



# One Washington Program Blueprint version 1

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## Deliverable Overview

The One Washington Program Blueprint deliverable provides a plan for a comprehensive business transformation program. The program will modernize and improve aging administrative systems and related business processes common across state government. The Blueprint is designed to be a comprehensive, phased implementation plan for an enterprise resource planning (ERP) system. This plan will provide details on the supporting technology and non-technology based initiatives necessary for implementation for each phase.

The Program Blueprint contains guiding principles and foundational assumptions for future program direction and will be developed in an iterative process throughout 2017 and 2018. This is the first version, Program Blueprint version 1, completed in September of 2017. Version 1 will be used for developing the supplemental budget request for the 2018 legislative session. This version of the Program Blueprint includes foundational assumptions for Washington's enterprise ERP direction for Finance, Procurement, Budget, and Human Resources (HR)/Payroll. Specific detail is devoted to the implementation of Finance and Procurement functional scope. It also contains schedules to execute non-technical and technical initiatives for Finance and Procurement for FY19, as well as supporting documentation for the implementation of Finance and Procurement initiatives for FY20-23.

The Program Blueprint version 2, to be completed in December 2017, will be used for communication purposes during the 2018 legislative session. Version 2 will be a refinement and elaboration of version 1. Version 2 will include modified (if necessary) assumptions for Washington's enterprise ERP direction for Finance, Procurement, Budget, and HR/Payroll, as well as plans, schedules, and estimates to execute non-technical and technical initiatives for Finance and Procurement for FY20-25. It will also include documentation of the full implementation of Budget and HR/Payroll functional scope for FY19-26, and plans, schedules, and estimates to execute non-technical and technical initiatives for Budget and HR/Payroll for FY19-26.

The Program Blueprint version 3, to be completed June 2018, will include all details of the components of the program with all budget estimates by component, with include additional details and refinements to the schedule and budget estimates for Finance, Procurement, Budget, and HR/Payroll. The Blueprint version 3 will represent the final Blueprint for the One Washington program to guide implementation in the years to come.

The 2014 Business Case was a fundamental input to the development of this document. The assessment work provided great insight into the work ahead and after further analysis, new information clarified some of those initial assumptions.

From the Business Case we learned:

- to approach business transformation incrementally
- to show value as we go
- refinement of Chart of Accounts is key
- this will be a multi-year effort with significant financial investment

Since the Business Case we learned:

- technology market is changing rapidly
- flexibility to alter course will be crucial as we move forward
- we will learn as we go
- best practice is to lead with a financial system implementation
- great business value can be achieved by deploying Finance and Procurement at the same time

Since the 2014 Business Case was developed some planning details have changed and key program directions have progressed. This progress will be discussed in the corresponding sections throughout the Program Blueprint. The detailed implementation planning contained in the subsequent sections of this Blueprint signifies the movement of the One Washington program from the strategy phase to the design phase.

## 1.1 Executive Summary

### *What is the One Washington program?*

One Washington is a comprehensive business transformation program to modernize and improve aging administrative systems and related business processes that are common across state government. Over the next eight years, One Washington will examine the state's business functions and implement initiatives so these functions are connected, consistent, and managed in a unified manner to provide reliable data and enable high performance.

One Washington consists of two elements: transformation of business processes and selection and implementation of an enterprise resource planning system (ERP) to support those business processes. ERPs are defined as common business practices across the enterprise and the technology that support them. ERPs pull together data on an organization's main resources – its people, money, information, and assets – and combine it into information that decision makers use to guide and manage. By implementing an ERP and transforming the processes that support the state's business, One Washington will help ensure decision makers have access to data that is accurate and timely, standardize common business processes across agencies, and enable improvements to citizen service delivery.

The scope of One Washington includes the Finance, Procurement, HR/Payroll, and Budget functions of the state. Washington currently relies on many manual and time consuming financial processes with an antiquated financial infrastructure. Failure of that old infrastructure means the state risks potential loss or degradation of financial information, with a commensurate loss of transparency and credibility – in other words, it could result in, at minimum, a significant loss of public trust. Additionally, there are disparate procurement functions and systems across the state, a complicated budgeting infrastructure which limits transparency, and an HR/Payroll system over 10 years old.

The Program Blueprint is the design for the next eight years. It defines the initiatives to accomplish the implementation plan and schedule and also identifies the benefits for these initiatives. This work builds on the preceding activities from the 2014 Business Case and sets the stage for implementation.

### *How will the state benefit from One Washington?*

Washington faces a situation common to most state governments, a constrained fiscal situation. Expectations for service are constantly changing with people expecting higher quality, faster interactions, greater and easier access to services, and better outcomes. The costs to deliver services are rising faster than revenues. Navigating a course between these pressures is the central challenge of those charged with governing our public institutions. Successful navigation requires effective tools that provide up-to-date information so that the state can make informed decisions and get the most out of every dollar that it spends.

In Washington, the administrative system tools in place are aging, are not well integrated with one another, do not readily produce needed information, and require heroic efforts by staff to maintain and function. In short, the state is trying to meet 21st century challenges with a 20th century operating strategy, business processes, and information systems. These aging capabilities inhibit the state's ability to meet the changing expectations of the people of Washington and maximize state resources.

An ERP is the strategic tool that organizations need in order to successfully navigate the challenges they face. With a new ERP system and redesigned business processes enabled by integrated technology systems, Washington will receive the following benefits:

- Business value delivered incrementally and continually over the course of the program
- Accurate and timely data for decision makers
- Reduced risk of major system failure
- More staff time devoted to delivering the mission rather than maintaining systems
- Critical capabilities maintained without having to own all the technology
- Process efficiencies as routine tasks are automated

### *History of the One Washington Program to Date*

In the 2013-15 Biennium, the legislature funded the One Washington program to produce a Business Case to develop the strategy for business transformation, replacing the state's aging financial system, and implementing an enterprise Procurement system. Working with 16 agencies and Accenture, One Washington developed the business case and defined the costs and mission impacts for three hypothetical ERP deployment scenarios. The scope of this Business Case was limited to Finance and Procurement and it provided the basis for making the business decision to proceed with implementing One Washington.

Based on the findings of the One Washington Business Case, the 2015-17 Biennium consisted of readiness activities to continue to prepare for the implementation of an ERP. There were six work streams of readiness activities:

- One Washington created a Strategic Partner Competitive Procurement process and selected Accenture as the Strategic Partner.
- Chart of Accounts (COA) work was completed to streamline expenditure coding, begin refinement of the COA, and establish data governance for the COA.
- The Procurement community defined common procurement business processes, data elements and procurement terms.
- One Washington collaborated with WSDOT on integration with the state ERP.
- One Washington implemented a Facilities Portfolio Management tool as a successful first effort in implementing a statewide SaaS solution.
- Budget system improvements and stabilization were implemented to facilitate the One Washington timeline.

This work, from 2013 to present, will continue to be the foundation of the current and future success of One Washington. The Business Case lays out the benefits of the program for the entire state, and the readiness activities have prepared Washington to get the most value from the coming transformation across the Finance, Procurement, HR/Payroll, and Budget areas. As the One Washington program further develops the Program Blueprint and makes detailed plans for implementation, success will continue to rely on the outstanding help, support, and leadership of dedicated participants and stakeholders from across state government.

### *Executive Summary of One Washington Blueprint Version 1*

#### *Scope and Methodology*

The Blueprint is the detailed and comprehensive plan to guide the coming phases of work. Additionally, the Program Blueprint will serve as a record of directions agreed upon throughout this planning phase and will serve as a guide for the implementation of these efforts in coming fiscal years, enabling the state to reference back to original goals to ensure that future work aligns to the guiding principles. The Blueprint is being developed iteratively in three versions. This version 1 of the Program Blueprint, serves to both outline the document and support the supplemental budget request for FY19. This version contains information on the first functions to be implemented (Finance and Procurement), and high-level information on later functions (Budget and HR/Payroll).

To develop this Program Blueprint, the program has conducted a series of activities to identify both technology and non-technology dependent initiatives, and define the detailed work needed to implement them. The program has

conducted interviews, working sessions, and large workshops with One Washington project stakeholders, including business owners and data experts from a representative group of state agencies. These outcomes will be analyzed to create a cost estimate for each initiative, a budget, and a staffing plan for version 2 of the Program Blueprint.

The plan for development of all three Program Blueprint versions, as well as the accompanying Integration Strategy and Plan, is pictured in Figure 1.1 below.

