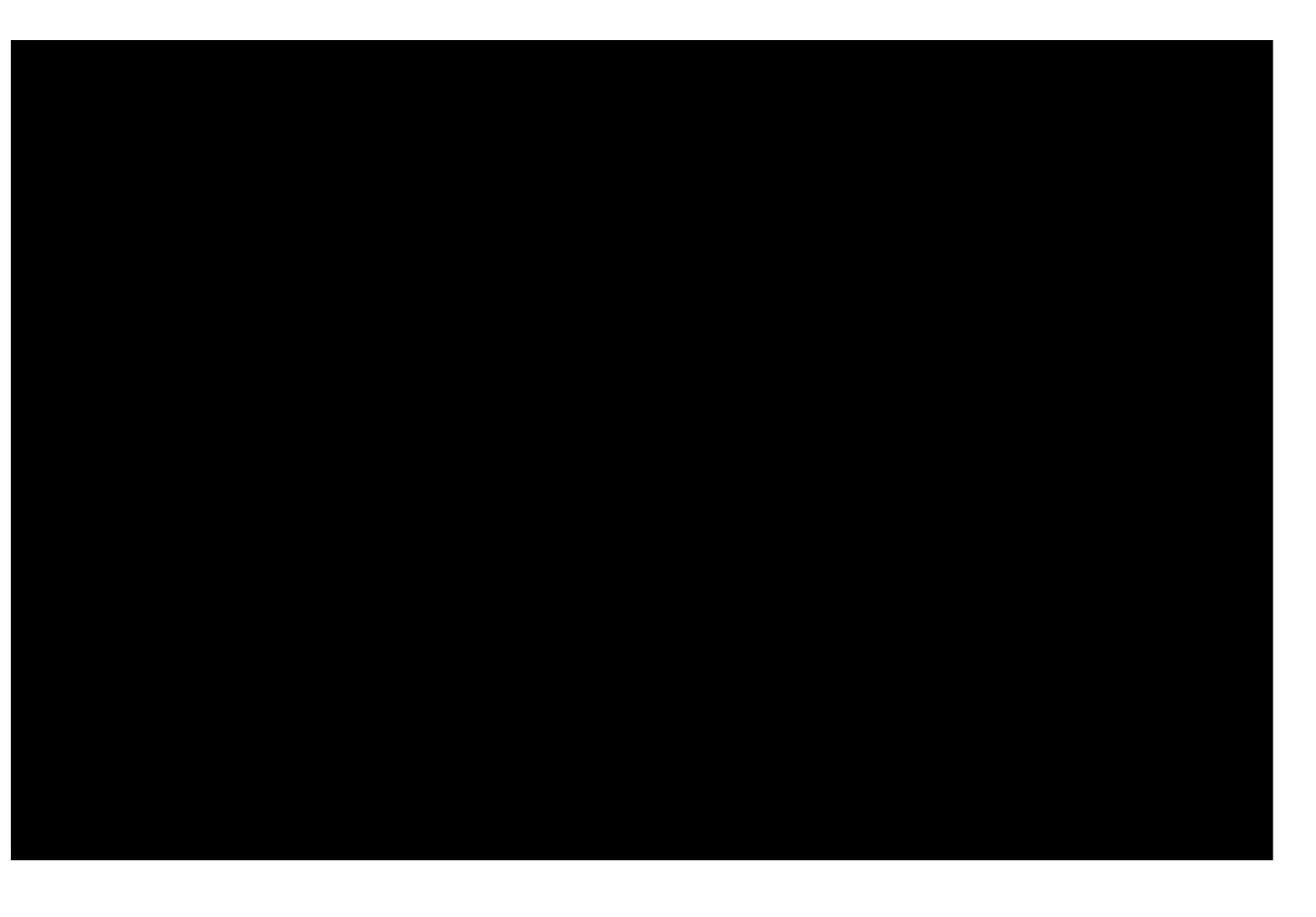






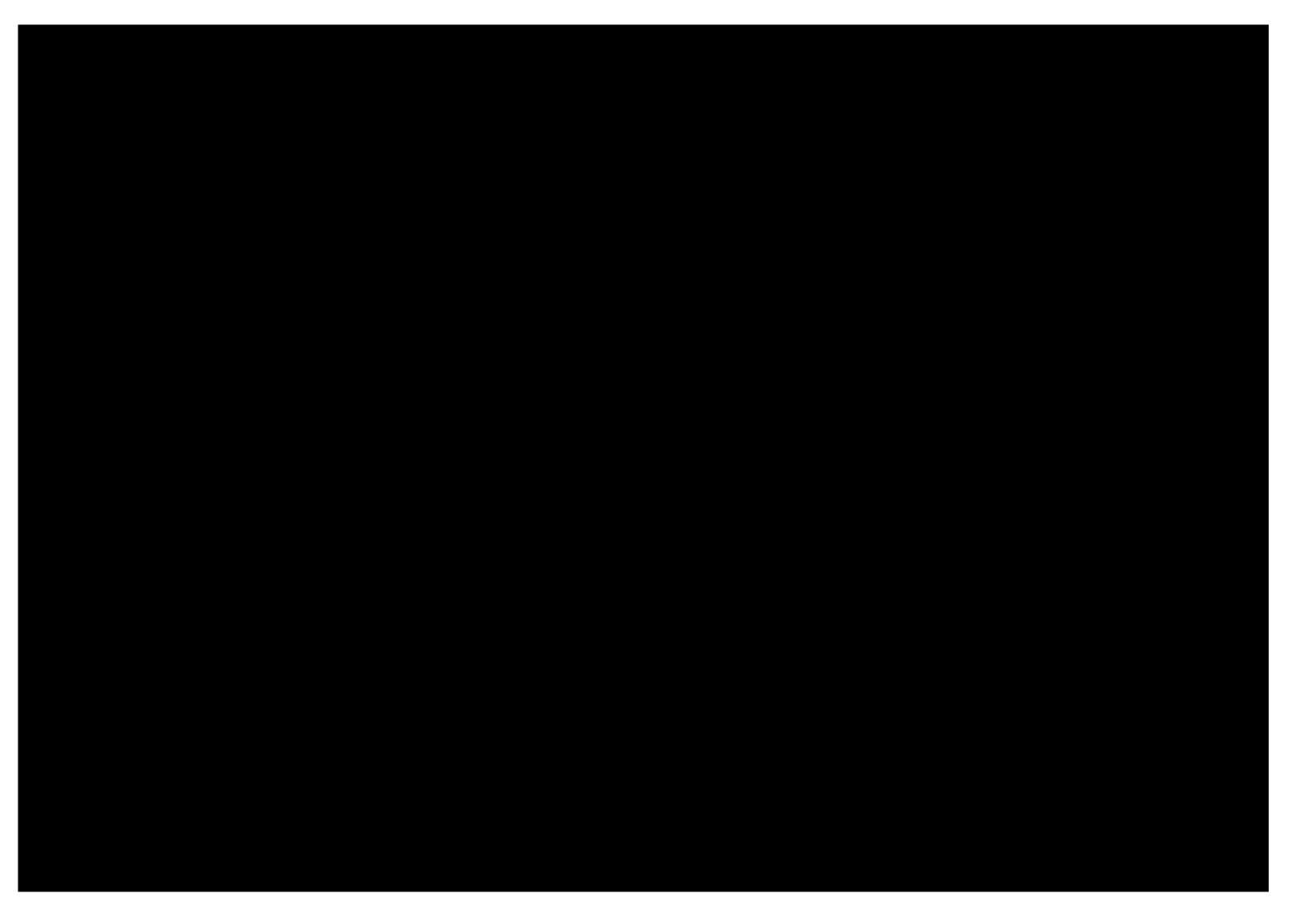




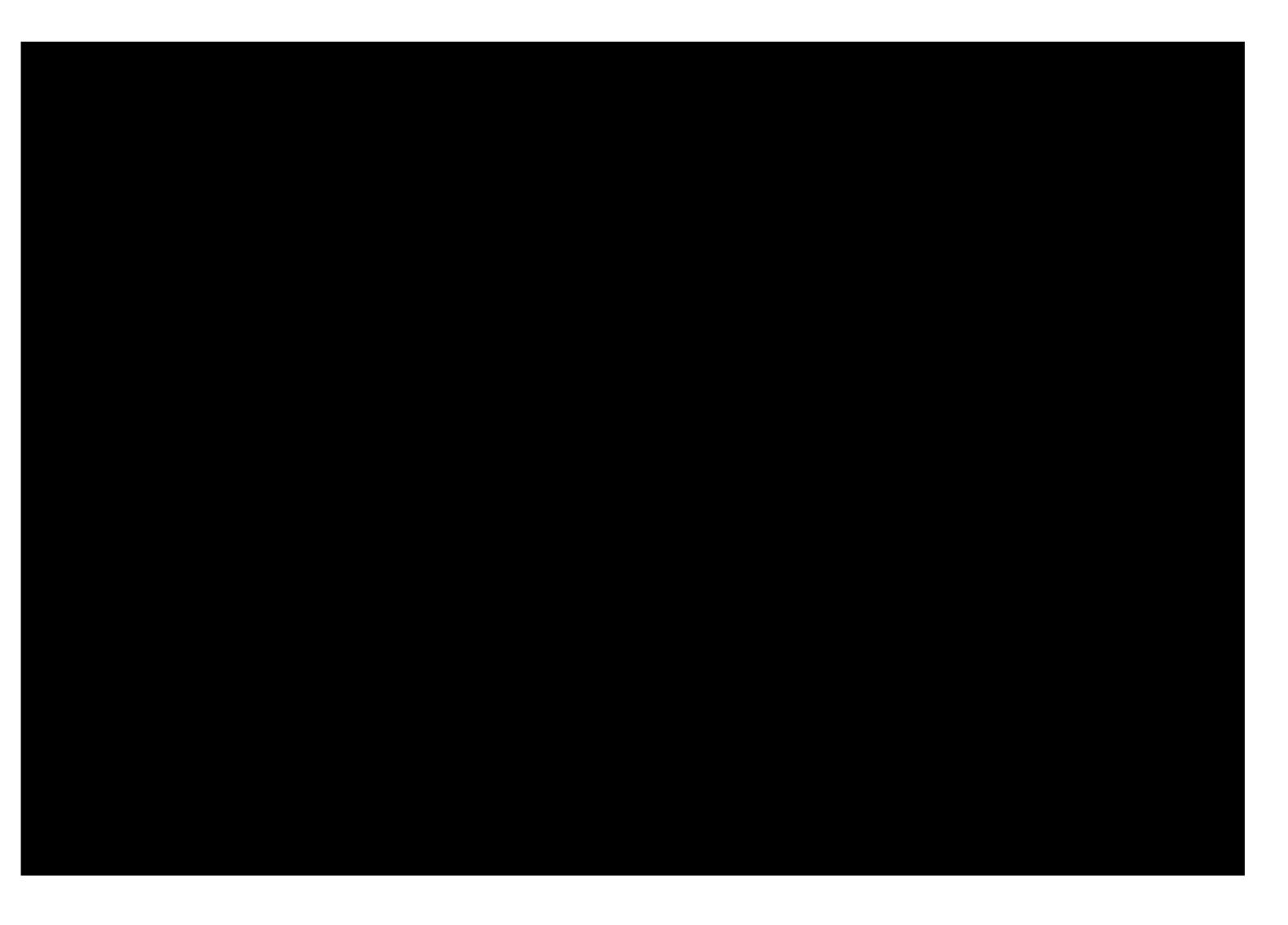




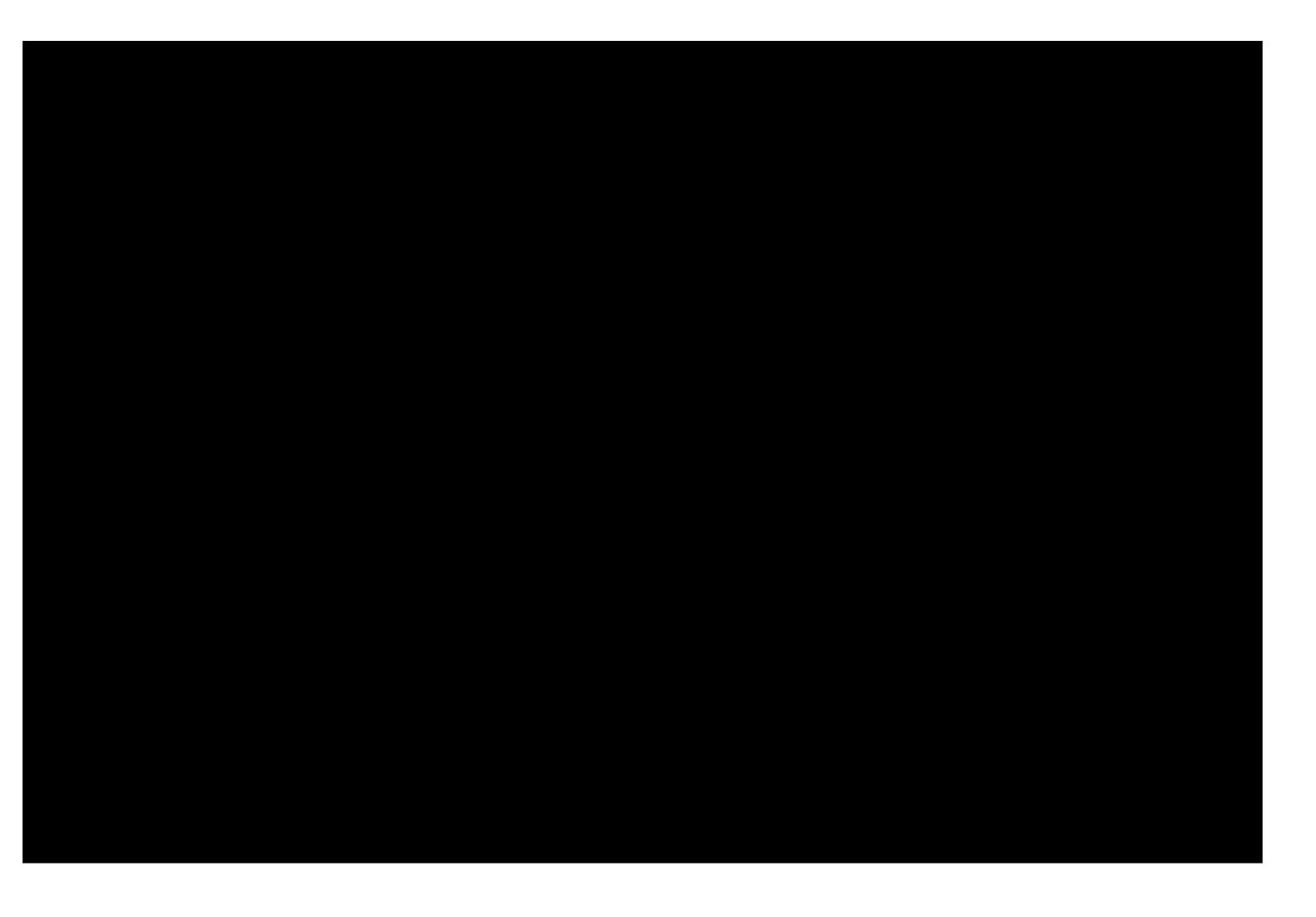














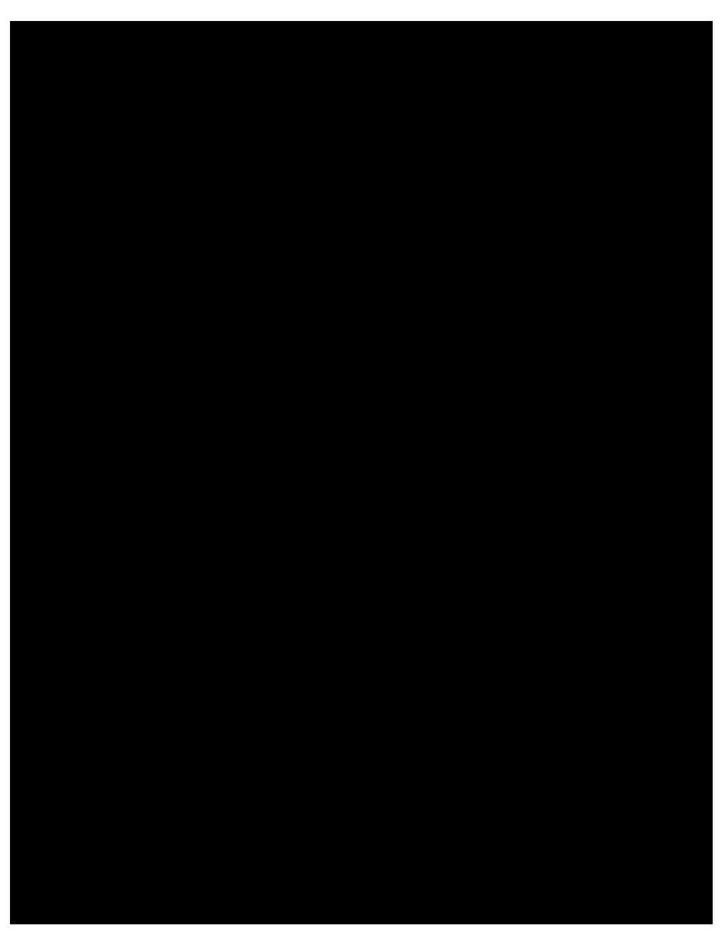


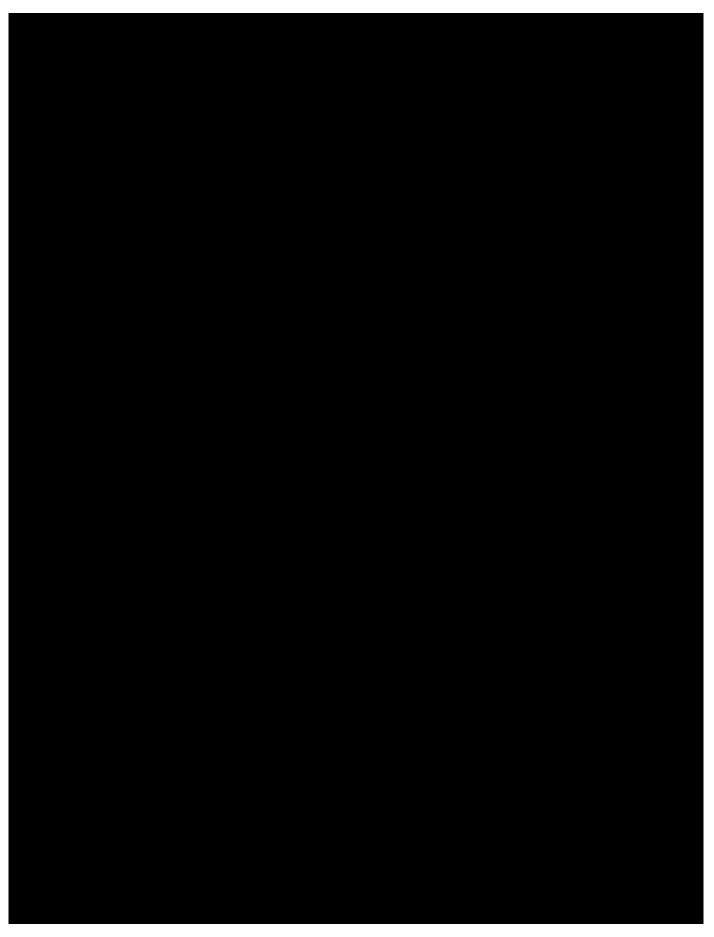


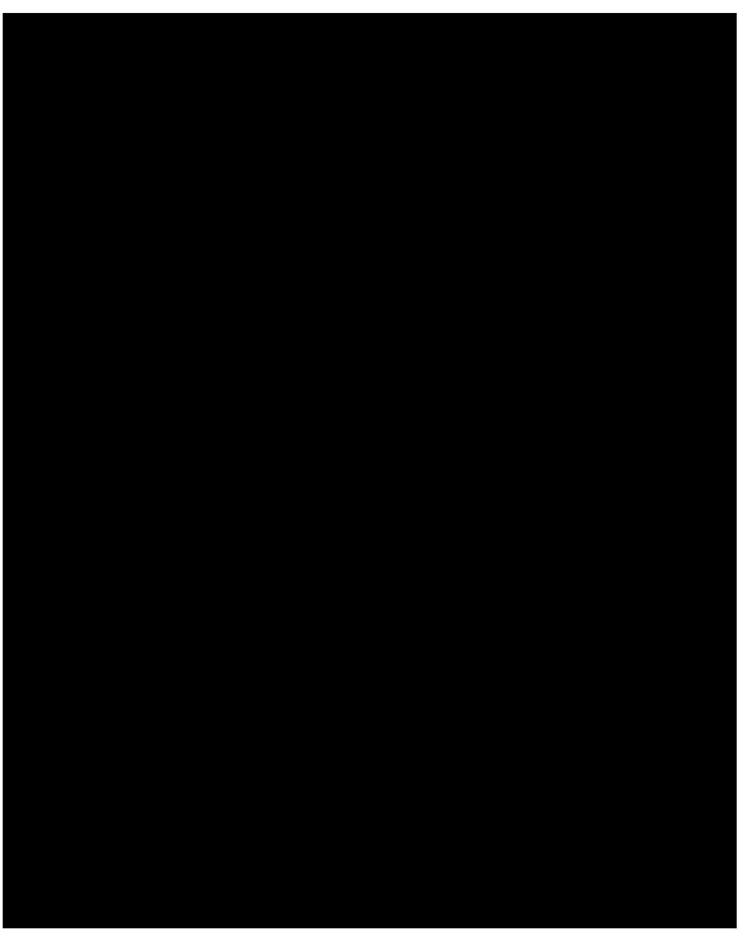


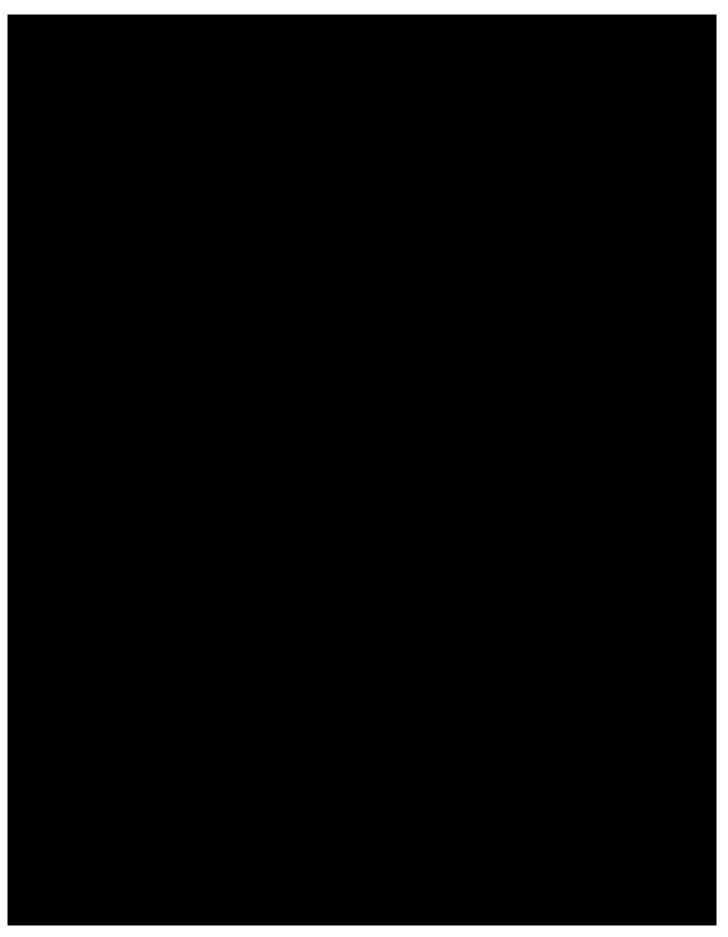


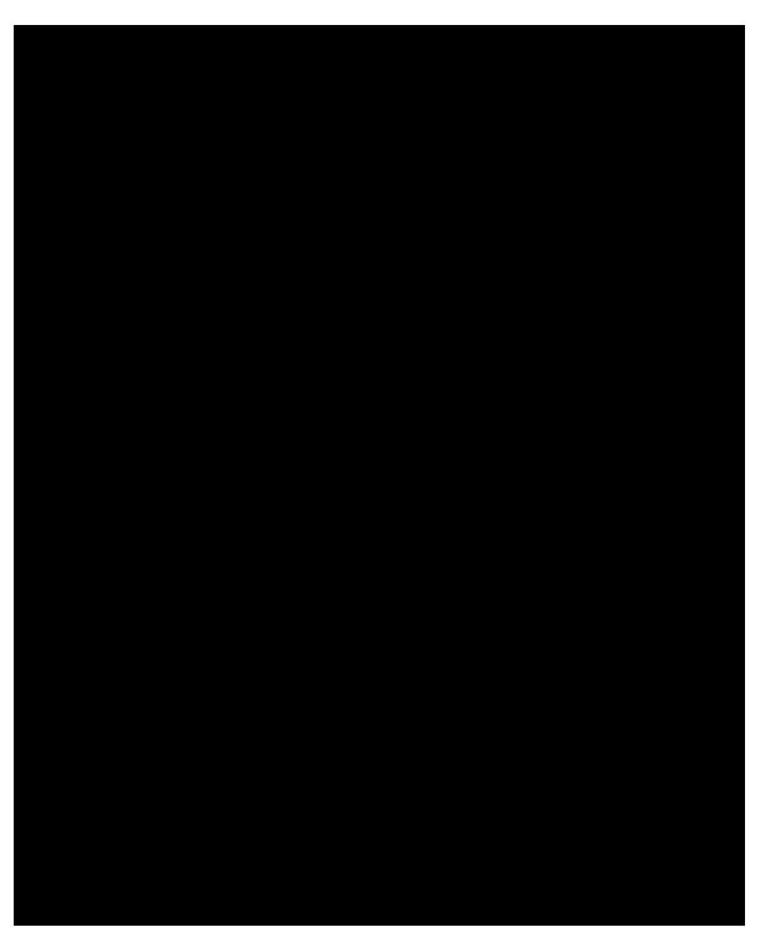


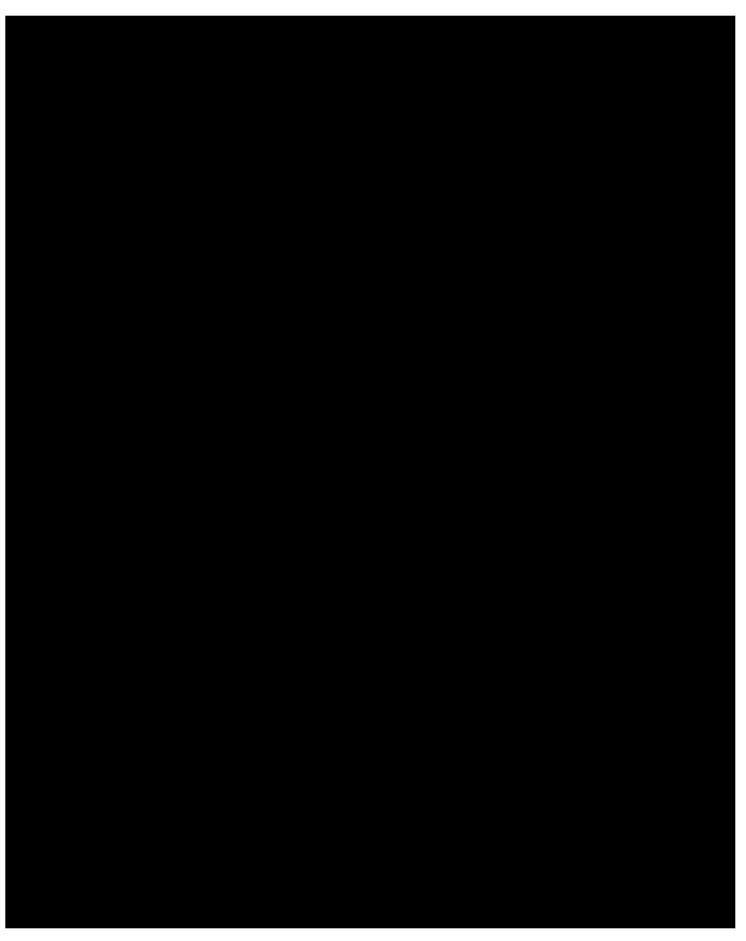




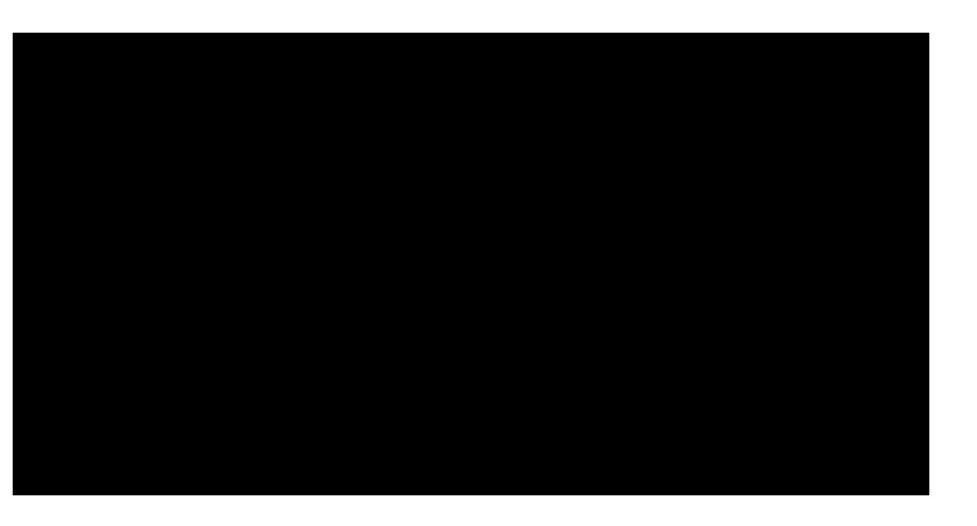






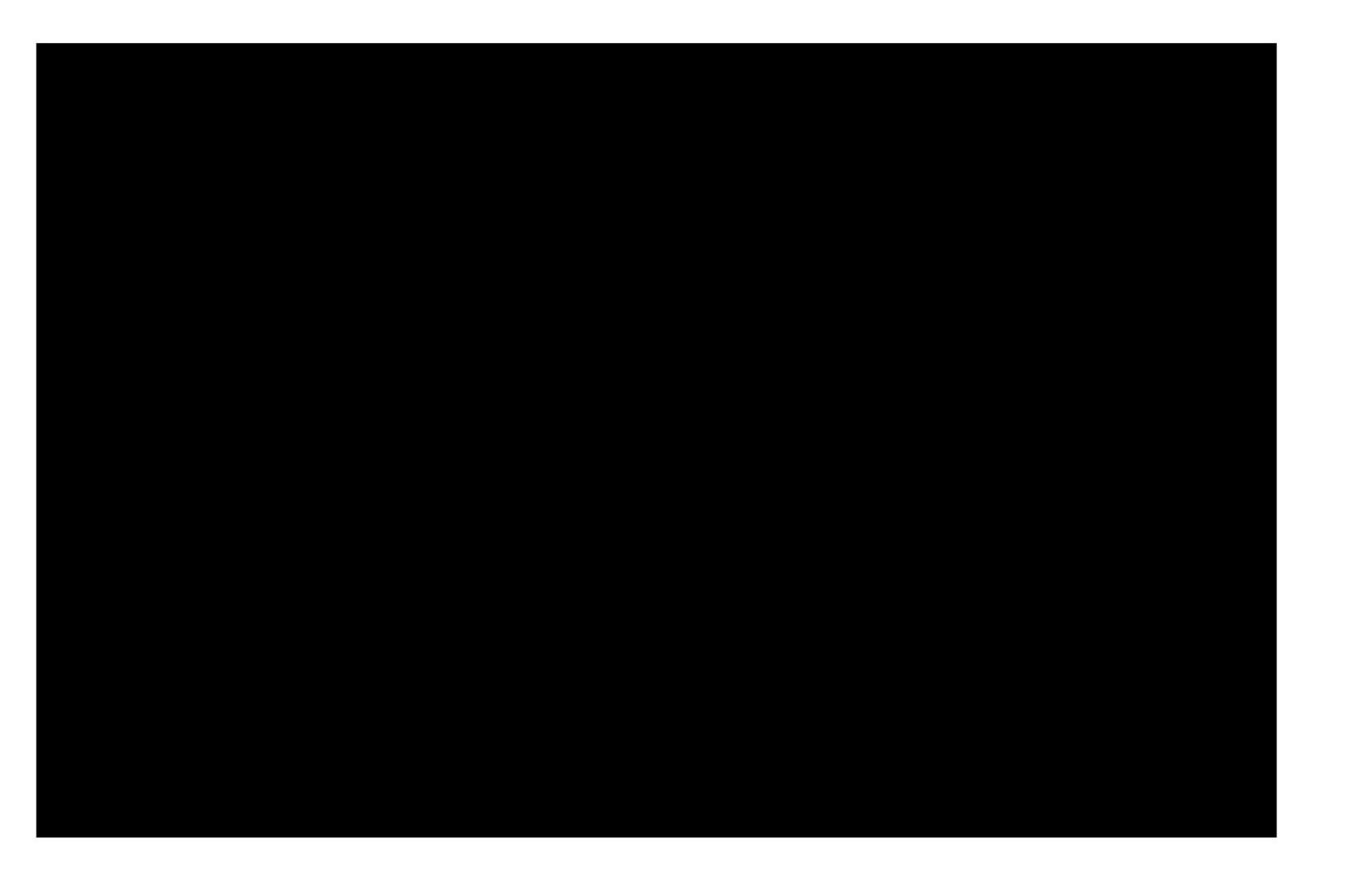






























## **Attachment Form for RFP-ERP-2020**



### **Resumes and Staffing**

The team has reviewed and considered the State's roles and Responsibilities from Table 1 of Appendix K.

Oracle is responding to this RFP with a hybrid Oracle/Na Ali'i (the Team) staffing approach for this project. We plan to combine the experience of Oracle PeopleSoft mainland subject matter experts with the Na Ali'i Hawaii based PeopleSoft implementation team. This combination of experience creates a well-rounded team that has deep government ERP experience coupled with staffing that are residents who are mindful of, sensitive to, and aligned with the local corporate culture.

Both Oracle and Na Ali'i have successfully delivered projects at the state, local and federal level in Hawaii by fostering strong working relationships based on mutual trust, respect, and open communication. We are mindful of the need to be sensitive around the ways of Hawaiian island culture and will strive to create a harmonious and productive working relationship with the State of Hawaii's work force.

This approach enhances the spirit and intentions of both parties to create a public - private partnership between the State's project team and our team. This critical success factor cannot be minimized, as experience shows, ineffective communications has a negative impact on successful project execution. Our team brings to the table both experience and professionalism delivered with a local style.

#### **Local Office Location**

The Oracle team's local Hawaii office is located at 3375 Koapaka Street, approximately 3.8 miles from the Hawaii State capitol. Should the Oracle team be awarded this contract, we plan to open a satellite office located within the downtown Honolulu corridor specifically for the purpose of hosting project-based meetings and presentations.

For on-site support, Na Ali'i will be providing experienced and skilled resources that work in step with Oracle's local and remote project management, transition support and ongoing support for a transparent and seamless project delivery and support.

Oracle uses a team approach to delivery providing the right resources for the right roles at the right time. Resources are identified at the signing of the agreement and as such we have provided sample resumes that represent the quality, certification and training of our highly experienced delivery resources.

### **Oracle Services Deployment Model and Sample Resumes**

The Oracle Advanced Customer Services (ACS) and Managed Services deployment model is a true long term managed services solution that offers the benefits of a committed service for a committed price, it assumes Oracle owns delivery risk and productivity incentives, it is lower cost operating model, there is a transparent line of site between the service and the cost, and it fosters IT planning and documentation of knowledge.



Oracle's teams of resources provide the right resource at the right time with the experience and skills to support the committed service levels.

In addition to the managed services model ACS offers T&M services that support an equally robust resource model with highly skilled and experienced resources for local or remote services.

#### COVID-19

Oracle's deployment model has proven itself through the current COVID19 pandemic. Not only is the Oracle Cloud Infrastructure secure and fault tolerant but the ACS follow the sun service hubs have provided uninterrupted support to all of our customers. Please see Oracle's public statement on COVID-19here: <a href="https://www.oracle.com/corporate/covid-19.html">https://www.oracle.com/corporate/covid-19.html</a>

### **Managed Services Operating Model**

Oracle Advanced Customer Services is based on a standard set of deliverables which are scaled out as required, therefore the resources used to manage the services are organized into teams specifically set up to cover the various aspects of the service. These teams vary based on the specific services in scope, they are:

- Global Cloud Services Operations Delivery: comprising product specific, specially trained and skilled Oracle resources residing in hubs around the world in a follow the sun model.
- **Software Operations:** providing critical support to the overall production management of our customer environments.
- Service Desk, Monitoring and Problem Management: the interface between all teams assisting with work for Cloud Services customers.
- Infrastructure and Automation Operations: provide for the successful implementation of the certified configuration, products, and tooling to each customer's environment.
- Regional Service Center: provides customer project, technical, and escalation services during implementation/transition stages of Cloud Services.
- **Business Operations:** handles all project management for operational delivery, in addition to headcount tracking and allocations, finance and budgeting, operational reviews, metrics and reporting functions, and other business-related activities.
- Functional Services: Offshore team to provide Functional Service Desk Support,
   CEMLI Management, Critical Process Management and Testing.



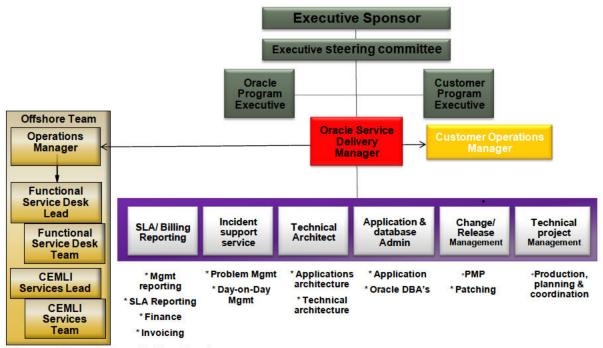


Diagram 4 Sample Organization Structure