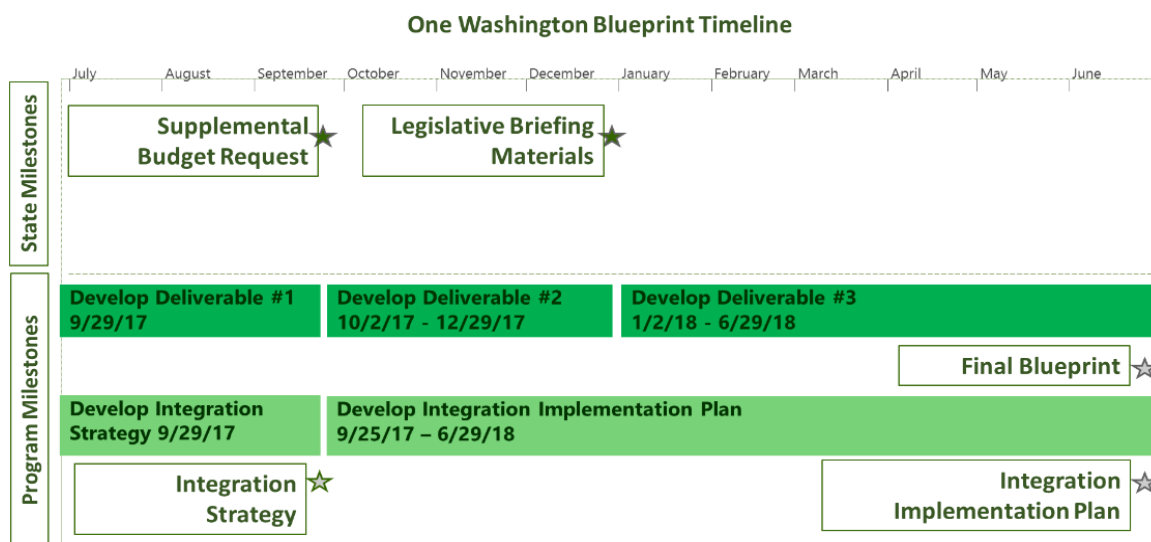


Figure 1.1: One Washington Blueprint Timeline July 2017 – June 2018

### One Washington Implementation Schedule

One Washington has determined key dates for executing the technology and non-technology initiatives to support the business transformation and ERP over the next eight years. Key dates are listed below, with a complete and more detailed schedule in Section 3.4.

- Initial functionality for Finance and Procurement will roll out in three waves of agencies, at the beginning of FY22, middle of FY22, and beginning of FY23.
- Expanded functionality for Finance and Procurement will roll out to all agencies at the beginning of FY24.
- Budget functionality will roll out statewide on January 1, 2026.
- HR/Payroll functionality will roll out statewide on January 1, 2026.
- Business Intelligence roll out will be aligned with every go-live of the four business functions.
- The schedule also includes time to select and procure software for each function.
- Supporting non-technology dependent business improvement initiatives will be executed before and throughout most of the technology rollout, beginning in FY19 and continuing through FY24.

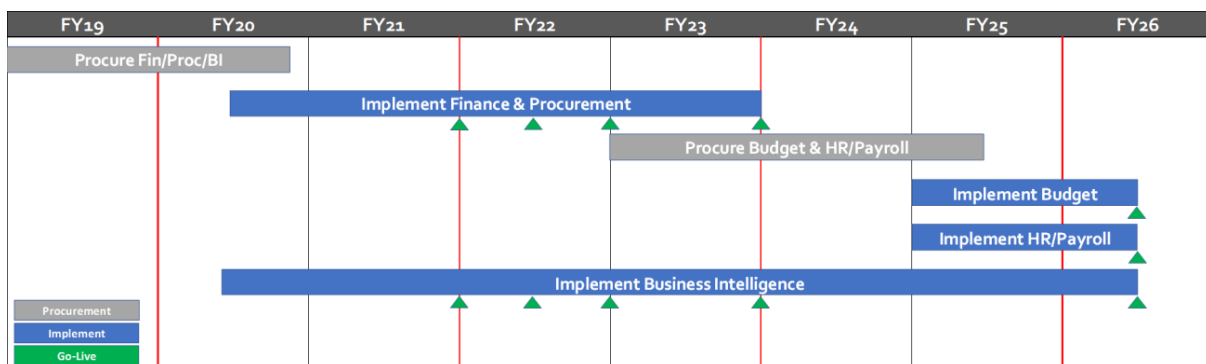


Figure 1.2: One Washington Program Implementation Timeline FY19-26

### Guiding Principles for the One Washington Program

The following sections summarize the One Washington guiding principles, the many component approaches and assumptions determined by the work of the program and the input of key stakeholders from across the state. These principles define the high-level plan for the work ahead and summarize the rationale and resulting downstream affects these principles will have.

### Unified vs. Best-of-Breed Strategy

One Washington will follow a unified approach (i.e. a single software product suite) for selecting and implementing the initial functionality of the Finance and Procurement systems. One Washington will also keep open the option of selecting different software (best-of-breed) for specialized functionality in the future (designated as expanded functionality). In coming to this conclusion, the state considered the factors for each deployment model as shown in Table 1.1 below.

Table 1.1: Distinguishing factors for unified and best-of-breed approach

| Unified Considerations  | Best-of-Breed Considerations   |
|---|--|
| An organization implements and supports a single instance of a suite of customizable software modules for each functional area from a single vendor | An organization implements and supports a compilation of different vendors and products, each based on specific needs in specific functional areas                                   |
| Provides functionality for common requirements across the various functional areas, with a common data model, data base, and user interface         | Allows for very precise requirements in various functional areas   |
| Integration is relatively less complex (all components in single-vendor environment), with integration provided “out-of-the box” by the vendor      | Integration is relatively more complex (typically multiple vendor environments involved), requiring dedicated efforts on integrations, some of which may be delivered by the vendors |
| Relatively less change management to train end users on a common application  | Relatively more change management to train end users on different applications   |



|   |  |
|---|--|
| Relatively slower to implement because single-vendor integration means more comprehensive design required, but less complexity to future changes and upgrades as part of the same application | Relatively faster to implement because fit-for-purpose modules can be 'plugged in' to core system, but adds complexity to future changes and upgrades e.g. testing |
| Sample vendors include Oracle, Workday, SAP, CGI, Infor, etc.   | Sample vendors include Salesforce, Round Corner (Grants Management), Periscope, Coupa, Amazon (eCatalog and Reverse Auctions), etc.                                |

To determine which functionality comprised the initial and expanded releases, One Washington facilitated a workshop to define the detailed business process areas of Finance and Procurement that would be in scope for all further planning activities. At this workshop, 30 stakeholders (representing both Finance and Procurement) reviewed the Accenture Business Process Models. The business process areas identified as in scope are included as an Appendix to this Blueprint.

Detailed discussion on the rationale behind this principle is in Section 2.1.

### *Technology Deployment Model*

The One Washington program has selected a Software as a Service (SaaS) approach, also described as a “cloud” approach, to technology deployment. This approach was selected over a more traditional on-premises deployment model, wherein the state would buy the complete code for its ERP software which would reside on the premises of the state. Instead, the state will subscribe to shared ERP software code, with its relatively lower cost to implement and quicker implementation cycle. Some of the differences, relative advantages and drawbacks of these concepts are visualized in Figure 1.3 below.

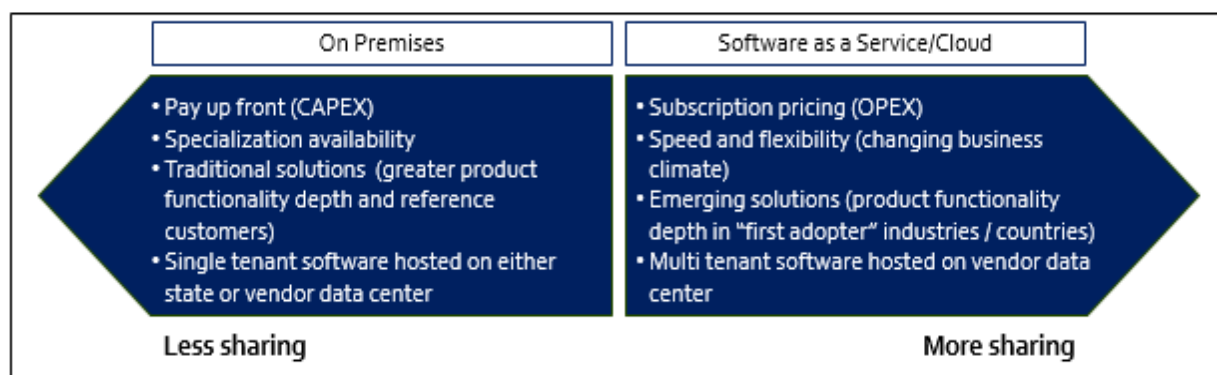


Figure 1.3: On-Premises and SaaS/Cloud models.

Detailed discussion on the approach the program used and the rationale behind it is in Section 2.2.

### *Scope of Business Functions*

Based on the unified approach and SaaS deployment model, the program will select one vendor to provide as many of the software modules in a cloud-based solution as possible. At this point, before the selection of a vendor, the program has identified several versions of existing software modules available in the ERP market, sold by major vendors. The modules may have some technical and functional distinctions across vendors but are designed to fulfill the same function. The Finance and Procurement business functions in scope for One Washington are defined below in Table 1.2.

Table 1.2: Finance and Procurement software to be acquired and implemented with the unified strategy

| Finance  | Procurement                              |
|--|--|
| <b>Initial Release Functionality</b>   | <b>Initial Release Functionality</b>     |
| General ledger accounting  | Requisitions and purchase orders         |
| Specialized accounting, e.g. project accounting, cost accounting, grantee accounting, Federal Highway accounting | Contract management                      |
| Budgetary control, e.g. encumbrances, commitment control   | Receiving                                |
| Asset management and accounting  | Sourcing, e.g. RFP, RFQ, RFX             |
| Accounts payable   | Supplier relationship management         |
| Accounts receivable  | Category management                      |
| Travel and expense   | Catalog purchasing                       |
| Cash management, e.g. local banking and cash control   | Master data, e.g. suppliers, commodities |
| Master data, e.g. chart of accounts, payees, suppliers   | Reporting                                |
| Reporting  |  |
| <b>Expanded Release Functionality</b>  | <b>Expanded Release Functionality</b>    |
| Grantor management   | Inventory management                     |

Detailed discussion, including the list of likely software modules, is in Section 2.3.

### *Implementation/Phasing Approach*

Finance and Procurement functionality will roll out in a phased agency/phased functionality approach (see Table 1.3 below). This plan represents the best balance of project risk with achieving business benefits. It includes a realistic schedule to accomplish selection and procurement of the software solution, non-technology dependent business improvement initiatives (i.e. business process redesign), and technology implementation. It also aligns with Washington business cycles (i.e. fiscal year end for Finance, to the extent possible, the current timelines for Budget, and calendar year end for HR/Payroll).

Table 1.3: Principles to match agencies to waves for Finance and Procurement

| Implementation Wave              | Detail   |
|----------------------------------|--|
| <b>Initial Release - Wave 1</b>  | <ul style="list-style-type: none"> <li>Agencies engaged by invitation, allowing One Washington to control size and mix for affordability</li> <li>Engage agencies that account for &gt;50% of the budget to show adoption</li> <li>Engage a mix of agencies that will use most of the initial functionality to help design the baseline configuration and common business rules</li> <li>Engage a mix of small, medium, and large agencies to demonstrate that the solution works for agencies of all sizes</li> <li>Engage a mix of agencies that use general fund, special revenue funds, capital funds, and internal service funds to demonstrate that the solution works for all fund types</li> </ul> |
| <b>Initial Release - Wave 2</b>  | <ul style="list-style-type: none"> <li>One Washington will work with agencies to schedule them into this wave, allowing One Washington to control size and mix for affordability</li> </ul>  |
| <b>Initial Release - Wave 3</b>  | <ul style="list-style-type: none"> <li>All other agencies</li> </ul>   |
| <b>Expanded Release - Wave 4</b> | <ul style="list-style-type: none"> <li>During development of version 2 of the Program Blueprint, we engage in selective interviews and/or meetings to confirm which agencies require expanded functionality to meet their business needs</li> </ul>  |

Agencies will be matched to implementation waves using the criteria listed in Table 1.4 below.

Table 1.4: Agency Selection Criteria

| Criteria  | Description   |
|---|---|
| Contributes to Baseline Configuration                   | Accounts for 80% of the common workflows, enterprise wide business rules, and master data.                                      |
| Fund Type   | Includes General Funds, Special Revenue Funds, Capital Funds, and Internal Service Funds.                                       |
| Technical Readiness                                     | Considers network infrastructure, cloud connectivity, and end-user devices.   |
| Executive Buy-In and Support                            | Addresses degree of willingness and support for design and adoption of the One Washington program and resource capacity.        |
| Business Buy-In and Support                             | Addresses degree of willingness and support from Finance and Procurement business community.                                    |
| Technical Imperatives                                   | Addresses agency needs, for example, broken financial systems, non-existent Procurement systems, agency systems at end of life. |
| Business Imperatives and Connectivity to Other Agencies | Addresses agency needs, for example, new business requirements, common business requirements among a group of similar agencies. |

The timelines for procurement and implementation of Finance, Procurement and Business Intelligence is summarized in Figure 1.4. For this version of the Program Blueprint, detailed planning has been done for the Finance and Procurement functionality.

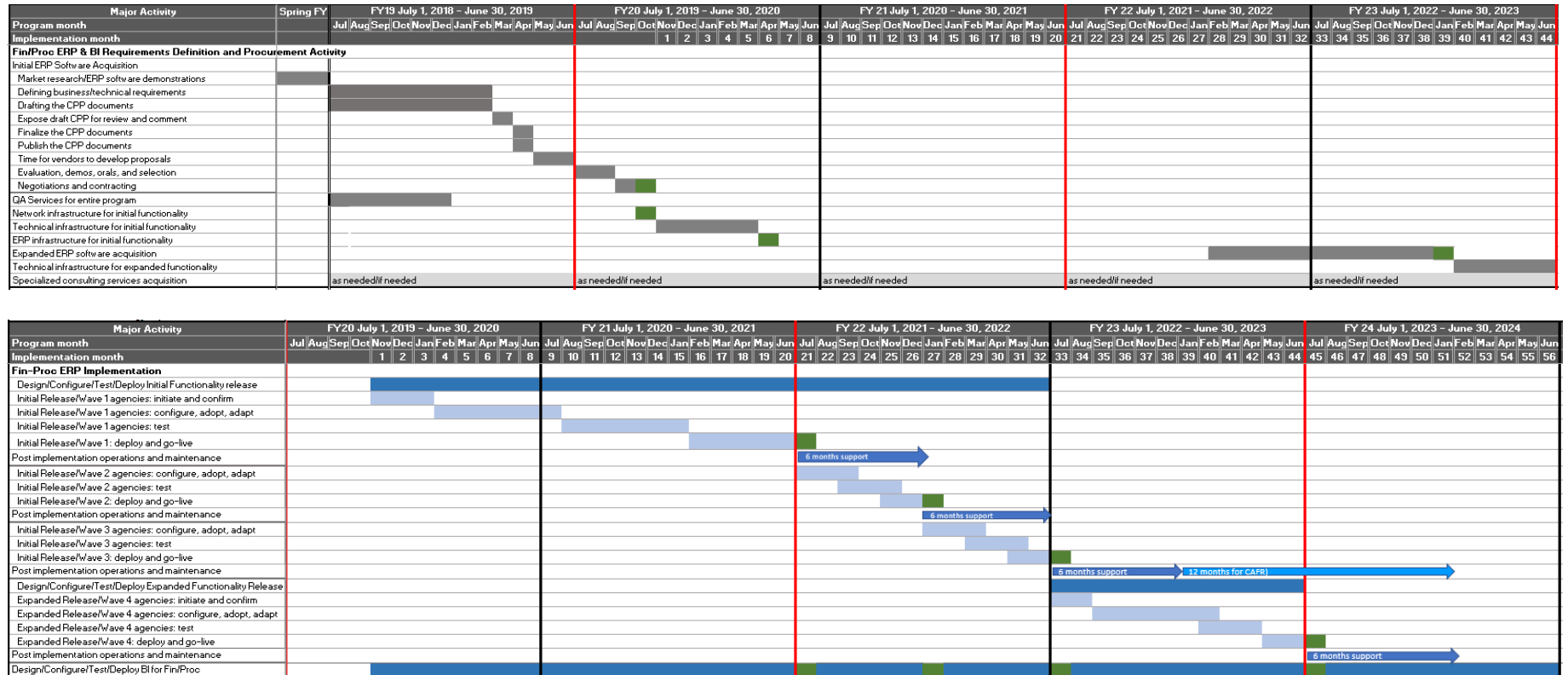


Figure 1.4: Timelines for Finance, Procurement and Business Intelligence



The timelines for procurement and implementation of Budget and HR/Payroll is summarized in Figure 1.5 below. For this version of the Program Blueprint, general and high-level planning is depicted for Budget and HR/Payroll functionality. (Note: The gap between the end of the Finance deployment and start of Budget and HR/Payroll implementation is depicted in Figure 1.5: Procurements needed to acquire Budget and HR/Payroll functionality)