ACS has over 4500 DBAs, engineers, product focused, infrastructure focused, and customer services focused resources that deliver services. All roles are backfilled to meet demand across our customer base and provide an experienced and skilled resource at the right time to support your timeline, project phase, program lifecycle and support needs when you need them.

In addition to the team resources, some named resources may be identified with your services based on the specific solution, such as the Service Delivery Manager, Technical Account Manager, Production Manager, Operations Manager, or Transition Manager.

All Oracle resources are certified in the technology and programs that they deliver. Oracle provides highly skilled and experienced personnel. Oracle hires the best resources available in Oracle Technologies. Our teams cover both Functional and Technical Expertise, with coverage for all Oracle applications.

The ACS support teams have access to and frequently receives training available to Oracleonly personnel in all areas of the Oracle technology and products they support. Formalized training plans and rotational assignments verify our resources are the most well-rounded and prepared technicians in the industry. The Oracle delivery approach identifies staff for the team specifically by the skills necessary to support our customers.

The sample resumes are representative of the resources that will provide the implementation services and the Oracle delivery teams.



# Resume - Program Manager

	Implementation Resource: SS				
Proposed role and responsibilities	<ul> <li>Advise the State on business and risk issues related to the project.</li> <li>Responsible for overall quality of Offeror services.</li> <li>Reviews and approves overall project plan, schedules, timeframes, and budget for the Offeror.</li> <li>Manage the QA review process and communications of the Offeror.</li> <li>Validate the effectiveness of Offeror resources, organizational structure and roles.</li> <li>Establish project/program standards and processes.</li> <li>Facilitate improvement in project processes and standards.</li> </ul>				
	Education				
	B.S., Civil Engineering, University of Hawaii at Manoa     A.A., Liberal Arts, Marymount Palos Verdes College				
	Training	Certifications			
	Construction Quality Management for Contractors	Engineer in Training			
Qualifications (knowledge, experience, and skills)					
Years of professional experience	25				
Range of experience	Mr. S has 20 years of project management experience and has been involved at all levels of the project lifecycle from proposal to closeout. He has experience working on U.S. Department of Defense contracts for the Navy, Air Force and Defense POW/MIA Accounting Agency (DPAA) as well as contracts for commercial clients. His engineering background and varied experience enables him to effectively serve in many roles. His most recent experience is in program management for the development of a multimillion-dollar personnel and payroll system for the US Navy.				
	Current and recent employment history				
2017-present	Employer: Na Ali'i Consulting & Sales, LLC Role: Project Manager Location: Honolulu, HI  Function and responsibilities:  Manage project submissions and deliverables to maintain overall quality and contract compliance Advise client on risks related to the development effort Provide cash-flow management and financial forecasting for internal and external use Establish project standards and perform project audits, performance analysis, and management reviews Support the preparation of proposals and assist with management review and analysis of cost proposals Development of project plan, schedules, and budget Manage staffing of the project in line with available funding and work requirements				
2014-2017	Employer: Na Ali'i Consulting & Sales, LLC Role: Project Engineer  Function and responsibilities:				



Implementation Resource: SS		
	<ul> <li>Apply general engineering principals across multiple disciplines to develop efficient and effective solutions for clients</li> <li>Generate client deliverables including, but not limited to, requirements documents, functional design documents, status reports, client presentations, estimates and schedule</li> <li>Supports the growth of Na Ali'i through business development, proposal preparation and community involvement</li> </ul>	
2013-2014	Employer: CB&I Federal Services LLC Role: Project Manager  Function and responsibilities:  Oversee Project activities for projects in Hawaii and Guam across multiple contracts  Manage corporate and client expectations of project performance  Provide daily supervision of staff and assignment of resources	
2002-2013	<ul> <li>Employer: Shaw Environmental &amp; Infrastructure, Inc.</li> <li>Role: Project Controls Manager</li> <li>Function and responsibilities:         <ul> <li>Daily supervision of staff, assignment of department resources, provide training and development strategies for personnel</li> <li>Perform project audits, and management reviews</li> <li>Act as a liaison between Project Controls and other functional departments</li> <li>In addition to Cost Schedule Engineer duties, perform financial and performance analysis of contracts</li> <li>Provided cash-flow management, and financial forecasting for internal and external clients</li> <li>Supported the preparation of proposals and assist with management review and analysis of cost proposals</li> <li>Provided supervision and training of less experienced Cost Schedule Engineers and Administrative staff</li> </ul> </li> </ul>	
1998-2002	Employer: IT Corporation Role: Cost Schedule Engineer	
1996-1998	Employer: OHM Remediation Services Corp. Role: Project Cost Accountant	

\* \* \* \* \*