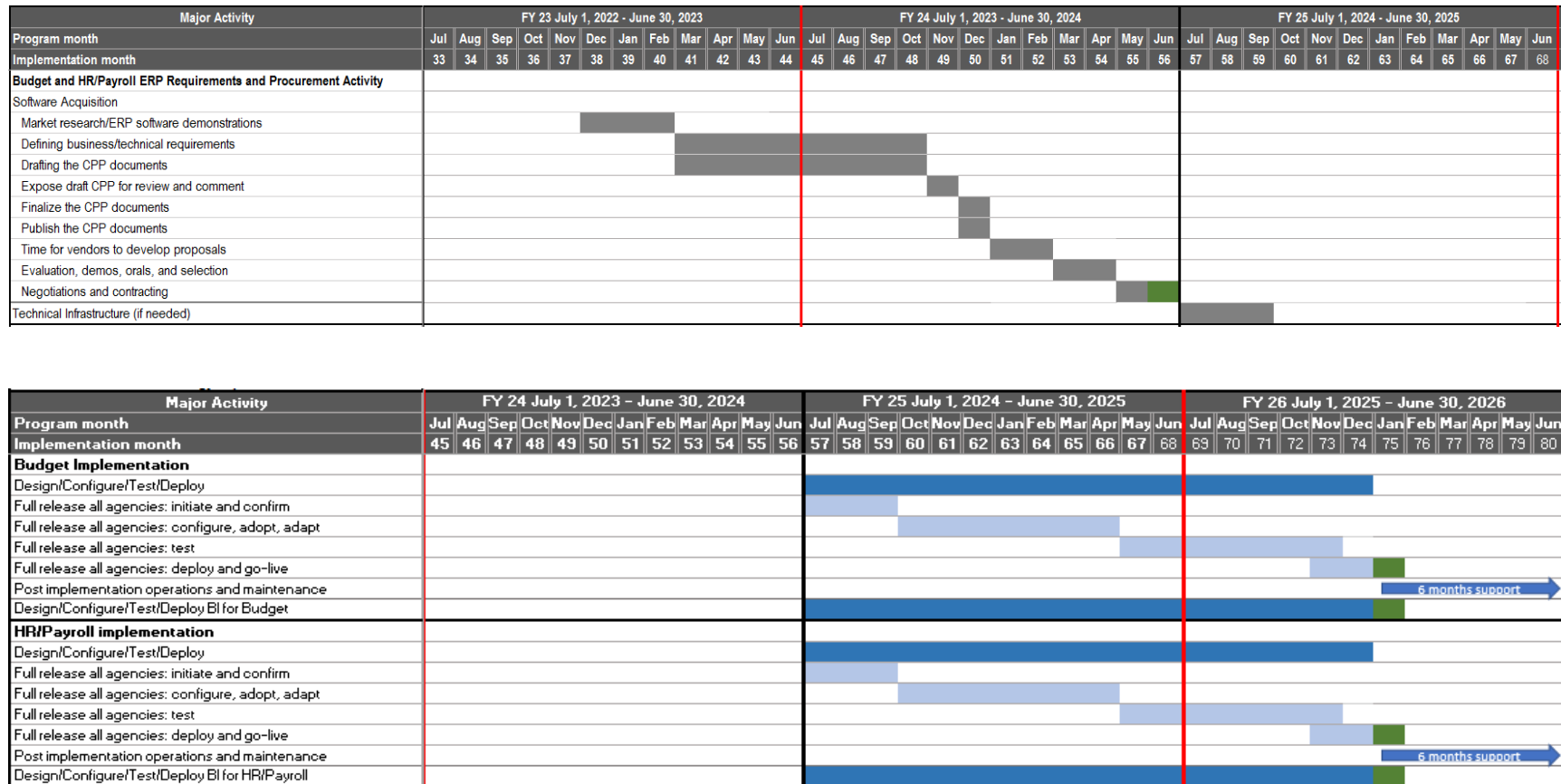


Figure 1.5: Timelines for Budget and HR/Payroll Implementation

Detailed discussion on the rationale behind this principle is in Section 2.4.

### Integration Approach

The integration approach defines the overall interface approach between the state's new ERP application(s) and numerous other systems with which the state's application(s) will interface. The interfacing system also includes other state management systems, systems by the various state agencies and external partner systems. The full integration approach is included in a separate document from this Blueprint, the One Washington Integration Strategy. That document includes the following sections:

- Data conversion approach
- Integration methodologies
- Interface development process

This current version of the Integration Strategy includes an initial draft in all these areas. Subsequent versions will provide more detail.

For the integration strategy, the finance and procurement data will be converted in waves, i.e. data for the agencies is converted during the wave to which they are assigned. Completion of the first wave will be followed by the next wave. This will require temporary interfaces until all agencies are fully implemented, converted, and integrated with One Washington. Figure 1.6 depicts the wave strategy.

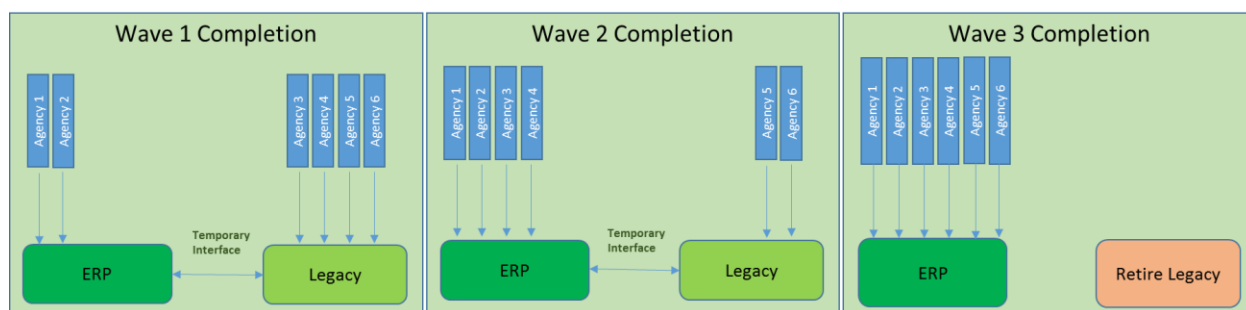


Figure 1.6: The Integration Strategy supports temporary interfaces during the implementation waves.

Detailed discussion on the rationale behind this principle is in Section 2.5.

### Master Data Management

The Master Data Management (MDM) strategy identifies the nature of data required for enterprise purposes that must be defined, managed, and stored in enterprise systems. The strategy also defines the governance and decision making process for enterprise master data, shared master data, and local master data (see Figure 1.7). Strong governance is key to the successful implementation of a complex program.



Figure 1.7: Master Data Management Strategy

The MDM governance model will consist of four groups (see Figure 1.8):

- Agency managers and end users who may make requests to create/read/update/delete master data.
- A committee, to review and make recommendations on these requests.
- Four executive oversight committees (Finance, Procurement, Budget, HR/Payroll), each chaired by the business owner relevant to the request. The oversight committee also sets master data management policies and standards for their respective domains.
- An implementation group. This group will execute the master data changes to the appropriate systems and data repository pursuant to standards and policies.



Figure 1.8: Master Data Management Governance Model

Detailed discussion, including the approach to executing MDM using this governance model, is in Section 2.6.

### Data Conversion

The One Washington data conversion strategy will ensure the conversion of accurate data, minimize business disruption, process inefficiencies and support issues after the completion of the conversion. The strategy defines the overall approach for data conversion from the legacy systems into the ERP system. It consists of the following elements:

- Assumptions
- Conversion methodology
- Data cleansing strategy
- Data conversion validation and reconciliation
- Roles and responsibilities
- Finance and Procurement data conversion scope
- Budget and HR/Payroll data conversion scope
- Other considerations that may impact the data conversion strategy and approach
- Assumptions used in determining the data conversion methodologies

This current version of the Program Blueprint outlines approaches One Washington will follow. Subsequent versions will provide more detail as the team analyzes the detailed systems and data to be converted. Figure 1.9 depicts the data conversion implementation approach for One Washington.

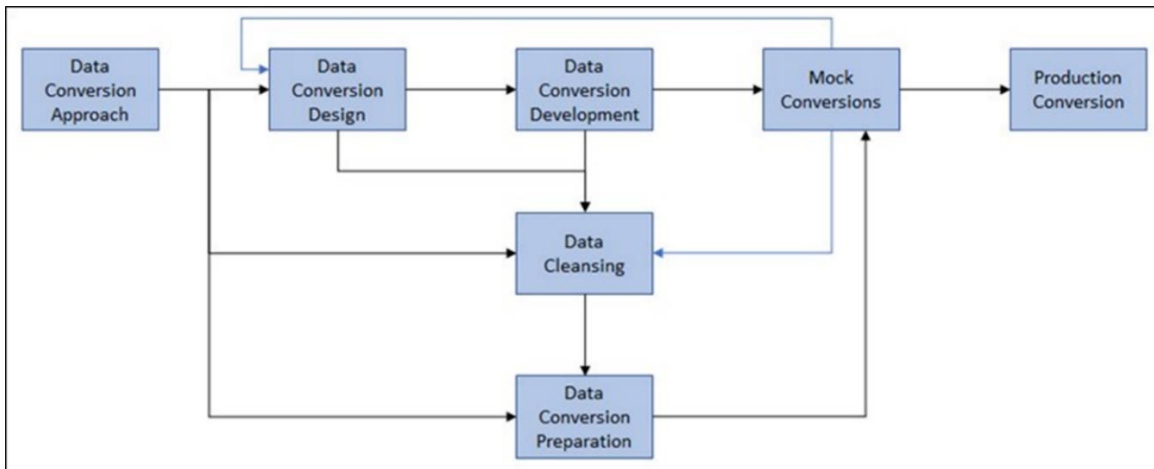


Figure 1.9: Data Conversion Implementation Approach

Detailed discussion on each of the sections above is in Section 2.7.

### Reporting Capabilities

The reporting capabilities need to support a wide range of business needs, from daily detailed transactional reports to executive-level dashboards with roll-up indicators supporting drilling down to lower levels of detail. There are a wide variety of potential tools available to support the broad range of reporting needs. The various reporting needs are depicted in Figure 1.10 below. The reporting approach for One Washington will use the delivered reporting capabilities of the selected ERP as a starting point. The detailed reporting strategy will also need to be integrated with the Business Intelligence (BI) strategy the state is preparing, showing cohesiveness between the Program Blueprint and the BI strategy in later versions. Finally, this approach may determine that add-on reporting options are needed to meet the state's needs for data.



Figure 1.10: Reporting Capabilities



A modern ERP will provide added capabilities that will address current reporting challenges for the state. These challenges are the result of having multiple applications and system of records. The capabilities are summarized below.

Table 1.5: ERP Capabilities

| Capability                                  | Description   |
|---|---|
| <b>Leveraging delivered functionality</b>   | Many report requests can be met using the capabilities delivered within the ERP.  |
| <b>Transparency of complex calculations</b> | ERPs give transparency to complex calculations and make that data available through reporting and dashboards.               |
| <b>Real-time data</b>                       | ERPs provide reporting capabilities and dashboards that allow data analysis in real time.                                   |
| <b>Drilldown capabilities</b>               | ERP reporting tools allow users to easily move from a higher-level view to a more detailed view of the data being analyzed. |
| <b>Ad-hoc reporting capabilities</b>        | ERPs provide for flexibility and easy access for users to build their own queries.  |

Detailed discussion is in Section 2.8.

### Security Approach

The security approach for One Washington combines delivered ERP security functionality with well-defined security processes and existing state security mechanisms. In compliance with existing Washington State policy, the security approach will combine infrastructure, data, and application-level security to ensure data is accessible to those authorized to view it and protected from unauthorized access. The One Washington program will adhere to the state's policy of mandatory security reviews throughout planning, implementation and post implementation support.

Embedding security design, configuration, and testing into the project lifecycle greatly reduces risk for the delivery of a secure system. The security configuration for the One Washington implementation will focus on three areas:

- Infrastructure Security – Configuring the infrastructure in such a way that users can easily access what they need to, but remain secure throughout the entire communication process.
- Data Security – Securing data such that only appropriate users have access to the appropriate data required for their job roles.
- Application Security – Configuring the system such that only the appropriate users can gain access through trusted authentication services. This is a critical step towards protecting the perimeter of the applications. Extending that configuration to appropriate authorizations that restrict users to only the data and transactions that they need to do their day-to day jobs completes the application security model.

The following security considerations need to be further analyzed for adherence to state and agencies' security policies and standards:

- ERP Authentication
- File Transfer Security
- Logging and Monitoring
- Firewall
- Digital Certificates

- VPN
- Secure Access Washington
- File Data Encryption
- Authorization
- Maintaining Security
- Security Design Review

Detailed discussion is in Section 2.9.

### FY19 Activities

There are three initiatives planned for FY19, to be included in the supplemental budget request for the year. These initiatives will increase the state's readiness, deliver rapid business value, and expedite the One Washington implementation. For each initiative, the component activities are shown in the list below in Table 1.6.

Table 1.6: Initiatives beginning in Fiscal Year 19

| Initiatives  |  |  |
|--|--|--|
| Procurement of Finance and Procurement Software  | Assess Procurement Organizational Strategy   | Assess Finance Organizational Strategy and Readiness   |
| <ul style="list-style-type: none"> <li>• Work with stakeholders to gather business and technical requirements</li> <li>• Work with WaTech to ensure infrastructure readiness</li> <li>• Facilitate software demos</li> <li>• Evaluate and select software</li> <li>• Continue to coordinate change readiness activities</li> </ul> | <ul style="list-style-type: none"> <li>• Assess current business processes with Procurement organizational strategy</li> <li>• Conduct review of laws, regulations, and policies in readiness for a new Procurement system</li> <li>• Launch strategic sourcing assessment for a select group of categories</li> </ul> | <ul style="list-style-type: none"> <li>• Assess current business processes with Finance organizational strategy</li> <li>• Consolidate statewide master payee and customer files</li> <li>• Conduct a review of laws, regulations, and policies in readiness for a new financial system</li> <li>• Review business processes that could be improved with existing technology</li> <li>• Standardize accounting practices and data in preparation for a new system</li> </ul> |

Detail on each of these initiatives, and the other initiatives in the entire program, are included in Section 3.0.

### Program Staffing

The staffing and supporting resources plan includes state employees and contractors, and accounts for all initiatives, i.e. non-technology and technology dependent. It will start in July 2019 and conclude in June 2026.

### Program Budget

The One Washington program budget was an iterative process based on Accenture estimating tools and staffing plans reviewed and adjusted according to stakeholder feedback and previous experience. Other inputs from programs of

similar scope and size were considered, including different cost factors like length of the deployment schedule, appropriate staffing number and duration on project, and the estimate of change orders and state turnover costs. Cost factors were weighed against the risks to the program. Based on the implementation schedule and guiding principles described above, the One Washington program is estimating total costs for the program at \$303.9m. The annual estimated costs are summarized below in Table 1.7:

Table 1.7: Estimated Annual Program Costs

| Cost Summary        | FY19         | FY20          | FY21          | FY22           | FY23           | FY24           | FY25           | FY26           |
|---------------------|--------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
| Total Annual Costs  | \$ 5,256,406 | \$ 26,440,966 | \$ 51,857,228 | \$ 57,869,862  | \$ 33,786,748  | \$ 24,745,057  | \$ 54,027,555  | \$ 49,977,291  |
| Total Program Costs | \$ 5,256,406 | \$ 31,697,372 | \$ 83,554,600 | \$ 141,424,462 | \$ 175,211,210 | \$ 199,956,267 | \$ 253,983,822 | \$ 303,961,114 |

These costs include estimates for One Washington state employee salaries and benefits, professional services, SaaS software subscription estimated costs, facilities and training costs, state staff turnover and replacement, and changes, amendments and adjustments to contractor resources.

The costs presented here are estimated values for the One Washington program only, these costs do not include cost of implementation to agencies.

The scope of One Washington program includes Finance, Procurement, Budget, HR/Payroll and Business Intelligence.

For comparisons purposes, the 2014 Business Case cost estimates ranged (depending on scenarios) from \$242m to \$284m for the implementation of Finance and Procurement only. One Washington also looked at other recent implementation costs for other states. Wisconsin recently implemented an ERP solution for Finance, Procurement, HR/Payroll and Business Intelligence for a total cost of \$280m.

More details for the budget, including costs by initiative and by object code by year, are in Sections 5.0 and in the Budget Analysis workbook.

### WSDOT Integration with One Washington

WSDOT needs to upgrade their aging financial system in the next five years, primarily due to technical obsolescence. WSDOT and One Washington will continue to work together to perform analysis and gather data necessary to make an informed decision on whether WSDOT should utilize the One Washington statewide ERP or upgrade TRAINS to the most current version of Advantage.

- A 2-day workshop was conducted and the following topics were discussed:
  - Overview of the One Washington program
  - A discussion of WSDOT specific requirements
  - Wisconsin DOT case study
  - A review of 25 WSDOT critical systems and impact due to the implementation of an ERP
- Mutual agreement that an ERP, whether statewide or WSDOT specific, would provide functionality and capability to meet WSDOT business needs
- WSDOT expressed needs regarding ERP governance, during and post implementation, in order to ensure an integrated system meets their business needs

### Next Steps

In the coming months, the One Washington program will continue to develop additional detail to support the Program Blueprint. Two more versions of the Program Blueprint will be completed in FY18, which will add detailed planning for the Budget and HR/Payroll functions. Future versions of the Program Blueprint will also contain the Communication Strategy and a Change Management Plan, based on the change management planning from the 2014 Business Case.

Future versions of this Blueprint will also include further technical details regarding infrastructure readiness, master data management, data conversion, reporting, and security.

## 1.2 Introduction

This section describes the scope (organizational and functional) and the methodology used to develop this first version of the Program Blueprint.

### 1.2.1 Scope

One Washington worked with the following 15 agencies in a series of focused interviews and workshops (further described below). Agency participants included business owners and technology staff. The functional areas covered in the interviews and workshops was Finance and Procurement.

- Department of Transportation
- Department of Corrections
- Department of Enterprise Services
- Department of Health
- Department of Ecology
- Office of Financial Management
- Department of Labor and Industries
- Department of Natural Resources
- Office of State Auditor
- Office of State Treasurer
- Supt. of Public Instruction
- Washington State Patrol
- Health Care Authority
- Department of Social and Health Services
- Department of Revenue

### 1.2.2 Methodology

One Washington started by first identifying the stakeholders and preparing an exhaustive list of non-technology and technology dependent initiatives by using Accenture's expertise and prior experience with similar programs in other states. This list was further refined and customized for specific business needs of the agencies in scope for the state of Washington by actively engaging with One Washington, business and technology staff in interviews and workshops. Finally, the prioritized list of initiatives for both Finance and Procurement, along with a defined implementation timeline, was developed by conducting a collaborative workshop with stakeholders from all the agencies. Lists of participants of all workshops and interviews are provided in the Appendix.

The following activities were undertaken to review and prioritize the non-technology dependent initiatives:

- *Identifying list of relevant Finance and Procurement business process initiatives:* A broad list of a total of 149 initiatives (78 Finance and 71 Procurement) was identified and then further refined to filter out the initiatives that are less relevant to Washington business processes or highly technology dependent. From this refined list, a final set of non-technology dependent initiatives for business process improvements for both Finance and Procurement was prepared.
- *Rating Finance and Procurement business process initiatives:* Value opportunity hypotheses were developed and distributed to the relevant stakeholders from 15 state agencies for each of the identified non-technology dependent Finance and Procurement initiatives. Separate interview sessions were then scheduled and conducted to gain insight into the value that agencies saw for each initiative and assessment



of the relative effort needed. These were then used as inputs in the analysis to estimate the relative benefits for each initiative.

- *Assessing the priorities for the non-technology dependent business process initiatives:* Workshops were conducted for both Finance and Procurement where the attendees included One Washington, and business and technology staff from several different agencies. Workshop attendees were divided into two breakout groups where they discussed relative importance of these initiatives based on the specific needs of their agencies. The attendees then regrouped and discussed the results and rationale with the larger group. This resulted in a prioritized list of initiatives and concurrence on a joint implementation timeline of these initiatives by fiscal year.

Below are the activities that were undertaken for technology dependent initiatives:

- *Selecting deployment model (on premise vs. software as a service; best-of-breed vs. unified):* Workshops were conducted to discuss the pros and cons of different deployment models, gather inputs from state agency stakeholders and gain consensus across the board. Workshop participants were One Washington core members as well as representatives from agencies. Based on best practice, past program experience, and current industry trends, the program made recommendations and gathered feedback on these recommendations from the participants.
- *Technology workshops (integration, master data management, data conversion, reporting/BI, security):* Based on the program's knowledge of best practice, as well as experience in similar state programs, preliminary recommendations and approaches were designed for each portion of the technical work stream. These approaches were socialized in an iterative review and feedback process with state agency stakeholders and One Washington. One Washington incorporated the feedback and Washington-specific technical considerations into the recommendations to further refine the approaches for the technical work streams.