# Resume - Project Manager

	Implementation Resource: KM				
Proposed role and responsibilities	<ul> <li>Act as the primary interface with the State.</li> <li>Provide day-to-day management of the Project including overall performance and Contract compliance for the Offeror.</li> <li>Provide day-to-day management and direction of Offeror resources assigned to the Project.</li> <li>Manage the Project to the current work plans and coordinating the availability of scheduled resources to the Project for the Offeror.</li> <li>Manage all Project resources and ensuring that appropriate resources for the Offeror are available and perform throughout the life of the Contract.</li> <li>Establish and maintain regular communications with the State Program Office.</li> <li>Maintain reporting, budget/cost reporting, and issue reporting, tracking, escalation, and resolution procedures.</li> <li>Practice change management controls and procedures in coordination with the State.</li> <li>Monitor and maintain the development and implementation schedules.</li> <li>Develop and implement a quality assurance process to ensure all objectives are met, milestones are achieved, and stakeholders are satisfied.</li> </ul>				
	Education				
	<ul> <li>MA, Human Resources/Industrial Relations, University of Minnesota – Carlson School of Management, 2006</li> <li>BS, Psychology, University of Wisconsin – River Falls, 2002</li> </ul>				
	Training	Certifications			
	Oracle PeopleSoft (various)	PMP     CompTIA Security+			
Qualifications (knowledge, experience, and skills)					
Years of professional experience	18				
Range of experience	Mr. M is a certified Project Management Professional with over 14 years of Human Resources Information Systems experience. He currently serves as the Deputy Project Manager with Na Ali'i for the Navy Pay and Personnel system implementation. Mr. Montgomery was formerly the lead Project Manager for Defense Retired & Annuitant Pay System 2 (DRAS2) for the Defense Logistics Agency. He also served as Deputy Project Manager for the U.S. Coast Guard (USCG) Direct Access Tech Refresh Program. Mr. Montgomery served as Project Manager on the Public Health Service (PHS) Retired Payroll Integration into USCG Global Payroll as well as for the USCG PeopleSoft upgrade from version 9.0 to 9.1. He has also served in various roles as a PeopleSoft Senior Functional Analyst, Security Administrator, and Query/Reporting Analyst.				
	Current and recent employment history				
2018-present	<ul> <li>Employer: Na Ali'i Consulting &amp; Sales, LLC Role: Deputy Project Manager and Production Support Lead Location: Honolulu, HI</li> <li>Function and responsibilities:         <ul> <li>Established project presence at company's Honolulu headquarters by building and training a Production Support Team that extended project workday for defect resolution</li> <li>Assist in the management of a 100+ team member ERP project responsible for the development and delivery of a DoD personnel and system using agile development methodology including availability of appropriate resources</li> <li>Act as the primary interface with the Navy client and maintain regular communication including budget, schedule, and issue reporting/resolution</li> </ul> </li> </ul>				



Implementation Resource: KM		
	Provide day-to-day management of the Project including overall performance and contract compliance     Establish and maintain regular communications with the State Program Office.     Oversee quality assurance process	
2014-2018	Employer: CSRA Role: ERP Project Manager  Function and responsibilities:  Project Manager for the Defense Retired & Annuitant Pay System 2 (DRAS2) for the U.S. Defense Logistics Agency.	
2009-2014	Employer: SRA International Role: ERP Deputy Project Manager  Function and responsibilities:  Provide project management support to the USCG Direct Access HRMS system  Oversee the complete life cycle for the firm fixed price contract to implement PHS Retiree Payroll into the USCG Direct Access Global Payroll system based on DOD-FMR regulations and PHS specific law – this project successfully went live on January 1, 2014  Perform invoice reconciliation, budget forecasting, and monthly status reporting  Manage all subcontracts for both firm fixed price and time & materials contracts  Perform general HR activities including recruiting/staffing, performance management, workforce management, and office policies  Provide PeopleSoft security and portal administration design and support for multiple USCG Direct Access tech refresh projects	
2005-2009	<ul> <li>Employer: Carlson Companies, Inc. Role: HRIS Analyst</li> <li>Function and responsibilities:         <ul> <li>Perform tasks supporting long range strategies for process and technologies used in human resources</li> <li>Develop functional system requirements for requested enhancements and system changes primarily for PeopleSoft 8.9 HRMS application, with focus on ePerformance module</li> <li>Maintaining system configuration table content related to various areas of PeopleSoft functionality</li> <li>Determining best approaches for the user community with respect to documentation, end user query tools, and training materials</li> <li>Provide business systems support for project development and production operations</li> <li>Coordinate control and implementation of all human resource system enhancements to ensure necessity and timely implementations</li> </ul> </li> <li>Create specifications for enhancements and customizations for applications supporting core human resource data and reporting, application security, ePerformance, employee self-service, manager self service</li> </ul>	
2004-2005	Employer: Carlson Hospitality Worldwide Role: HR Coordinator	
2003-2004	Employer: Radisson Plaza Hotel Role: HR Coordinator	