The conclusions derived from the results of these activities form the basis of the plan for a comprehensive business transformation program, detailed in the ensuing sections and comprising the One Washington Program Blueprint deliverable.

## 2.0 Guiding Principles

This section describes the foundational guiding principles relevant to the One Washington implementation, along with the rationale of why these principles are the appropriate choice for the State of Washington, based on Washington State data and comparison to leading industry practice, as appropriate. These guiding principles are for planning purposes and may be re-assessed at periodic 'gates' throughout the course of the program. We acknowledge that any changes to these guiding principles will add risk to the program, adding time and cost. Considerations to revisit these gates may include changes in the technology market, evolving security requirements, or other external decisions that would affect the successful implementation of systems by this program.

Each of the principles listed below will include a relevant introduction and background information, along with the rationale behind the principles and a brief description and outcomes of the quantitative and qualitative activities conducted to support the guiding principles. These guiding principles are:

- Unified vs. best-of-breed strategy
- Technology deployment model
- Scope of business functions
- Implementation/phasing approach
- Integration approach
- Master data management
- Data conversion
- Reporting capabilities
- Security approach

### 2.1 Unified vs. Best-of-Breed Strategy

#### 2.1.1 *Background and Introduction*

One of the foundational assumptions which will impact the future direction of the One Washington program is the deployment strategy for Finance and Procurement ERP software, in addition to Budget and HR/Payroll ERP software at a later point in the program. One strategy is to select a single software product for all business functions (i.e. a unified approach) and the other is to select different software products for each business function (i.e. a “best-of-breed” approach). This concept is depicted in Figure 2.1.1 below.

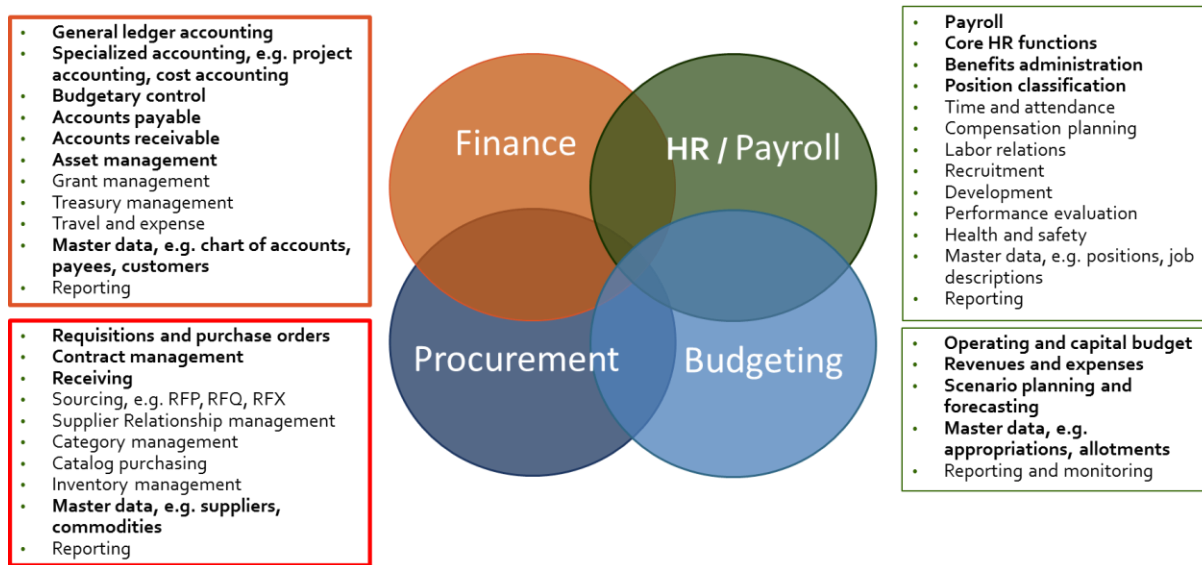


Figure 2.1.1: In the unified approach, one software product will deliver all business functions. In a best-of-breed approach, a different software could be selected for each business function.

The State of Washington evaluated the relative advantages of these different approaches before. In the 2014 Business Case effort, the unified approach was discussed as “Scenario 1.” The best-of-breed approach was discussed as “Scenario 2.”

#### Guiding Principle

1. *One Washington will follow a ‘unified’ approach (a single software product suite) for selecting and implementing the initial functionality of the Finance and Procurement systems. In version 2 of the Program Blueprint this matter will be examined in further detail to establish the guiding principle for the Budget and HR/Payroll system functionality.*
2. *One Washington will keep open the option of selecting different software (‘best-of-breed’) for expanded functionality in the future (designated as ‘expanded functionality’).*

### 2.1.2 Supporting Activities

This guiding principle was evaluated through the following activities:

- One Washington facilitated a workshop to define common Finance and Procurement business process areas to be used to scope the One Washington implementation. At this workshop, 30 stakeholders (representing both Finance and Procurement business functions) reviewed the Accenture Business Process Models. The business process areas identified as “in scope” are included as an Appendix to this Blueprint.
- The unified vs. best-of-breed strategy was discussed in a workshop with both business and technical stakeholders. At this workshop, the stakeholders concurred on a unified strategy for the initial Finance and Procurement functionality. This group also agreed to keep options open for the possibility of selecting different software with expanded functionality in the future (for example, different software may be better for certain

expanded Finance functionality such as grantor management, and certain expanded Procurement functionality such as inventory management).

- The scope of business functions, results of the workshops, and the direction to plan for a unified strategy was reviewed and validated by the One Washington Executive Steering Committee.

### 2.1.3 *Rationale and Recommendation*

The guiding principle for the State of Washington is a unified approach for selecting ERP software for Finance and Procurement. In coming to this conclusion, the state considered the following factors as shown in Table 2.1.1 below.

Table 2.1.1: Distinguishing factors for unified and best-of-breed approach

| Unified Solution Considerations   | Best-of-Breed Considerations   |
|---|--|
| An organization implements and supports a single instance of a suite of customizable software modules for each functional area from a single vendor   | An organization implements and supports a compilation of different vendors and products, each based on specific needs in specific functional areas                                   |
| Provides functionality for common requirements across the various functional areas, with a common data model, data base, and user interface   | Allows for very precise requirements in various functional areas   |
| Integration is relatively less complex (all components in single-vendor environment), with integration provided “out of the box” by the vendor  | Integration is relatively more complex (typically multiple vendor environments involved), requiring dedicated efforts on integrations, some of which may be delivered by the vendors |
| Relatively less change management to train end users on a common application  | Relatively more change management to train end users on different applications   |
| Relatively slower to implement because single-vendor integration means more comprehensive design required, but less complexity to future changes and upgrades as part of the same application | Relatively faster to implement because fit-for-purpose modules can be ‘plugged in’ to core system, but adds complexity to future changes and upgrades e.g. testing                   |
| Sample vendors include Oracle, Workday, SAP, CGI, Infor, etc.   | Sample vendors include Salesforce, Round Corner (Grants Management), Periscope, Coupa, Amazon (eCatalog and Reverse Auctions), etc.  |

The stakeholders who participated in the workshop confirmed the direction of adopting a unified ERP strategy for the purposes of formulating the Program Blueprint. In reviewing this issue, the stakeholders agreed that the unified approach balances considerations of cost, benefits, speed, and risk. Other important considerations and discussion points raised by stakeholders as the rationale for this direction included the following:

- Recent decisions made by other states in similar circumstances. For initial functionality, similar states have adopted this strategy.
- A unified procure-to-pay process (which is most easily delivered if the Finance and Procurement systems are unified) is a key capability to deliver full potential value with a new ERP system.
- Business requirements may ultimately necessitate new assumptions regarding the approach that best meets enterprise needs, thus the Program Blueprint should reflect some flexibility.



- More conversations may be needed for expanded functionality (i.e. grantor management and inventory management).
- Good governance and change management are critical to the success of the program. This could be simpler and more standardized with a unified strategy.

Table 2.1.2 below indicates functionalities for which software will be initially procured and deployed under the unified strategy. (Note: functionality labeled “expanded” reflects the possibility of selecting a different software for certain expanded functionalities in future.)

Table 2.1.2: Finance and Procurement software to be acquired and implemented with the unified strategy

| Finance  | Procurement                              |
|--|--|
| <b>Initial Release Functionality</b>   | <b>Initial Release Functionality</b>     |
| General ledger accounting  | Requisitions and purchase orders         |
| Specialized accounting, e.g. project accounting, cost accounting, grantee accounting, Federal Highway accounting | Contract management                      |
| Budgetary control, e.g. encumbrances, commitment control   | Receiving                                |
| Asset management and accounting  | Sourcing, e.g. RFP, RFQ, RFX             |
| Accounts payable   | Supplier Relationship management         |
| Accounts receivable  | Category management                      |
| Travel and expense   | Catalog purchasing                       |
| Cash management, e.g. local banking and cash control   | Master data, e.g. suppliers, commodities |
| Master data, e.g. chart of accounts, payees, suppliers   | Reporting                                |
| Reporting  |  |
| <b>Expanded Release Functionality</b>  | <b>Expanded Release Functionality</b>    |
| Grantor management   | Inventory Management                     |

## 2.2 Technology Deployment Model

### 2.2.1 Background and Introduction

This section details the rationale that supports the guiding principle of a Software as a Service (SaaS) model of technology deployment for the One Washington program. It also describes the detailed process by which this principle was determined.