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# Resume – Integration Manager

	Implementation Resource: KS		
Proposed role and responsibilities	<ul> <li>Responsible for the quality, consistency, and completeness of the overall design for the Offeror.</li> <li>Work with the functional and technical leads to identify and resolve both intra-phase and inter-phase integration issues.</li> <li>Review sub-process designs, key activity designs and data designs.</li> <li>Assist the functional leads in the developed and maintenance of the project plans.</li> <li>Work with the functional and technical leads to manage the implementation analysis.</li> <li>Responsible for the on-time completion of the design in accordance with the requirements.</li> <li>Manage design issues and scope change requests.</li> <li>Lead development of integration test scenarios.</li> <li>Evaluate the EFS transports being migrated to production from all teams.</li> </ul>		
	Education		
	BS, Business Administration, University of Maryland, 2011		
	Training	Certifications	
	Oracle PeopleSoft (various)	ITIL v3 Foundations	
	Qualifications (knowledge, experience, and skil	ls)	
Years of professional experience	13		
Range of experience	Ms. S has over 10 years of experience working with the DoD on various projects. Most recently she has overseen integration issues for the development of the Navy's integrated pay and personnel system. She has extensive experience with project management and maintaining consistency and quality throughout large IT projects. She is extremely proficient in utilizing Atlassian Jira to manage an Agile development project and is experienced with the full software development lifecycle from design through release.		
	Current and recent employment history		
2018-present	<ul> <li>Employer: Na Ali'i Consulting &amp; Sales, LLC</li> <li>Role: Project Manager - Release</li> <li>Location: Honolulu, HI</li> <li>Function and responsibilities:         <ul> <li>Established and the design process and maintained the design project in Jira across all themes</li> <li>Responsible for the on-time completion of the design and management of issues and changes</li> </ul> </li> <li>Took on additional role of Defect Coordinator in Hawai'i - finalized defect process, established and maintained Defect Management Project in Jira, working across all themes to ensure defects are researched and fixed in a timely manner, coordinated and facilitated defect discussions/resolutions with external partners and Navy and instrumental in closing over 400 defects within 5 months</li> <li>Organized and managed release delivery to the Navy bi-weekly and successfully delivered nine releases, including over 300 design documents and over 100 features</li> <li>Implemented a Confluence page to easier track release and defect metrics used for release reporting to the Navy bi-weekly</li> <li>Created and implemented a feature map used to track all delivered features that map to corresponding User Stories, Acceptance Criteria and Requirements, serving as the basis for the Feature database to improve overall BA team efficiency</li> </ul>		



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## Resume – Technical Manager

	Implementation Resource: BS		
Proposed role and responsibilities	osed role and  • Present design/functionality based on contract functional and technical requirements,		
	Education		
	Bachelor of Science, Information Systems and Operations Management, George Mason University, 2010		
	Training	Certifications	
	Oracle PeopleSoft (various)	CompTIA Security+	
	Qualifications (knowledge, experience, and skil	ls)	
Years of professional experience	10		
Range of experience	Mr. S is a PeopleSoft System Administrator with eight years of PeopleSoft development and administration experience. He has trained entry level and mid-level colleagues on development topics, configuration topics and system administration topics. He has experience with PeopleTools, App Designer, Application Engine, Application Packages, Component Interfaces, Maintain Security, Tree Manager, Object Security, Process Scheduler, Integration Broker, DataMover, PS Query, Connected Queries, XMLP/BI Publisher reporting, Event Mapping, Related Content Services, Activity Guides, WorkCenter, Dashboards, Fluid, Elastic Search and Data Migration Workbench.		
Current and recent employment history			
2017-present	Employer: Na Ali'i Consulting & Sales, LLC Role: PeopleSoft Administrator and Senior Technical Developer Location: Arlington, VA  Function and responsibilities:  Train junior and mid-level employees Peer review developer's code Migrate developer's code from development to test environment Build and migrate release packages that go to client		



	Implementation Resource: BS
	<ul> <li>Maintain current PeopleSoft servers using AWS</li> <li>Install new PeopleSoft environments</li> <li>Maintain current PeopleSoft environments</li> <li>Help developers with any issues they may have</li> <li>Help testers with any issues they may have</li> <li>Installed Elastic Search on our servers</li> <li>Prototyped Global Search to learn their functionality and teach the technical team</li> <li>Created a framework to allow running a BI publisher report dynamically and programmatically from Component level PeopleCode events or application engine PeopleCode</li> <li>Created BI Publisher reports to help replace paper forms</li> <li>Prototyped Activity Guides to learn their functionality and teach the technical team</li> <li>Prototyped WorkCenter and Dashboards to learn their functionality and teach the technical team</li> <li>Worked with event mapping to add PeopleCode functionality as a configuration instead of a customization</li> <li>Used Page and Field Configurator to modify delivered PeopleSoft components/pages with a customization</li> </ul>
2011-2017	<ul> <li>Employer: SRA International, Inc</li> <li>Role: PeopleSoft Developer</li> <li>Function and responsibilities:</li> <li>Technical Team Lead for PeopleSoft Recruiting/Accessions for US Public Health Service (USPHS)</li> <li>Assisted with end user training</li> <li>Working on solutions for Defects and Change Requests.</li> <li>Provided technical assistance in developing Global Payroll reports.</li> <li>Developed reports using XMLP/BI Publisher, PS Query and Connected Queries.</li> <li>Converted several reports from SQR to Application Engines and XMLP's.</li> <li>Developed custom reports.</li> <li>Studied and learned PeopleSoft basics from the PS Admins on site</li> <li>Performed troubleshooting and resolved issues with Application Designer and PeopleSoft Security.</li> <li>Designed, installed, implemented and tuned an Oracle 10G database.</li> <li>Set-up database owner for table space and ran scripts using PeopleSoft DataMover and SQL*Plus to create tables.</li> </ul>

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# Resume – Functional Manager (Phase 1)

	Implementation Resource: MH		
Proposed role and responsibilities	<ul> <li>Work with State team leads to manage the functional teams through all projects.</li> <li>Work with the State to control deliverable quality and team risk.</li> <li>Guide the team in developing and building business process designs.</li> <li>Work with State team leads to manage work products and deliverables.</li> <li>Provide business process experience and guidance to State team leads.</li> <li>Identify and manage to resolution business process and system design issues.</li> <li>Serve as functional subject matter knowledgeable resource.</li> <li>Advise and approve business process design and EFS configuration.</li> <li>Direct development of detailed teamwork plan and manage to plan.</li> <li>Work with Project Manager and Functional Manager to identify and obtain resources.</li> <li>Monitor and report team progress against plan.</li> <li>Identify and manage to resolution business process and system design issues related the implementation.</li> <li>Lead in the preparation of deliverables.</li> </ul>		
	Education		
	<ul> <li>MA, Management Information Systems, George Washington University, 2008</li> <li>BS, Finance, George Mason University, 1995</li> </ul>		
	Training	Certifications	
	Oracle PeopleSoft (various)	PMP     Oracle Certified General Ledger Consultant     Oracle Certified Accounts Payable Consultant     Lean Six Sigma Green Belt	
	Qualifications (knowledge, experience, and sk	ills)	
Years of professional experience	20		
Range of experience	Mr. H is a business professional with over 20 years of PeopleSoft experience including extensive work in Federal/Public sector environments. He has demonstrated a strong grasp of PeopleSoft Financial applications from maintenance, development, and end user perspectives. His experience includes implementations, upgrades, production support, system integrations and several chart of account redesigns/re-engineering efforts. He adds value by combining finance and accounting acumen with creative uses of the latest PeopleSoft functionality and tools to deliver innovative solutions. Mr. Habibi is a well-rounded team player who connects well with people at all levels and can anticipate business user needs.		
	Current and recent employment history		
2018-present	Na Ali'i Consulting & Sales, LLC Role: PeopleSoft Solutions Architect Location: Arlington, VA  Function and responsibilities:  Lead architect for designing Pay Accounting solutions for U.S. Navy Pay modernization initiative  Work with Product Manager and Navy leadership to define SFIS compliant accounting structure and design ChartField, Ledger and Reporting structures in PeopleSoft General Ledger  Design Approval workflows for journal entries using PeopleSoft Approval Framework		



	Implementation Resource: MH	
	Prototyped mobile solution for Navy PCS travel using PeopleSoft Expenses. Configured module, designed approval workflows and demonstrated fluid capabilities using iPhone 8	
	<ul> <li>Setup and configure Accounts Payable and design solutions for recording IPAC bulk file transactions to U.S. Treasury</li> <li>Setup and configure Accounts Receivable and design solutions for recording member Debt transactions</li> </ul>	
2017-2018	Project: US Holocaust Memorial Museum Role: PeopleSoft Asset Management Functional Consultant	
	Function and responsibilities:	
	<ul> <li>General Ledger\KK Lead for PeopleSoft 9.2 on Oracle Cloud re-implementation project</li> <li>Developed conversion strategy document and cutover plan for Budget balance conversion</li> <li>Redesigned KK Ledger structure and budget rules to fit with new ChartField design</li> <li>Drafted functional requirements documents, test approach</li> <li>Redesigned ChartField structure to relieve reporting pain points</li> <li>Developed conversion strategy document and cutover plan for GL ChartField conversion</li> <li>Designed automated reporting solution to replace manually constructed month end</li> </ul>	
	<ul> <li>CFO reporting package</li> <li>Configured system for new ChartField structure, including new combo edits, new tree structures, re-designed of entry events</li> <li>Retrofitted nVision reports including Statement of Net Cost, Balance Sheet, Funds Balance Reports, 133 and 224 reporting, and others</li> <li>Configured system for Data Act reporting</li> <li>Redesigned GTAS configurations and eliminated customization as a result of COA restructure</li> <li>Authored functional design documents, wrote test scripts, performed unit and system testing</li> </ul>	
2014-2017	Project: US House of Representatives Role: PeopleSoft Asset Management Functional Consultant	
	<ul> <li>Function and responsibilities:</li> <li>PeopleSoft Asset Management SME for Asset Lifecycle Re-engineering Project</li> <li>Advised House management on best business practices for asset tracking, available 3rd party technologies to automate processes</li> <li>Documented and reviewed as-is business processes and provided critical inputs for tobe processes</li> <li>Supported the automation effort for Physical Inventory</li> <li>Supported the automation effort for Asset Disposals</li> <li>Demonstrated PeopleSoft fluid capabilities for real time Asset Inventory/Tracking updates</li> <li>Developed user training materials and conducted classroom training sessions.</li> <li>Assisted AM team lead for PS 9.2 upgrade including new feature evaluation, fit gap</li> </ul>	
	analysis, writing test scripts     Diagnosed system breaks and bugs, ad-hoc reporting requests, scheduled maintenance and testing efforts     Created automated ART (adds, additions, retirements) report for upper management     Assisted users with cost adjustments, re-categorizations and transfers     Provided training to new and existing users	
2007-2014	Employer: ManTech International Corporation Role: PeopleSoft Functional Manager	
	Function and responsibilities:	



#### Implementation Resource: MH

- Responsible for managing functional aspects of General Ledger, Asset Management and Accounts Payable including data integrations between sub modules, identifying and maintaining reporting structures
- Provided support for AM maintenance activities including depreciation adjustments, recategorizations, transfers and adjustments
- Supported ad hoc reporting needs and enhancements. Supported month end reporting requirements, research issues and exceptions
- Automation of General Ledger journal entry processing including the use of approval framework and attachments
- Drafted System and UAT test approach across entire project.
- Designed and tested custom AM to PC interface
- Wrote custom month end PS nVision reporting package to capture all Asset Management activity including
- Designed and built PeopleSoft virtual ledger and reports to provide real time view of operation results, reduced month end Projects to GL reconciliation from 3 days to 15 minutes

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# Resume - Reporting Manager

	Implementation Resource: DM	
Proposed role and responsibilities	Lead the development of the reporting strategy.     Lead the design and development reports.     Lead the design for the model to publish reports via portal.     Assist with the management of the information providers and extractors.     Guide the team in developing and building logical data model designs and data flow diagrams.     Advise the team members in the design, development, and configuration.     Work with other team leads to provide integration across other modules and teams.     Monitor and report team progress against the project plan.  Education	
		roity 1002
	BS, Accounting and Economics, Towson State University	rsity, 1993
	Training	Certifications
	Oracle PeopleSoft (various)	CompTIA Security+
	Qualifications (knowledge, experience, and skill	ls)
Years of professional experience	22	
Range of experience	Mr. M has over 22 years of experience in Enterprise Resource Planning (ERP) applications, primarily PeopleSoft, in both Contractor and Permanent Roles. He has led teams in all phases of the project life cycle for new implementations, upgrades, conversions, and production support. He has held roles as Product Manager, Team Lead, Technical Lead, Functional Analyst, and Developer while working within various technical environments, versions, platforms, applications and project sizes. He is currently involved in managing two products responsible for implementing a subsidiary ledger with reconciliation reports and managing debts.	
	Current and recent employment history	
2017-present	Na Ali'i Consulting & Sales, LLC Role: Payroll and Accounting PeopleSoft Product Manager Location: Arlington, VA  Function and responsibilities:  Led as many as 20 people on multiple projects for the US Navy Designed reporting strategies and dashboard/report designs using Qlik, Tableau, and native PeopleSoft technologies Delivered PeopleSoft front end solutions for users that use Global Search, fluid components, WorkCenters, activity guides, related actions, event mapping, as well as all the traditional PeopleSoft technologies Provided interface designs for data transfers from PeopleSoft HCM to PeopleSoft FSCM, Web Service to US Treasury, and Inbound interfaces from web services Developed conversion strategies from multiple sources and formats into PeopleSoft Responsible for the design of the General Ledger to Payroll reconciliation solution that could demonstrate that summary level General Ledger postings could trace back to detailed audit support Primary developer on the Liquidations accounting process which accounts for disbursements from payroll including vendor payments withheld from a sailor's pay	
2007-2017	Project: US Coast Guard Integrated Pay and Personnel Role: Financial Management System Contractor Function and responsibilities:	



	Implementation Resource: DM	
	<ul> <li>Designed, developed, tested, and presented the solution that properly accounts for over a billion dollars in yearly expenditures</li> <li>Gathered requirements and implemented a solution for a complicated calculation of sea time for almost 40,000 members</li> <li>Orders Functionality - Technical Lead</li> <li>Promotions Functionality - Technical Lead</li> <li>Assignments Functionality - Team Lead</li> <li>Retired Payroll General Ledger Interface - Senior Functional Analyst and Technical Developer</li> <li>Worked directly with the head of the accounting department to create an accounting of the retired payroll on a monthly basis, as well as creating a reconciliation system</li> </ul>	
2005-2007	Employer: Arbitron, Inc Role: Principal PeopleSoft Developer  Function and responsibilities:  Lead architect in designing, implementing, and supporting a security data flow to allow customers to access online content in a system outside of PeopleSoft  Designed and developed a PeopleSoft 8.9 CRM custom application for Customer Service and Customer Self-Service to allow management of users, and authorizations to internal and external business applications delivered over PeopleSoft Enterprise Portal 8.8	
2005	Project: Open Solutions, Inc. Role: Lead Consultant for Standards Development	
2004	Project: Adelphia, Inc. Role: Technical Team Lead	
2003	Project: Qwest Communications Role: Senior PeopleSoft Technical Consultant	
1998-2000	Employer: GEICO Role: Technical Developer	