The selection of deployment model for the One Washington program can be summarized as a consideration between an on premises and a SaaS approach (also described as a “cloud” approach) to technology deployment. The key differences between these strategies is the degree to which the state would own or share the core code of the ERP software. If the state were to determine it wanted to buy the complete code for its ERP software, then the

software would reside on the premises of the State of Washington. However, if the state were to determine it wanted to lease shared ERP software code, with all the relative advantages and drawbacks of sharing the software, it would be subscribing to a SaaS model of technology deployment and the software would reside “in the cloud.” Some of the differences and relative advantages and drawbacks of these concepts are depicted in Figure 2.2.1 below.

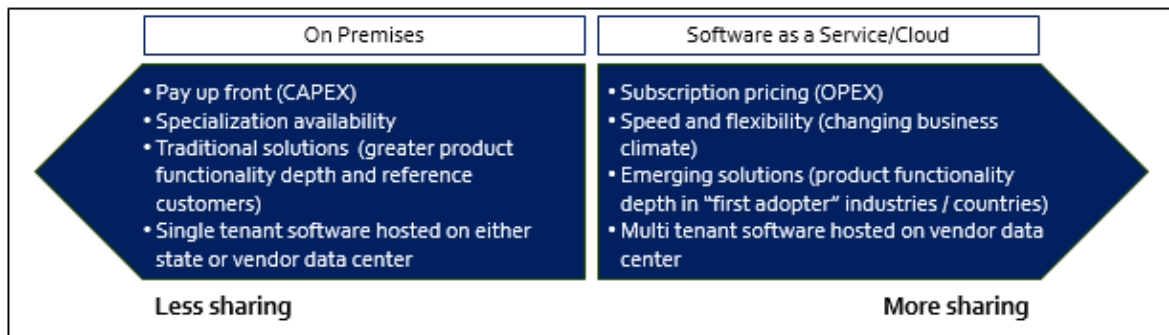


Figure 2.2.1: Differences, and relative advantages and drawbacks of on premises vs. SaaS

Some stakeholders are already familiar with the key distinctions between these two models. In 2014, the Business Case examined at a high level many of the same considerations relating to technology deployment that are addressed in this section. The 2014 work familiarized the stakeholders with the generally available technology deployment options at the time and examined the feasibility of three scenarios. Scenario 3 of the 2014 work examined the feasibility of an implementation of “Best-of-Breed eProcurement with (SaaS) ERP Financials.” While the selection of a unified approach to the technology deployment precludes the “best-of-breed” scenario for One Washington (refer to section 2.1 above), the principles of a SaaS implementation generally remain the same. However, one key difference since the time of the 2014 assessment is that vendors in 2014 lacked implementation experience with SaaS solutions for state government. As a result, the 2014 description of Scenario 3 examining the implications of implementing a SaaS solution lacked specific phasing, timeline guidance and estimates.

In the past three years, vendor experience in the state government SaaS ERP market has grown and matured. With the guiding principle of a SaaS solution defined for One Washington, the program can proceed to plan for a deployment of a SaaS solution for future bienna with the benefit of the detailed phasing and implementation planning described in the rest of this document.

### Guiding Principle

1. *SaaS strategy will be used for the One Washington implementation.*

## 2.2.2 Supporting Activities

The development of this component of the Program Blueprint was based on following activities:

- This analysis is based primarily on a workshop conducted to discuss the on premises vs. SaaS strategy with both business and technical stakeholders. At this workshop, the stakeholders concurred on a SaaS strategy for the One Washington functionality. Important drivers acknowledged by stakeholders during the workshop for the above conclusion included:

- SaaS strategy avoids up-front capital investments and allows for lower costs to change software in the future.
  - A SaaS model may meet more requirements, but should still consider the limited flexibility to customize.
  - Software companies in our market are investing their R&D funds into their SaaS products, they are not investing in their on premises solutions, if we want best in class we should choose SaaS.
  - State security experts should weigh in on data privacy considerations for this decision.
  - If there are elements that will require a hybrid approach, it would be important to reflect the potential that the solution may not be 100% cloud-based in the budget estimate.
  - Recent decisions made by other states were considered in the discussion.
- This guiding principle, for a SaaS strategy, was reviewed and validated by the One Washington Executive Steering Committee.

### 2.2.3 Rationale and Recommendation

One Washington developed a conceptual model to describe the on premises and SaaS strategies, as well as list of considerations for each, for review by both business and technical stakeholders (Table 2.2.1 below). After considering advantages and disadvantages of the two options, the stakeholders concurred on a SaaS strategy for the One Washington implementation.

Table 2.2.1: On Premises vs. Software as a Service Considerations

| On Premises Considerations (Buy)  | SaaS Considerations (Lease)  |
|---|--|
| Allows <b>significant organizational freedom</b> to shape the software to business requirements   | Software <b>customization is limited to non-existent</b> , but the solutions are generally <b>highly configurable</b>  |
| This model allows for <b>flexibility to perform technical hosting</b> activities (such as managing the application servers for application, etc.) either internally or outsourced to a service provider | <b>Software is not locally installed or owned</b> ; it is accessed through the web or mobile applications  |
| <b>Fixed pricing model</b> - customers pay a license fee and on-going maintenance charges   | <b>Variable pricing model</b> - customers pay subscription fee per user and module   |
| <b>Enhancement patches and release upgrades must be done by the customer</b> or a third party with specialized technical skills   | The vendor releases patches, functionality enhancements, or full upgrades, so that the <b>customer solution will be automatically updated</b>  |
| Requires dedicated staff with <b>technical and business knowledge</b> of the software   | Requires dedicated staff with <b>business knowledge</b> to work with software vendor   |
| <b>Higher implementation cost</b> , longer implementation cycle, longer cycle time between major functionality additions  | <b>Lower implementation cost</b> , quicker implementation cycle, more frequent additions of new software functionality   |
| Business requirements not satisfied by the software can be addressed via <b>software customization</b> (though not recommended), or business process redesign   | Business requirements not satisfied by the software <b>cannot be met with direct changes to vendors' baseline code</b> , but can be addressed via Platform as a Service, on Ppremises middleware, or business process redesign |

The program also summarized other considerations that were relevant for the business and technical stakeholders to make an informed selection on the appropriate deployment model. This included the following:

- An assessment of what other comparable states were choosing to implement.
- Industry guidance from Gartner (Magic Quadrant for Enterprise Integration Platform as a Service (IPaaS), 30 March 2017), which states: *“It is expected that the service-based approach for IT will become the preferred option over the software-based approach over time, as end-user organizations look to downsize the operation side of their IT portfolios.”*

Based on the above rationale, the stakeholder group recommended a SaaS strategy for the One Washington implementation. This was later validated by the One Washington Executive Steering Committee.

## 2.3 Scope of Business Functions

### 2.3.1 Background and Introduction

This section details the recommended scope of Finance and Procurement functions included in the One Washington program. This section also connects the business functions with the software modules to be implemented by the One Washington program. At this point, before the selection of a vendor, the software is described with brand-agnostic descriptions of existing software modules available in the ERP market sold by major vendors. The modules may have some technical and functional distinctions across vendors, but are designed to fulfill the same function.

The State of Washington evaluated the scope of Finance, Procurement and budget functions during the 2014 Business Case but only Finance and Procurement was included in the recommendations. The Program blueprint considers all business functions including Finance, Procurement, Budget and HR/Payroll. Technology has advanced since the 2014 business case, offering complete systems that covers the One Washington enterprise business functions, and making it possible to consider all areas for the program.

### 2.3.2 Supporting Activities

The development of this component of the Program Blueprint is based on the following activities and analysis:

- Conclusions of a workshop to define the business process areas in scope. At this workshop, 30 stakeholders (representing both Finance and Procurement) reviewed the Accenture Business Process Models. The business process areas identified as in scope are included as an Appendix to this Blueprint document.
- Survey of available ERP products in the market and Accenture experience in ERP implementations in other comparable states.
- Staff site visits to the states of Wisconsin, Arizona, and New York, who have all recently completed a successful ERP implementation.
- Collaboration with the University of Washington and Washington State University as they work to implement their ERP solutions.

### 2.3.3 Rationale and Recommendation

In Table 2.3.1 and 2.3.2 below, the business processes areas that can be supported by ERP software modules with specific applicability to a specific function are noted with a generic title in the “Functional ERP Software Module” column. Some business process areas in scope for the One Washington Blueprint do not necessarily depend upon a specific ERP software module. For example, many Finance and Procurement business process areas will rely

upon data, information, and automated workflow generated by an ERP system overall, but not a specific module. These are marked with an “N/A” in the “Functional ERP Software Module” column. Further explanation of how the business process area can be supported is provided in the “Notes” column where appropriate.

#### 2.3.4 *Out of Scope Business Functions*

Based on the results of the stakeholder workshops, the following Finance functions related to Tax and Treasury areas were deemed not in scope for the One Washington program:

- Revenue Cycle Management - Tax.
- Investment Management
- Debt Management

These were excluded because they are more of an agency line of business processes rather than enterprise processes that are common and shared across the agencies of state government.