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## Resume – Organizational Change Manager

Implementation Resource: CG			
Proposed role and responsibilities	<ul> <li>Develop the end-user training strategy and plans.</li> <li>Provide the change leadership approach and strategy including workforce transition.</li> <li>Assist with the development of stakeholder communication for functional teams.</li> <li>Participate in the visioning and process design activities.</li> <li>Assess impact of to-be process designs on as-is organization and provides transition plans.</li> </ul>		
	Education		
	MBA, George Washington University, 2010     BSE, Civil & Environmental Engineering, Duke University, 2002		
	Training	Certifications	
		PMP     Lean Six Sigma Green     Belt	
	Qualifications (knowledge, experience, and skil	lls)	
Years of professional experience	18		
Range of experience	Mr. G is a certified Project Management Professional with over fifteen years of experience supporting program management, portfolio management, training, and change management, both as a Naval Officer and strategic consultant. He is a dedicated and focused professional able to prioritize the urgency of competing demands and juggle multiple tasks and projects.		
	Current and recent employment history		
2018-present	Employer: Na Ali'i Consulting & Sales, LLC Role: Operations Manager Location: Arlington, VA  Function and responsibilities:  Coordinates all project management and contract management activities for Navy		
	PersPay contract including staffing, training, resource allocation, financial management and reporting, project metrics, and subcontractor coordination		
	<ul> <li>Assists with end-user training strategy and change management approach for transition once the system goes live</li> <li>Develops stakeholder communication products to convey project status and future impacts</li> <li>Leveraging experience as a Naval Officer, participates in the visioning and process</li> </ul>		
	<ul> <li>design activities for multiple products within the system</li> <li>Assess impact of to-be process designs on as-is organization at the total system level and provides input for workforce transition plans</li> </ul>		
	Assists with the management of software developme	nt and delivery	
2013-2018	Employer: Herren Associates Role: Lead Associate		
	Function and responsibilities:		
	Coordinated data-driven solutions for reducing opera enabling future weapons/sensors through technology change		
	Developed training strategy and plans in support of N Conservation (iEncon) program	lavy's Incentivized Energy	



	Implementation Resource: CG	
	<ul> <li>Provided change management approach and strategy to support Navy's surface force energy reduction initiatives</li> <li>Developed of stakeholder communication to advocate for energy programs and grow buy-in across the fleet</li> </ul>	
	Responsible for managing multiple projects across DOD, accounting for over \$2M annual revenue, including customer communication, deliverable management, recruiting, and subcontractor management     Responsible for developing and executing company-wide strategic initiatives as member of management team	
2012-2013	Employer: URS Corporation Role: Energy & Environmental Analyst Function and responsibilities:	
	<ul> <li>Developed products to communicate changes in the Navy's Operational Energy Strategy and train sailors on better energy practices</li> <li>Assisted in the development of change leadership approach and strategy for Operational Energy Program</li> <li>Formalized budget process for Operational Energy Program and successfully managed over \$1.8B across the Future Years Defense Program (FYDP)</li> <li>Performed analysis to quantify past and projected future cost savings from Operational Energy efficiency initiatives</li> </ul>	
2002-2012	US Navy Role: Naval Officer  Function and responsibilities: Assistant Requirements Officer/Flag Aide Office of Chief of Naval Operations – Director, Air Warfare  Performed duties required to support 2-star Admiral responsible for all Naval Aviation requirements  Managed nearly \$400M investment in simulator fidelity upgrades to produce over \$100M annual savings by FY2020  Flag Aide Department of the Navy, Office of the General Counsel  Effective briefer of senior level officials and Flag officers Naval Aviator  Supervised 11 Quality Assurance personnel responsible for maintenance integrity on 12 helicopters and management of 39 critical maintenance and safety programs  Wrote and managed daily flight schedule for 12 SH-60B aircraft resulting in execution of over 500 flight hours and accomplishment of all required training, readiness, and qualifications for more than 50 pilots and 25 enlisted aircrew  As Paraloft Division Officer, decreased turnaround time for non-critical work by 85% through analysis of as-is process and designing more efficient to-be process	

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# Resume - Testing Manager

	Implementation Resource: SS	
Proposed role and responsibilities	<ul> <li>Define and implement testing functions for all types of testing (i.e., unit, integration, data conversion, stress, regression, end-to-end, system testing).</li> <li>Define the scope of testing within the context of each release / delivery.</li> <li>Deploy and manage the appropriate testing framework to meet the testing requirements.</li> <li>Implement and evolve measurements and metrics to be applied against the system under test.</li> <li>Plan, deploy and manage the testing effort.</li> <li>Define and implement the process for creating and managing testing assets required for meeting testing requirements including team members, testing tools, defect tracking and testing processes and scripts.</li> </ul>	
	Education	
	B.S. in Accounting, Virginia Commonwealth University, 2012	
	Qualifications (knowledge, experience, and skills)	
Years of professional experience	10	
Range of experience	Ms. S has over ten years of experience in managing testing and release activities of multiple applications throughout the software development lifecycle. She has led testing and release teams while enhancing test quality and effectiveness in order to deliver high quality software to the customer.	
	Current and recent employment history	
2018-present	Employer: Na Ali'i Consulting & Sales, LLC Role: Delivery Manager/Test Manager Location: Arlington, VA  Function and responsibilities:  Provide guidance and direction for test process improvement, schedule, and release management  Provide support, monitoring and evaluation of schedule variance, Agile Scrum methodologies and metrics to project team and client  Effectively communicate with and mentored Scrum Masters, release team and test leads  Reviewed project deliverables and other artifacts prior to customer delivery  Work extensively with stakeholders throughout all stages of product delivery in order to ensure delivery of code and systems meet the client expectations and requirement  Work directly with the customer to plan and define additional testing phases and requirements for applications	
2014-2018	Employer: Department of Commerce Role: Test Manger  Function and responsibilities:  Developed best practices and procedures to be used by the entire team which spanned various internal projects  Recommend the selection of and be responsible for the performance management of staff members  Participated in regular meetings with senior management to communicate accomplishments, plans and issues as well as any risks to the project's progress  Analyze test plans created by team leads to ensure acceptance criteria is correctly translated into test cases and robust RTM is maintained	



	Implementation Resource: SS
	Coordinate schedules for execution of test scripts and documentation of test results in defect tracking system     Reviewed technical specifications/limitations and constructed reviews of technical approach including application capacity reviews     Recommend the selection of and be responsible for the performance management of staff members
2012-2014	Employer: USEPA Role: Test Lead  Function and responsibilities:  Involved in reviewing and analyzing the requirement documents for the application.  Involved in designing of Test scripts based on the System requirements from the business Analyst  Prepared Test Plan and conducted review of test plan with QA and Development team  Analyzed application to find out which part can be automated, and which can be manually tested  Implemented HP ALM/Quality Center for Test Planning, Test Case writing, Test Execution and Requirement Mapping with Test Cases  Performed defect tracking and reporting using Quality Center/ALM  Performed white box testing on developer's SQL code and wrote SQL verification scripts to test the result of deployment for correct business logic  Performed tests on various features of agile development process  Successfully used Agile/Scrum Method for gathering requirements and facilitated user stories workshop. Documented user stories and facilitated Story Point discussions to analyze the level of effort on project specifications

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## Sample Resume - Technical Account Manager

Oracle Team Resource: Oracle Technical Account Manager (TAM)			
Proposed role and responsibilities	Co-manage the Oracle Project in concert with the Oracle Project Team     Focus on implementation of services and coordinate with Oracle Operations		
	Education		
2000	B.Sc. Computer Sciences     University;     B.Sc. Naval Architecture Engineering     University;		
	Training Certifications		
2001-present (Internal Oracle Training and Oracle University Courses)	<ul> <li>CRM</li> <li>JDE 9.2 on OCI</li> <li>Loftware</li> <li>Transform</li> <li>Hubble</li> <li>APS (Demantra)</li> <li>Hyperion</li> <li>OBIEE</li> <li>GIS</li> <li>Arctools</li> <li>Appworx</li> </ul>	PMP     ITIL	
	Qualifications (knowledge, experien	ce, and skills)	
Years of professional experience	18		
Range of experience	Project management     Cloud service implementation     Shared service center design     Infrastructure and IT planning		
Areas of specialization	Solutions development     Oracle cloud infrastructure (OCI)     laaS, PaaS, SaaS     OCI implementation		
	Current and recent employment history		
2009-present	Employer: 1. Oracle Advanced Customer Services (ACS) Role: Senior Principal Technical Account Manager  Function and responsibilities:  Migrate customer Enterprise Resource Planning (ERP) systems from an on-premises platform to OCI, including bolt-on applications and SaaS components Provision and configure all components from on-premises to cloud Collaborate with architects, consultants, business owners, partners Deliver a performant, compliant, and scalable solution that includes OCI, ICS/Autonomous ICS, and Cloud ERP procurement modules Coordinate cross-functional meetings with various functional areas to meet overall stakeholder expectations and customer objectives		



	Oracle Team Resource: Oracle Technical Account Manager (TAM)
	<ul> <li>Provide 24x7x365 support with advanced enterprise monitoring tools to end-users in multiple locations in the USA and overseas countries.</li> </ul>
2005-2009	Employer: 2. BIC Graphic USA Manufacturing Co., Inc. Role: Project Manager  Function and responsibilities:  Managed the full life cycle of various customer engagements for cloud services Gathered requirements and created project plans and schedules Sourced and managed resources, controlled budget, and facilitated project execution, deployment and closure Provided leadership and communicated project status to all stakeholders Negotiated with stakeholders to identify and mitigate risks, and resolve issues Coordinated cross-functional meetings with various functional areas to meet overall stakeholder expectations and customer objectives Provided functional/technical knowledge across multiple business and technical areas.
2001-2004	<ul> <li>Employer: 3. TITAN Technology Partners Ltd.</li> <li>Role: Consulting Project Lead</li> <li>Function and responsibilities:</li> <li>Managed the integration/conversion strategy of Oracle Content Manager with existing website in WebLogic</li> <li>Enabled end-users to browse for phones and promotions on the customer websites</li> <li>Solutioned and designed custom workflow approval process to Manage Changes by Segmenting type of Change based on Complexity of Change</li> <li>Managed teams for Designing Technical Architecture using a 3-Tiered Approach</li> <li>Gathered Requirements, and designed solutions and interfaces</li> <li>Managed projects that involved integration, including custom JSP, Java, and PL/SQL coding to extend the Oracle Content Manager module to interface with Clarify</li> <li>Worked on project charter development, resource scheduling, budget management</li> <li>Provide Periodic updates to Senior Management on project status, performance, and deliverables.</li> </ul>
	Examples of customer projects
2016-present 1. Oracle	Customer: Printpack, Inc. Role: Engagement Manager  Function and responsibilities:  Worked with various modules: EBS, JDE, Hyperion, OBIEE, DSI, Loftware, GIS, Arctools, Appworx  Developed strong customer relationships to boost service excellence  Oversaw delivery of service or service technology to Printpack customers  Ensured that all services were in scope and delivered and aligned per Oracle's Service Level Agreement (SLA)  Acted as the primary interface and bridge between Printpack and Oracle's operational delivery teams during service delivery cycle  Identified, investigated, escalated, and resolved major issues in order to maintain consistently high service performance and high level of customer satisfaction  Collected and evaluated feedback to continually improve service quality, staff productivity, and customer satisfaction  Coordinated with internal and external stakeholders to provide quality services to Printpack's customers.



	Oracle Team Resource: Oracle Technical Account Manager (TAM)
2012-2015 2. BIC Graphic	Customer: Office Depot, Inc. Role: Quality Assurance (QA) Manager Function and responsibilities:
	<ul> <li>Worked with various modules: Customer Data Hub, Trading Community Architecture, Oracle Sales Online, Territory Manager, Siebel CRM-On Demand, Installed Base, Spares Management</li> <li>Led requirements gathering and scenario analysis sessions</li> <li>Managed Office Depot's expectations by performing map/gap analysis and gap justification processes</li> <li>Managed solution design process (BP-080) which involved business process design for sales</li> <li>Led implementation of Oracle Sales Online application for Office Depot's sales organization (used by 1,300 sales reps across the U.Ss serving around 200,000 contract customers)</li> <li>Worked with third-party vendors, e.g., Trillium, on strategy for data cleanup and data de-duplication efforts</li> <li>Managed the QA team and tracked defects and issues via Office Depot's Mercury Quality Center.</li> </ul>
2010-2011 3. TITAN	Customer: Danka Office Imaging Co. Role: Project Lead/Solutions Architect  Function and responsibilities:  Worked with various modules: Customer Data Hub, TCA/DQM, Oracle iSupport, Oracle iStore, Field Service, IVR, Territory Manager, Sales Online, Quoting and Proposals, Installed Base, Spares Management, email Center, Depot Repair and Service Contracts  Led requirements gathering sessions with Business for Trade Management Involved in functional setups  Managed implementation of iStore  Set up the mini-site, product hierarchy, relationships, prices, media objects, template mappings, and content components  Served as the Oracle iSupport subject matter expert.

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## Sample Resume - Technical Account Manager Project Manager

	Oracle Team Resource: Oracle Technical Account Mana	ager (TAM)
Proposed role and responsibilities	Exceptional IT professional with 30 years of Informatic commercial and public sectors with various industry vinvestments to support and meet strategic objectives     Engagements include positions such as Practice Manand Sr. Principal Technical Account Manager (Oracle management and consulting experience in wide ranged evelopment, implementation and support for on Prerinfrastructure such as E-Business, BI analytics (OBIE Salesforce on Oracle cloud and AWS Cloud with indu Manufacturing, Telecom, Federal, State/Local, Health Investment Securities.	erticals to align their technology and goals of business. agger, Architect, Project Manager e ACS) with extensive customer e of projects involving and Cloud applications and (E), Hyperion, PeopleSoft, estry verticals such as Banking,
	Education	
2000	<ul> <li>Graduate Certificate in eMarketing and Social Media – University of Virginia</li> <li>Certification in Computer Applications – Thiagarajar Engineering College, Anna University, Madurai, India</li> <li>BS in Physics, Kerala University, Kerala, India</li> </ul>	
	Training	Certifications
2001-present (Internal Oracle Training and Oracle University Courses)	Implementation of Oracle Cloud for laaS, PaaS and SaaS infrastructure     Hands on experience AWS, Docker, Linux OS.     Fusion Apps installation, BigData Implementation, OBIEE implementation.     Oracle E-Business R12 implementation, PeopleSoft implementation     BI Analytics, Endeca Analytics implementation, Siebel Business Analysis     DevOps Tools training from Oracle     ITIL Foundation, PMP Bootcamp training, Scrum Master Training	PMP     ITIL     Certified SCRUM Master
Qualifications (knowledge, experience, and skills)		
Years of professional experience	30	
Range of experience	<ul> <li>Interfacing with customer executives, project stakeholders and System Integration partners for the implementation of products such as Oracle Engineered Systems, Oracle Cloud at Customer, Fusion Apps, E-Business, BI Analytics, Hyperion, Fusion Middleware, PeopleSoft. Siebel and Salesforce</li> <li>Customer Support, Escalation Management, Liaoning with Product Engineering and third-party vendors</li> <li>Facilitating requirements gathering and analysis by interfacing with customer executives, project stakeholders and System Integration partners for IT infrastructure projects for on Premise, IaaS, PaaS and SaaS infrastructure.</li> <li>Develop statement of work (SOW), estimate LOE for deliverables.</li> <li>Work with Software and Systems Engineers and for delivering enterprise level complex Hardware and Software installation, configuration, upgrade, patching, migration for Oracle Cloud and on-premise systems and applications.</li> <li>Project Management, Product Development, Release Planning and Production Deployment</li> <li>Engagement of Oracle ACS expert services for professional services to configure/setup/troubleshoot critical issues in Oracle Engineered systems, Databases, Middleware, OS and Enterprise applications</li> </ul>	



#### Oracle Team Resource: Oracle Technical Account Manager (TAM)

- Pre-Sales engagements with Oracle ACS sales and Oracle Sales for selling ACS services (Fixed, T&M) in most of major Oracle products.
- Hands-on experience with Oracle Cloud and Amazon AWS Cloud technologies
- Agile methodologies, DevOps & CICD tools such as JIRA, Eclipse, Github/Gitlab, Jenkins for application development/deployment in Docker based architecture
- Practice management of ERP/CRM solutions and managing resources with revenue

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#### Current and recent employment history

#### 2010-present

Employer: Oracle Advanced Customer Services (ACS)

Role: Senior Principal Technical Account Manager

#### Function and responsibilities:

Responsible for delivery of various Oracle Support services such as Infrastructure implementation, patching, migration, upgrade and support of Oracle Cloud for laaS, PaaS and SaaS applications infrastructure, Oracle Engineered Systems such as Exadata, Oracle Big Data, Storage systems and enterprise application implementation for Oracle Financials, Siebel CRM, PeopleSoft HRIS and BI Analytics for customers such as Bank of America, NUCOR, RICOH, BAE, Michelin, Fidelity, NCR, DC Government and Federal agencies

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- Daily interaction with project stakeholders, System Integrators, Product managers, Development team, Sales and support resources to assist and deliver services to customer in following areas.
- Facilitate meetings, present Oracle service delivery roadmap, gather requirement, identify issues/risks, understand security requirements and work with team members for service delivery plan, statement of work (SOW) and management.
- Lead and assist implementation team to deliver customer contractual deliverables in Hardware and Software upgrade, patching and monitoring services, meet SLA and resolve implementation and performance issues to ensure business continuity.
- Lead Oracle Engineers for implementation and upgrade of Oracle EBS R12.2 Applications.
- Manage large Oracle Cloud at Customer infrastructure implementation for Bank of America in coordination with customer and multiple Oracle Cloud delivery teams
- Manage Oracle Cloud implementation for Canadian Public health Dept. Quebec
- Manage data center migration for databases and applications.
- Manage implementation, upgrade and migration service delivery for Oracle Engineered Systems, Oracle Financials, PeopleSoft HRIS, Identity Management, OBIEE, BigData, Exadata and Oracle fusion middleware applications
- Manage platform, OS and Database Migrations for various customers
- Communicate status with project stake holders and escalate issues with Oracle Product Support & Development to resolve product defects and bugs
- Liaise with customer & Oracle on product demos that fit to the customer requirements.
- Mentor team members on DevOps, CICD and Cloud technologies such Oracle Cloud, Amazon AWS, Microsoft Azure, Google Cloud and demonstrate Container technologies using Docker and Terraform.
- Familiar with Oracle BI Analytics, Opensource Data Sciencemproducts such as RStudio, Jupyter and Python.

#### 2009-2010

**Employer: Bio-Science Organization** 

Role: Consulting Project Lead

#### Function and responsibilities:

 Engaged as Principal Consultant to review Oracle E-Business Application Security configuration and recommended future state architecture with RAC, Web Cache Server and Load balancing.



### Oracle Team Resource: Oracle Technical Account Manager (TAM) Engaged as Project Manager and Oracle EBS SME to develop business case, strategy, establish priorities and gather requirements, develop LOE, prepare project plan, identify issues, risks, resolutions and risk response plans. Facilitate functional and technical business requirement for modules such as General Ledger, Order Management, Purchasing, Inventory, Bill of Materials, Accounts Payable, and Accounts Receivables and identify corporate reporting requirements. Work with product vendors, prepare and facilitate CRP and product walkthroughs Work with business users and lead functional & Technical design, validation, understand issues and provide mitigation plans. **Examples of customer projects** 2008 - 2009 **Customer: Federal Organization** Role: Consulting Manager Function and responsibilities: Worked as a consultant to provide a strategy data management for Federal Election Commission's Campaign Finance reporting system using Oracle warehouse and Oracle BI Tools. Developed Perl based program to capture data growth and reported using html pages.

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# Sample Resume - Transition Manager

Oracle Team Resource: Oracle Transition Manager (OTM)		
Proposed role and responsibilities	<ul> <li>Transition Management team is comprised of mature and experienced Oracle project managers.</li> <li>The team has a great depth of experience of managing the transition into Cloud Services for new and existing customers across all Oracle offerings.</li> <li>During implementation projects the OTM will work closely with the customer and implementation team(s) to facilitate the smooth move into Production. During migration projects the OTM will manage the overall migration into the service.</li> </ul>	
Qualifications		
Qualifications	The main qualification of the OTM is their depth of experience in both Oracle and cloud projects.  Many OTMs also hold complementary qualifications, such as:  PMI Certification  ITIL Foundation Certification  Industry memberships  ;	
	Training	Certifications
Courses and Certifications	Oracle technology and Cloud	PMP     ITIL
Columbations		
oci ancadons	Qualifications (knowledge, experien	ice, and skills)
Years of professional experience	Qualifications (knowledge, experien  5 plus years managing Oracle services p	**************************************
Years of professional		**************************************

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## Sample Resume – DBA Migration Lead / Engineer

	Oracle Team Resource: DBA	Lead
Proposed role and responsibilities	for Oracle Apps R12(12.1 and 12.2)/11i I RAC-ASM, Exadata environments, Patch	and Database administrator problem solving and Database administrator related activities installation, upgrades, configuration with hing, database administration, production direcovery, space management,, migration ity, cloning, migration, shell scripting and station project delivery of various sizes of
	Education	
2000	Bachelor Of Engineering (Electronics & C	Communication), Vidyasagar University
	Training	Certifications
2001-present (Internal Oracle Training and Oracle University Courses)	<ul> <li>10g RAC deep dive course at Denver, Colorado by Howard Ostrow, Oracle Corporation</li> <li>Writing Scalable SQL by Ahmed Alomari, Oracle Corporation</li> <li>Forms Debugging and troubleshooting by Chris White, Oracle Corporation</li> <li>Big IP administration by Leonid Stavnister, Oracle Corporation</li> <li>Oracle Backup and Recovery Overview by Rama Velpuri, Oracle Corporation</li> <li>AOL (Application Object Library) Foundation at Oracle IDC, Hyderabad</li> </ul>	• 10g OCA
	Qualifications (knowledge, experien	ice, and skills)
Years of professional experience	15+	
Range of experience	<ul> <li>Technical Project management</li> <li>Installation, upgrades, migration</li> <li>Implementation</li> <li>Project Management</li> <li>Testing</li> <li>Conversion</li> <li>Configuration</li> <li>Troubleshooting</li> <li>End User Training</li> <li>Tuning, performance</li> <li>Customizations</li> </ul>	
Areas of specialization	OS  Windows 98/2000/NT/Vista/IBM-AIX/HPUX/LINUX/Sun-Solaris VMware Oracle Linux	Oracle E-Business Suite 11i,R12 (12.0,12.1 and 12.2) High Availability Oracle 9i/10g RAC Automatic Storage Management and Configuration and Tuning



### Oracle Team Resource: DBA Lead

Windows 2003,2008 server edition

#### Languages

SQL and PL/SQL, UNIX Shell

#### Databases

- Oracle 9i/10g/11g/12c Database
- Exadata Database

#### Clusters

- Sun Cluster
- Oracle Clusterware and OCFS
- Exadata clusters

#### Ticketing System

- BMC Remedy
- HP Open View Service Desk and IBM IMPACT
- Issue Track

#### Domain

- Insurance
- Manufacturing
- Utilities
- Distribution
- Telecom
- High Tech Sector.

Materialized Views

#### Tools & Utilities

- PLSQL Developer
- Kintana
- Remedy
- IMPACT
- Developer 2000
- Toad, Formatter Plus
- PLSQL Developer
- SQL CLIENT SERVER Tools.

#### Oracle Tools

- Oracle Enterprise Manager, 10g,11g,12c OEM Grid
- Stats Pack
- Export/Import
- RMAN.
- Toad
- Quest
- Foglight
- Qstat migration tool

#### Office Tools

Microsoft Office/Works

Lotus Symphony

#### **Current and recent employment history**

#### Oracle Apps DBA for Advanced Customer Support

Role: Principal Advanced Support Engineer Function and responsibilities:

- Work on multiple Advanced customer's 12.2 EBS upgrades (12.1.3/11.5.10 to 12.2.5/12.2.6) (on-site/remote), work includes- planning, implementation and go-live support.
- EBS Upgrades performance improvement (ACS recommendation for overall performance planning during upgrades, review and provide solution for long running workers during upgrade stage)
- EBS 12.2 Applications capacity planning
- EBS 12.2 fresh implementation support from DBA end
- Help customer on Cloning issues and provide optimized steps for 12.2/12.1/11i clones
- Work with Customer DBA's and provide plans for 12.2 Customization and EBR (Edition Based Redefinition)
- Resolve customer patch cycle adopt issues on EBS 12.2
- Month end support for ACS customer (production performance review, month end/quarterly closing dba work, housekeeping, performance improvement, production capacity planning)
- Day to day Production DBA (ACS DBA) support for esteemed customers.
- Production support work on EBS database running on EXADATA and apps on EXALOGIC machines for multiple customers.
- Non Exadata to Exadata migration.
- Performance tuning on Exadata and non-Exadata environment.
- · Production support work on EBS database and application running on Super cluster
- Work on wait events specific to Exadata database
- Sev1 Service Request support for ACS customers.
- Database and apps migrations.
- Review requirement and provide solution to the customer issues.



	Oracle Team Resource: DBA Lead
	Implementation/Upgrade project day to day support
Database Administrator	Role: Oracle Apps DBA/Principal Consultant Function and responsibilities:
	<ul> <li>Troubleshooting various P1 issues of R12 Upgrades, discoverer upgrades, tech stack upgrades.</li> <li>Preparation of plan for R12.2.3 upgrades and implementation of upgrade and followed by stabilization.         <ul> <li>Worked on multiple hosted/non-hosted customer for upgrading Oracle EBS Applications from 11.5.10.2/12.1.3 version to 12.2.4 version.</li> </ul> </li> <li>12.1.3 upgrades         <ul> <li>JRE and JDK upgrades.</li> <li>Database Installations, Upgrades, Migrations, Patching Activities</li> <li>Application and database migration to ITC hosted environment</li> </ul> </li> </ul>
	<ul> <li>Application and database migration to TTC hosted environment</li> <li>Standby Databases Implementation (Data Guard)</li> <li>Cloning/Refresh of apps 11i and R12</li> <li>OATM Migration Project</li> <li>AD Utilities and AD Administration Activities</li> <li>System Administration Activities</li> <li>Concurrent Requests/Programs performance issue resolution</li> <li>Patching, Configuration, CEMLI Activities</li> <li>Prepare the environment settings for capacitive migration of non-Exadata to Exadata environment.</li> <li>Supporting performance issues on databases using Exadata storage</li> <li>Team Management (appraisal, performance review, mentoring juniors).</li> </ul>
Oracle Apps DBA Support Multiple Clients	Role: Database Administrator/Oracle Apps DBA/Principal Consultant Function and responsibilities:
	Environment: Linux, Windows 7, Oracle Database 11gR2, Oracle E Business Suite 11i,R12, RMAN, SQL*Plus, PL/SQL      Datable a planta for Oracle E Business suite applications and database.
	<ul> <li>Patching, cloning for Oracle E-Business suite applications and database</li> <li>RMAN backup script preparation and backup scheduling.</li> <li>Production support for multiple customers (shared support)</li> <li>Application and database upgrades</li> <li>Work on Scheduled maintenance</li> <li>Troubleshooting Oracle Application issues</li> <li>Issue Track ticket based issue resolution</li> <li>Code Migration through SVN</li> <li>Preparing and implementing scripts in shell scripts.</li> <li>Prepare proper IORM, DBRM plans for EXADATA environments</li> <li>Exadata on ODA health check and performance tuning</li> <li>Troubleshooting any database/Application related issues.</li> <li>RAC and ASM based database support.ASM and RAC database installations</li> </ul>

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# Sample Resume – PeopleSoft Lead / Senior Principal

	Oracle Team Resource: DB/	A Lead
Proposed role and responsibilities	<ul> <li>Portfolio lead in Oracle Global Services Delivery organization</li> <li>Customer relationship management for a portfolio of clients ensuring delivery of infrastructure support through global virtual teams (Mexico, Romania, India)</li> </ul>	
	Education	
Education	BS Chemistry, Physics and Mathematics – M.S. University of Baroda, India	
	Training Certifications	
Oracle Training and Oracle University Courses	PeopleSoft PIA Server Administration     PeopleSoft Application Server Tuning     PeopleSoft Process Scheduler and Application Server Configuration     PeopleSoft PeopleTools (I & II)     PeopleSoft Application Engine     PeopleSoft Application Upgrade     PeopleTools Upgrade.	PeopleSoft Consultant Technology     PeopleSoft Administrator     PeopleSoft Upgrade Level II
	Qualifications (knowledge, experier	nce, and skills)
Years of professional experience	16+	
Engagement Experience	PeopleSoft Administrator     PeopleSoft Application Implementation     PeopleSoft Installation     PeopleSoft Architecture     PeopleSoft Application Certification     PeopleSoft Application Upgrade	<ul> <li>PeopleTools Upgrade</li> <li>PeopleSoft Architecture Configuration</li> <li>Bea Tuxedo Tuning</li> <li>Bea WebLogic Configuration</li> <li>Data Mover</li> <li>PeopleSoft Update Manager</li> <li>PeopleSoft Change Assistance</li> </ul>
Oracle Platform and Architecture PeopleSoft Applications Hardware & Operating Systems Programming Languages	Oracle 11g2     Oracle 10      HRMS     Financials     Campus Solutions     Portal      Windows NT     Windows     Linux 5.x, 6.x      PeopleSoft Application Engine     People Code	<ul> <li>Performance Tuning</li> <li>HP-UX 11.11</li> <li>Sun Solaris</li> <li>Aix</li> <li>Structure Query Language</li> </ul>
	Current and recent employmen	nt history
Major University	As a PeopleSoft Administrator Architecture for Major University using PeopleSoft 9.0 Campus Solution, PeopleTools 8.50.19, SQR Server 4.3.2, Tuxedo 10g1R, Apache Web server, Linux 5.1, Window 2008 in Physical n-tier/3-tier environment his roles included:  • Analyzing issues with performance in Production physical n-tier environment of PeopleSoft 9.0 Campus Solution.  • Assisting in sorting out issues with Custom Payroll Interface process of PeopleSoft 9.0 Human Capital Management.  • Assisting and tuning Payroll Interface processes of PeopleSoft 9.0 Human Capital Management.	



#### Oracle Team Resource: DBA Lead

- Tuning of Application Server Domains, Web Server Domains and Process Scheduler Domains for Development, User Acceptance Testing environments.
- Tuning of Application Messages Application Server Domains for PeopleSoft 9.0 Campus Solution for Admission Functionality.
- Assisting in performance load and monitoring of PeopleSoft 9.0 Campus Solution Middle-Tier servers when doing performance load for over 10000 users and Batch processes.
- Assisted in resolving issues with custom PeopleSoft 9.0 Campus Solution COLA application processes.
- Tuned custom PeopleSoft 9.0 Campus Solution COLA application batch process.
- Managing Service Tickets for all PeopleSoft Application for PeopleSoft 9.0 Campus Solution with Vendor.

#### Major Financial Institution

As a Lead Technical PeopleSoft Administrator Architecture for a Major Financial Institution using PeopleSoft 9.1 Financials PeopleTools 8.51.13, PeopleSoft 9.0 Global Payroll - HRMS, PeopleTools 8.49.24 and PeopleTools 8.48.09, PeopleSoft 9.1, PeopleTools 8.51.07, PeopleSoft 8.9 Financials, PeopleTools 8.50.13, PeopleSoft 8.9 Accounts Payable/E-Procurement, PeopleTools 8.46.09, SQR 6.1.4, SQR 4.3.2, Tuxedo10g1R, Tuxedo 9.1, Tuxedo 8.1, Tuxedo 6.5, WebLogic 10.3.3, WebLogic 9.20, WebLogic 8.1 SP1-SP6, WebLogic 5.1, Citrix, Windows 2008, Windows XP, Windows Server 2003, Linux 3.6.2, Linux 4.4.2, Linux 5.0 (64bit) in Physical n/3-tier environment his roles included:

- Installation of PeopleSoft 9.1 Financials, PeopleTools 8.51.07.
- Upgraded PeopleSoft 8.3 Financials, PeopleTools 8.43.00 to PeopleSoft 9.1 Financials, PeopleTools 8.51.07
- Upgraded PeopleTools 8.48.09 to PeopleTools 8.51.13.
- Installation of PeopleSoft 9.0 MP7 Talent Management, PeopleTools 8.50.13.
- Installation of PeopleSoft 9.0 Global Payroll, PeopleTools 8.48.09.
- Planning Upgrade of PeopleTools 8.46.09 to PeopleTools 8.48.09, PeopleSoft Application Financials 8.4 to PeopleSoft Application Financials 8.9.
- Installation PeopleSoft 9.0 Talent Management, PeopleTools 8.49.24 and PeopleSoft Server Architecture Design for 30,000 Users.
- Applied Maintenance Pack 5 8 on PeopleSoft Global Payroll 9.0, PeopleTools 8.48.09.
- Applied Monthly Bundles Updates on PeopleTools 8.46.09 and PeopleSoft Applications Financials 8.9.
- Designing and implementing PeopleSoft Internet Architecture for PeopleTools 8.48.09 and PeopleSoft Global Payroll 9.0.
- Designing and implementing PeopleSoft Internet Architecture for PeopleTools 8.49.24 and PeopleSoft Talent Management 9.0 MP 7.
- Installation of Third party applications Tuxedo 9.1, Tuxedo 8.1, Tuxedo 6.5, WebLogic 9.20, WebLogic 8.1 SP6 and WebLogic 6.5.
- Installation of Micro Focus COBOL 4.0 and 4.1.
- Bench marking and performance tuning for 2000 online users for Self-service and New Hires activities.
- Analyzing Technical problems with Off Cycle Pay Calc and Processes.
- Tuning Benefit Administration Benefit/Deduction Payroll Process.
- Analyzing and Tuning Paycalc, Pay conform, Pay sheet processes.
- Refreshing Development/QA and User Acceptance Instances.
- Refreshing Development/QA and User Acceptance Instances.
- Quest Stat Administration and Security of Version 5.5.0, 5.6.0 and 5.6.1.
- Quest Stat Installation/Configuration of Version 5.5.0, 5.6.0 and 5.6.1.
- Upgraded Quest Stat Versions from 5.5.0 to 5.6.0 to 5.6.1.

#### Financial Institution

As a Senior PeopleSoft Administrator Architecture for PeopleSoft Global Support using PeopleSoft Applications 8.x, PeopleTools 8.x, SQR 6.1.4, SQR 4.3.2, Tuxedo 8.1, Tuxedo 6.5, WebLogic 8.1, WebLogic 5.1, Cirtix, Windows, and UNIX in Physical n/3-tier environment his roles included:



#### **Oracle Team Resource: DBA Lead**

- Analyze the cases and supported for Process Scheduler issues on PeopleTools 8.x on UNIX and Windows.
- Analyze the cases and supported for Process Scheduler issues on PeopleTools 7.x on UNIX and Windows.
- Analyze Case on Reporting Tools in PeopleTools 8.x and PeopleTools 7.x such as nVision, Query manager and Crystal Reports on Windows.

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As a Lead PeopleSoft Upgrader for PeopleSoft Head Office using PeopleSoft 8.9 HCM, PeopleTools 8.2, SQR 8.42, SQR 4.3.2, Tuxedo 6.5, Tuxedo 8.1, WebLogic 8.1, Ascential 7.5, Window NT 4.0 SP 5 in Physical N-Tire environments his roles included:

- Upgraded PeopleTools 8.42 to PeopleTools 8.46.x, PeopleSoft Application HCM 8.3x to PeopleSoft Application HCM 8.9.
- Installation of PeopleSoft Environments PeopleTools 8.46 and Application 8.9, Tuxedo 8.1, WebLogic 8.1, Change Assistance and Ascential 7.5.
- Sorting out Error in Ascential 7.5 DataStage Mapping in upgrade.

#### Financial Institution

As a Lead PeopleSoft Administrator Architecture and PeopleSoft Upgrader for Major Financial Institution using PeopleSoft 8.4 Financial, PeopleTools 8.42.05, PeopleSoft 7.53 Financial, PeopleTools 7.62, Vertex, SQR 8.42, SQR 4.3.2, Tuxedo 6.5, WebLogic 6.1, Citrix, Window NT 4.0 Service pack 5 in Physical n/3-tier environment his roles included:

- Planning Upgrade of PeopleTools 7.62 to PeopleTools 8.42.05, PeopleSoft Application Financials 7.53 to PeopleSoft Application Financials 8.4.
- Upgraded PeopleTools 7.62 to PeopleTools 8.42.02, PeopleSoft Application Financials 7.53 to PeopleSoft Application Financials 8.4.
- Applied Accelerated Updates on PeopleTools 8.42.05 and PeopleSoft Application Financial 8.4.
- Applied Monthly Bundles Updates on PeopleTools 8.42.05 and PeopleSoft Applications Financial 8.4.
- Designing and implementing PeopleSoft Internet Architecture for PeopleTools 8.42.05 and PeopleSoft Application Financials 8.4.
- Installation of Third party applications SQR 6.1.4, Tuxedo 6.5 and WebLogic 6.1.
- Installation of Vertex 2.0.10 Tax Package to integrate with PeopleSoft application.
- Configuring Application Servers and Application Server Domains for Performance stress test.
- Installation of PeopleSoft Application Financial 8.4, PeopleTools 8.42.05 for Development environments.
- Tuning Online Order Management Process.
- Tuning of Application Engine Data Conversion programs for Financial Application Upgrade from 7.5 to 8.4.
- Analyzing and Tuning batch processes.

#### Major Health Benefit Consulting Institution

As a PeopleSoft Administrator Architecture for Major Health Benefit Consulting Institution using PeopleSoft 8.0 SP1 HRMS, 7.52 Financials, PeopleTools 8.14.10 and 7.59, SQR Server 4.3.2 and 6.1.4, Tuxedo 6.5, Apache Web server, Sun Solaris Unix, Window NT 4.0 Service pack 5 in Physical n-tier/3-tier environment his roles included:

- Analyzing issues with Performance in Production physical 3-tier environment of PeopleSoft 7.53 Financial, PeopleTools 7.59. Resizing of Application servers and table extents, which were badly fragmented.
- Installation, configuration and tuning of PeopleSoft 8.0 SP1 HRMS, PeopleTools 8.14.10 Physical n-tier environment.
- Assisting in sorting out issues with upgrade of PeopleSoft 7.x HRMS upgrade to PeopleSoft 8.0 SP1.
- Assisting and supporting daily maintenance issues in Production Environments.
- Tuning of Application Server Domains for Development Environment.
- Tuning of HRMS 8SP1 Application process for Development Environment.
   Planning sizing of Production Server for PeopleSoft HRMS 8SP1.

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# Sample Resume – Business Intelligence Consultant

	Oracle Team Resource:	ВІ
Summary	and ODI     Experience creating the custom mapping and target tables of the Data Warehouse     Data Warehousing development includin	g business requirements gathering, ment and support. Involved in the migration
	Training	Tools
Technical Skills	<ul> <li>Financials, Procurement, SCM</li> <li>OBIEE11g,12c</li> <li>Oracle, SQL Server</li> <li>ODI 11g, BICS, OACS, Tableau, Power BI</li> </ul>	Service Now     OATS     Remedy
	Qualifications (knowledge, experien	ce, and skills)
Years of professional experience	9+ years of Technical experience in Solution Analysis, Design, Development, Testing on Oracle Analytics and Fusion Middleware Applications.     6+ years of experience in Oracle Analytics tools     Approximately 2 years of OAC and ODI	
Range of experience	<ul> <li>Migration of OBIEE 11g to 12c</li> <li>Migration From Discoverer to other OBIEE / OAC</li> <li>Provided Object level and Data level securities in OBI 11g and 12c</li> <li>Configured MSAD for the Authentication in OBIEE</li> <li>Provided Org level, Inventory org and Ledger based securities for the OOTB Reports.</li> <li>Creation of Agents for scheduling of the reports and enablement of the Usage Tracking</li> <li>Lift and Shift of the RPD to OACS instance and creation, restoring of snapshots</li> <li>Created ODI Custom Interfaces and loaded the data from csv files to staging tables and then to target using different knowledge modules</li> <li>Created reports in BICS and Tableau with different visualizations. Uploaded on premise RPD to OACS, taken snapshots</li> </ul>	
	Current and recent employmen	nt history
Global One Implementation	object level security o Resolving the issues raised aga	EBSR12 as a single source for all the A reports in BI and provided data level and hinst GAIA and Discoverer reports h incidents raised in Service Now in a
Global One Implementation	Role: Sr. Software Engineer Responsibilities:	
	10 10 10 10 10 10 10 10 10 10 10 10 10 1	he impact of Global One implementation and sand technical objects. These changes will yes for bringing all other entities to this



	Oracle Team Resource: BI	
	<ul> <li>Enabled the OOTB Security and the custom security on xxx Objects</li> <li>Tested the Discoverer to OBIEE Converted reports and prepared the Test Case Documents</li> <li>Enabled the OOTB security init blocks and listed all the dimensions that are based on Operating unit, ledger and Inventory org in the data filters.</li> <li>Merging of xxx RPD with the current TABS RPD for the application of security data filters</li> <li>Lift and shift of the RPD to OAC instance</li> </ul>	
Project – CAPEX Report Development	Role: Sr. Software Developer Responsibilities:  • Multiple applications with different sources and based on these different sources custom OBIEE reports are built based on the requirements. This project implementation will involve Report Development of CAPEX Summary Report and the drill reports that are built on the Custom views of EBS Data which included the Spend, Budget, Forecast and Committed Amounts  • Designed the RPD based on the Custom views • Created custom views in the database with the help of ETL team for the unique columns and the grain of the table and developed Capital Expenditure Reports • Created the custom metrics and columns required for the development of report • One Summary report and 6 drills down reports are developed and tested • Done the lift and shift of the RPD to OAC and developed the custom reports on top of it	
Oracle Financial and Proc and Spend Analytics	Role: BI Consultant Responsibilities:  This project implementation will involve Report Enablement of Procurement, Financial Reports and installation of 11.1.1.10.2 BIAPPS and OBIEE Migration from 11.1.1.9.0 to 12.2.1.2.0 in Linux and Active Directory Security Implementation in OBIEE 12c instance  Installed 12.2.1.2.0 OBIEE in Linux and migrated the catalog of OOTB reports from 11g instance to 12c instance  Enabled the reports in Procurement and Finance Dashboards in OBIEE 11g  Enabled the Usage Tracking in EM  Provided Subject Area level access and Catalog access to the respective Users  Configured Microsoft Active Directory in the security realm for the users in AD to log in to OBIEE	

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### **Attachment Form for RFP-ERP-2020**



### ATTACHMENT CUSTOMER REFERENCES OFFEROR FORM OF-1

Customer References: Offeror is required to complete Section 1 with a minimum of three (3) references of customers who received services similar to those requested in this RFP. Offeror, including any proposed sub-contractors included in the Offer, shall complete Section 2a for each reference and email to referenced customer to complete Section 2b.

(a) Section 1. To be completed by the offeror and submitted with proposal.

### START ORACLE CONFIDENTIAL

Oracle is very sensitive to the time and effort our existing and prospective customers expend in handling reference calls. Further, Oracle maintains contractual confidentiality and/or "no publicity" standards with all our customers that may prohibit our disclosing customer information. Oracle would be happy to arrange the appropriate reference calls for you upon request with the following customers or other customers that satisfy qualifications.

Customer Name#4: Address: Reference Name: Current Phone:	
Customer Name#5: Address: Reference Name:	



### Current Phone:

### **END ORACLE CONFIDENTIAL**

The State may contact all of the references listed to inquire about Offeror's equipment, services, performance, and degree of customer satisfaction. Full points for references will not be awarded unless Section 2a and 2b are emailed from referenced customers to the Contract Administrator.



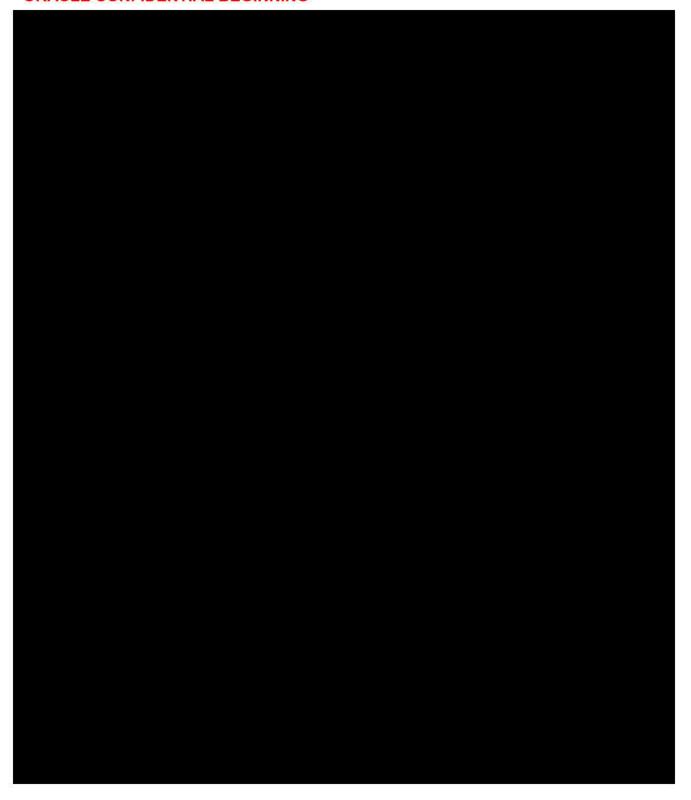


### **Attachment Form for RFP-ERP-2020**



### Section 2a. To be completed by the Offeror

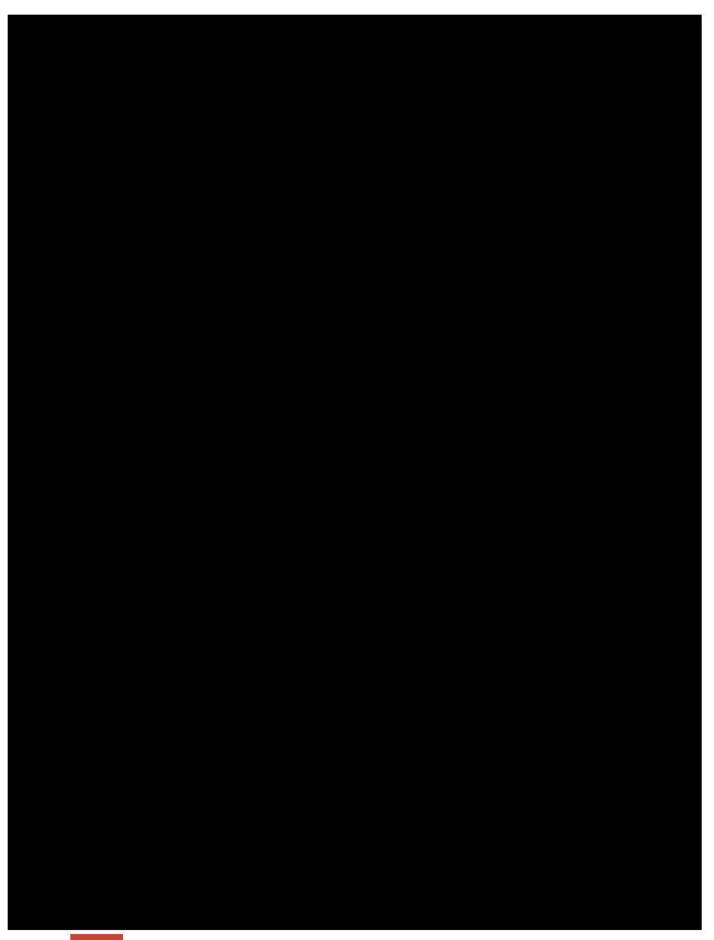
### ORACLE CONFIDENTIAL BEGINNING

















**ORACLE CONFIDENTIAL ENDING** 

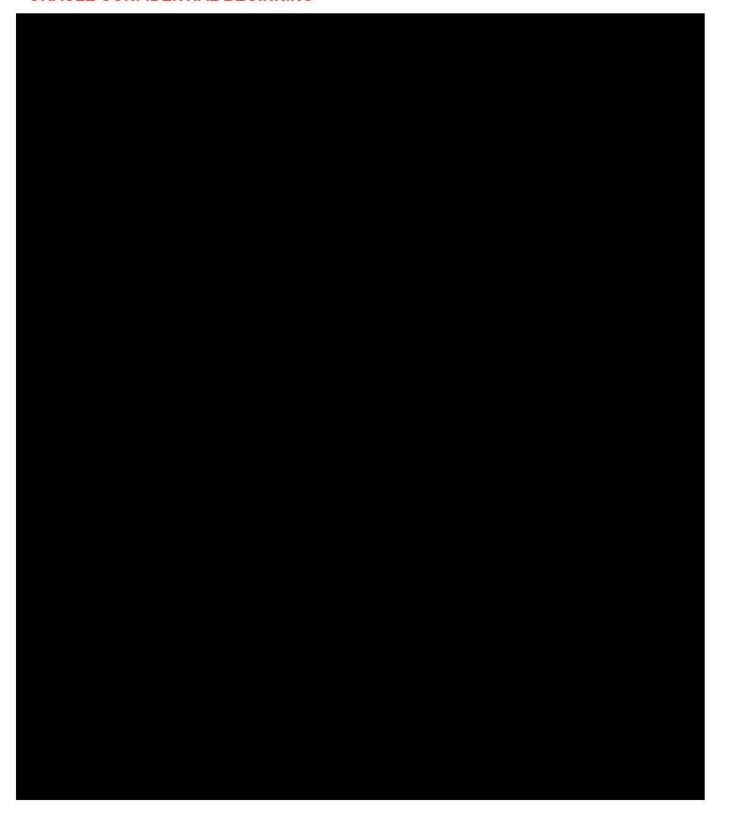






# Section 2a. To be completed by the Offeror

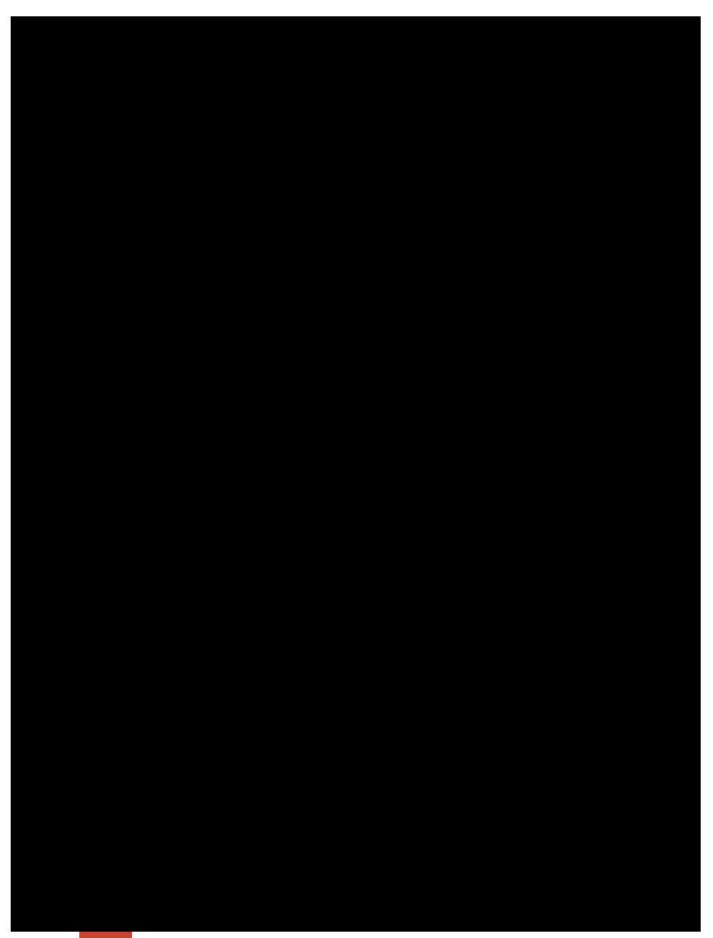
## ORACLE CONFIDENTIAL BEGINNING













**ORACLE CONFIDENTIAL ENDING** 

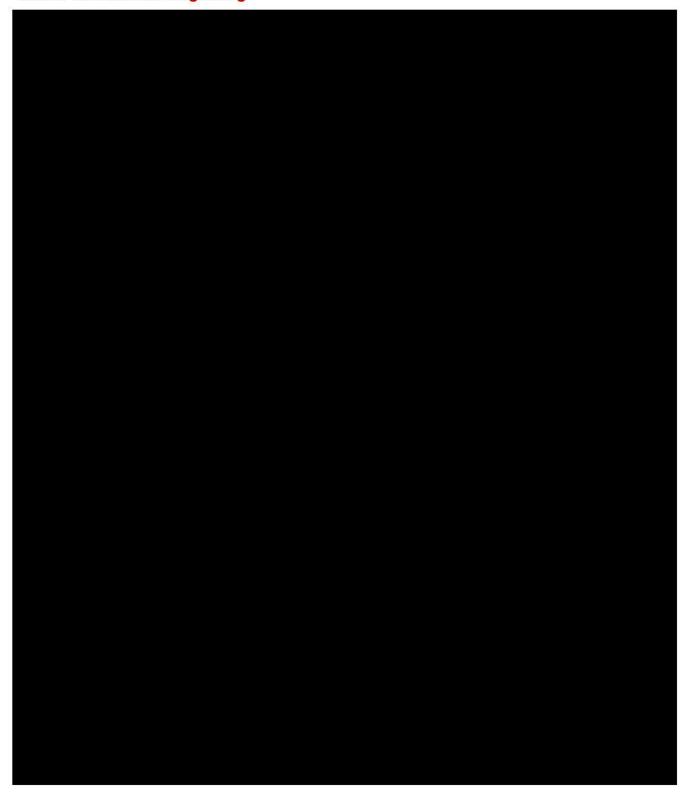






## Section 2a. To be completed by the Offeror

# Oracle Confidential Beginning















**Oracle Confidential Ending** 







#### ATTACHMENT FORM OF-2 - EXCEPTIONS

#### RFP-ERP-2020, AN ENTERPRISE FINANCIAL SOLUTION STATE OF HAWAII, OFFICE OF ENTERPRISE TECHNOLOGY SERVICES (ETS)

Exceptions to the terms, conditions, specifications, or requirements listed in the RFP (not including the General Conditions) shall be indicated below. No exceptions shall be made to Exhibit 4, the General Conditions. OFFEROR shall reference the RFP section where the exception is taken, a description of the exception taken, the proposed alternative, and the reason for the proposed alternative. The State reserves the right to accept or reject any request for exceptions

### Exhibit 5: Selected Supplemental General Conditions RFP-ERP-2020

"While your business is important to us, Oracle does take exception to any provision of the Request that purports to establish the contractual and legal terms under which Oracle will provide products or services to you; you should not construe, nor does Oracle consider, the Response to be legally binding upon Oracle. Oracle respectfully submits that the products it is proposing in this response would be contracted subject to Oracle's General Terms and Conditions and the Oracle Master Agreement, US-GMA-1301562 as mutually signed by both parties. In the event of an award, Oracle is open to discuss contract terms with The State of Hawaii Department of Accounting as part of the resulting post-award contract negotiations".







#### ATTACHMENT FORM OF-3 – CONFIDENTIAL INFORMATION

#### RFP-ERP-2020, AN ENTERPRISE FINANCIAL SOLUTION STATE OF HAWAII, OFFICE OF ENTERPRISE TECHNOLOGY SERVICES (ETS)

List and provide the basis for any information deemed confidential, protected, or propriety information. Do not include this information in the Proposal. Provide references in the Proposal to this OF-3.

\*

Oracle Confidential information includes our references as identified in documents:

- Attachment Form OF 1
- Attachment Form OF 1 Section 2a2b Reference 1
- Attachment Form OF 1 Section 2a2b Reference 2
- Attachment Form OF 1 Section 2a2b Reference 3

Oracle Confidential information includes our pricing as identified in documents:

Appendix L Cost Workbook



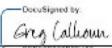
## Attachment Offeror Checklist

Offeror must address ALL sections and attachments and provide the information and documentation as required in the table below.

Description	Reference in RFP	Completed
Offeror Transmittal Letter	Attachment to Exhibit 1, Offeror Transmittal Letter	✓
Table of Contents		✓
Evaluation Criteria 1: Client References	Attachment to Exhibit 1, Offeror Form OF-1	✓
A List of Exceptions to Terms	Attachment to Exhibit 1, Offeror Form OF-2	✓
Identification of Confidential Information if applicable	Attachment to Exhibit 1, Offeror Form OF-3 RFP Document Section 1.23	✓
Evaluation Criteria 1: Offeror Qualifications Offeror Background and Experience	RFP Document Section 6	✓
Evaluation Criteria 1: Offeror Qualifications Financials	RFP Document Section 6	✓
Evaluation Criteria 2: Project Organization and Staffing Staffing Plans	RFP Document Section 6 and Appendix K	✓
Evaluation Criteria 2: Project Organization and Staffing Project Team	RFP Document Section 6 and Appendix K	✓
Evaluation Criteria 2: Project Organization and Staffing	RFP Document Section 6 and Appendix K	✓

Description	Reference in RFP	Completed
Staff Experience and References		
Evaluation Criteria 3: Business Solution - Functional Requirements Core Phase Requirements	RFP Document Section 6 and Appendix A-1	<b>✓</b>
Evaluation Criteria 3: Business Solution - Functional Requirements Expansion Phase Requirements	RFP Document Section 6 and Appendix A-2	✓
Evaluation Criteria 3: Business Solution - Functional Requirements Optional Phase Requirements	RFP Document Section 6 and Appendix B	✓
Evaluation Criteria 4: Business Solution - Technical Requirements Technical Architecture	RFP Document Section 6 and Appendix C	<b>✓</b>
Evaluation Criteria 4: Business Solution	RFP Document Section 6 and Appendix C	✓
- Technical Requirements Solution Architecture		✓
Evaluation Criteria 4: Business Solution - Technical Requirements Solution Technology	RFP Document Section 6 and Appendix C	<b>✓</b>
Evaluation Criteria 5: Business Solution - Implementation Requirements Implementation Plans included with offer	RFP Document Section 6 and Appendix D	✓
Evaluation Criteria 5: Business Solution -	RFP Document Section 6 and Appendix D	✓

Description	Reference in RFP	Completed
Implementation Requirements Work Plan and Schedule		
Evaluation Criteria 6: Business Solution - Ongoing Services Hosting Services	RFP Document Section 6 and Appendix E	<b>✓</b>
Evaluation Criteria 6: Business Solution - Ongoing Services Maintenance and 0Derations Services	RFP Document Section 6 and Appendix E	✓
Evaluation Criteria 6: Business Solution - Ongoing Services Business Process Outsourcing Services	RFP Document Section 6 and Appendix E	✓
Evaluation Criteria 6: Business Solution - Ongoing Services Project Team Facility Requirements	RFP Document Section 6 and Appendix E	<b>✓</b>
Evaluation Criteria 6: Business Solution - Ongoing Services Service Level Agreement Requirements	RFP Document Section 6 and Appendix F	✓
Evaluation Criteria 7: Price Price Proposal	RFP Document Section 6 and Appendix L	✓
Certification - As Applicable	RFP Document Section 1.21 and 1.22	✓
Offeror Checklist - submittal of this checklist with all items checked "completed."	Attachment to Exhibit 1, Offeror Checklist	<b>✓</b>







# ATTACHMENT Offer Transmittal Letter An Enterprise Financial Solution RFP-ERP-2020

Todd Omura Office of Enterprise Technology Services, State of Hawaii 1151 Punchbowl Street, Room 810 Honolulu, Hawaii 96813

Dear Mr. Omura:

The undersigned has carefully read and understands the terms and conditions specified in this RFP and hereby submits the following Proposal subject to the General Terms and Conditions for Oracle's Proposal. The undersigned further understands and agrees that by submitting this Proposal 1) Offeror is declaring this Proposal is not in violation of Chapter 84, Hawaii Revised Statutes, concerning prohibited State contracts, and 2) Offeror is certifying that the price(s) submitted was (were) independently arrived at without collusion.\*\*\*

•	☐ Partnership	X *Corporation	☐ Joint Venture
☐ Other *State of incorporat	tion: <u>Delaware, US</u>	<u>A</u>	
Hawaii General Exc Social Security No.	cise Tax License I.D or Federal I.D. No. <sub>.</sub>	). No. 54-2185193	
Payment address {other than street a City, State, Zip Coo	ddress below): le:		
Business address (	street address):⊦	IQ: 2300 Oracle Wa	ау
Respectfully submi	tted:		
9 Feb 2021 Date	(x)	orized (Original/Dig	ital E-Signature) Signature
_770-402-0481 Telephone No.		Greg Calhoun_ Name and Title (l	Please Type or Print)
Fax No.	C ** Exac	oracle America, Inc. ot Legal Name of Co	ompany (Offeror)
greg.calhoun@o E-mail Address			



"""If Offeror is a "dba" or a "division" of a corporation, furnish the exact legal name of the corporation under which the awarded contract will be executed:

\*\*\*Offeror limits to the scope of its responses to the best of its knowledge and belief as of the date of signature and, for 1), to the prohibited state contracts as described in HRS § 84-15. The signatory above is an authorized representative of Oracle America, Inc. and signs this form on behalf of Oracle America, Inc. and not in his/her individual capacity.