Table 2.3.1: Finance Functions in Scope for One Washington & Corresponding Software Modules Where Applicable

| In-Scope Function                              | Description   | Function Supported by Specific Module? | Functional ERP Software Module | Notes   |
|--|---|--|--------------------------------|---|
| Enterprise Mission & Strategy                  | In conjunction with enterprise strategic planning, this includes the alignment of the Finance function to the overall mission and strategy of the organization. The strategy is usually manifested in laws, regulations, policies and procedures. Example strategies might include business partner, administrator, regulator, controller, or a combination.  | No                                     | N/A                            | Informed by Business Intelligence                                 |
| Enterprise Performance Planning and Management | On behalf of the enterprise, this includes Finance's role in the overall strategic planning and performance management process including development and adoption of strategic plans, the establishment, management, and reporting of key performance indicators (e.g. metrics) for programs, priorities, or any other areas of interest determined by the enterprise. For example, in the US, the Governmental Accounting Standards Board describes this as Service Efforts and Accomplishment reporting. The establishment, management, and reporting of metrics might be unique to an individual business unit or standardized across the enterprise | No                                     | N/A                            | Informed by Business Intelligence and supported by niche software |
| Enterprise Budget Development                  | On behalf of the enterprise, this includes the promulgation of policy and process guidance to develop budget requests, the analysis and recommendations pertaining to such requests, and the decision making and approval of budgets. For example, it includes all types of budgets (i.e. operating and capital). It may also include financial forecasting and budget monitoring activities.   | Yes                                    | Planning and Budgeting         | Informed by Business Intelligence                                 |
| Enterprise Value Architecture & Realization    | On behalf of the enterprise, this includes the identification of opportunities to generate additional value for the benefit of the organization. This includes both "hard dollar" value (e.g. revenue increases and other captured value which can help offset expense of implementing an enterprise program) and "soft dollar" value (e.g. process efficiencies, process optimization, quality, customer satisfaction, etc.). This also includes projects and programs to harvest the value for identified opportunities.  | No                                     | N/A                            | Informed by Business Intelligence and supported by niche software |

| In-Scope Function              | Description  | Function Supported by Specific Module? | Functional ERP Software Module                    | Notes                             |
|--------------------------------|--|--|---|-----------------------------------|
| Audit & Compliance Management  | This includes external audits of a financial, compliance, and reporting nature, such as the cognizant federal agency approving indirect cost rates (for example, in the US, the Government Accountability Office (GAO)), as well as audits by separately elected public officials. For example, risk assessment activities for the targeting of audits are part of this business process.  | Yes                                    | Governance, Risk, and Compliance (GRC) Management |                                   |
| Internal Controls              | This includes the development and management of internal control plans with defined control objectives and activities, which are developed often using Committee of Sponsoring Organizations (COSO), Generally Accepted Government Auditing Standards (GAGAS), or other external authoritative guidance. For example, each department and the enterprise completes an internal control plan to assure segregation of duties.                           | Yes                                    | Governance, Risk, and Compliance (GRC) Management |                                   |
| Fraud & Abuse                  | This includes strategies and procedures to detect, prevent, and mitigate situations that lead to fraud and abuse. For example, each department and the enterprise has security measures (i.e. role based security and passwords) to control access to resources and systems.   | Yes                                    | Governance, Risk, and Compliance (GRC) Management |                                   |
| Risk Management                | This includes processes, policies, and tools used to identify, mitigate, and manage risks to safeguard assets. For example, departments and the enterprise has controls to prevent unauthorized use or theft of tangible and intangible assets.  | Yes                                    | Risk Management                                   |                                   |
| Finance Org. Management        | This includes the organizational structure, management processes, and policies of the organizational units that provide leadership and management to all aspects of the Finance function. Provision of automated systems and digital capabilities is part of this process area. Organizational units at both the department and enterprise-wide levels might include accounting, budgeting, auditing, performance management, and treasury operations. | No                                     | N/A   | Informed by Business Intelligence |
| Finance Performance Management | This includes the establishment, management, and reporting of key performance indicators (e.g. metrics) for each of the constituent business process areas (as defined by level 4 in the business process  | No                                     | N/A   | Informed by Business Intelligence |

| In-Scope Function                | Description   | Function Supported by Specific Module? | Functional ERP Software Module               | Notes                             |
|----------------------------------|---|--|--|-----------------------------------|
|                                  | model) within the overall Finance function. Often this is approached with a continuous improvement philosophy. The establishment, management, and reporting of metrics might be idiosyncratic to an individual business unit or standardized across the enterprise.   |  |  |                                   |
| Finance Value Arch & Realization | For each of the constituent business process areas (as defined by level 4 in the business process model) within the Finance function, this includes the identification of opportunities to generate additional value for the benefit of the organization. This includes both “hard dollar” value (e.g. revenue increases and other captured value which can help offset expense of implementing an enterprise program) and “soft dollar” value (e.g. process efficiencies, process optimization, quality, customer satisfaction, etc.). This also includes projects and programs to harvest the value for identified opportunities. | No                                     | N/A  | Informed by Business Intelligence |
| Budget Execution                 | This includes the mechanisms, at both the department and enterprise-wide levels, to manage and control actual operations to conform to the approved budget. For example, the ability to predict and prevent budgetary overruns is part of this business process.  | Yes                                    | Budgetary Control and Encumbrance Accounting |                                   |
| General Accounting               | This includes the definition of the chart of accounts, payee file, and customer file and the accounting of transactions to the general ledger for each department and the enterprise as a whole.  | Yes                                    | Financial Management                         |                                   |
| Project Accounting               | This includes the specialized accounting for projects (which could be related to various contracts, interdepartmental work orders, capital projects, etc.). For example, the ability to set up and account for specialized data fields is part of this business process. In some agencies (e.g. transportation), grants are accounted for using project accounting.   | Yes                                    | Project Financial Management                 |                                   |
| Cost Accounting & Controlling    | This includes another form of specialized accounting for various categories of cost. For example, allocations of overhead, equipment, labor and other costs across projects of other dimensions of the chart of accounts, as well as, analysis, monitoring, and optimizing direct/indirect  | Yes                                    | Profitability and Cost Management            |                                   |

| In-Scope Function                  | Description   | Function Supported by Specific Module? | Functional ERP Software Module                     | Notes                |
|------------------------------------|---|--|--|----------------------|
|                                    | spend (e.g. Smart Spend, activity based costing, cost variability and profitability analysis)   |  |  |                      |
| Accounts Payable                   | This includes the review and approval of requests for payment. For example, the matching of purchases to receipt to invoicing for vendors and approval for payment and disbursement.  | Yes                                    | Payables and Receivables                           |                      |
| Revenue Cycle Management – Non-Tax | For all types of revenue from sources other than taxes (e.g. fees, fines, rents, sales, assessments, gifts, grants, reimbursements, interagency transactions, etc.), this includes the chain of activities from the revenue event (i.e. determination of amount), through accounts receivable, billing, collections, or write off from both external entities (from customers) and internal entities (from other departments). Typically, this process is decentralized to multiple agencies. | Yes                                    | Payables and Receivables                           |                      |
| Grants Management                  | This includes the departments and enterprise acting as both grantee (apply for and receiving grants) and grantor (receiving applications and making grants). For example, applying, receiving, managing, reporting, and closing federal grants.   | Yes                                    | Grants Management                                  |                      |
| Asset Management                   | This includes the management and accounting of fixed and capital assets. For example, land, buildings, and equipment.   | Yes                                    | Maintenance, Inventory, and Real Estate Management |                      |
| Travel & Expense                   | This includes the chain of activities from request for travel authorization, through travel arrangement, to payment/reimbursement of the travel expense   | Yes                                    | Travel and Expense Management                      |                      |
| Cash & Banking Management          | This includes the inflows and outflows of banking accounts. All depository and disbursement accounts, centralized and decentralized, are included. For example, use of electronic mechanisms such as Electronic Funds Transfer (EFT) is part of the business process. This also provides visibility to future cash flow for analysis and optimization (e.g. interest income).   | Yes                                    | Treasury Management and Cash Management            |                      |
| Enterprise Statutory Reporting     | This includes financial reporting required by law or other covenants. For example, in the US, the Comprehensive Annual Financial Report   | No                                     | N/A  | Informed by Business |

| In-Scope Function                                   | Description  | Function Supported by Specific Module? | Functional ERP Software Module | Notes   |
|---|--|--|--------------------------------|---|
|   | (CAFR) and Bond Offering Statements, enterprise financial statements, regulatory reports (e.g. Schedule of Expenditures of Federal Awards (SEFA), "Checkbook" disclosures required by transparency legislation, etc.   |  |                                | Intelligence and niche software                   |
| Enterprise Performance Reporting & Decision Support | On behalf of the enterprise (i.e. more than just the Finance function) this includes the reporting of key performance indicators (e.g. metrics) for programs, priorities, or any other areas of interest determined by the enterprise as well as the development of decision options and impact analysis. Often this involves the correlation of: goals and objectives established in strategic or annual plans, to budgets, to actual costs, and to actual outputs and outcomes. For example, in the US, the Governmental Accounting Standards Board (GASB) describes this as Service Efforts and Accomplishment reporting. The establishment, management, and reporting of metrics might be unique to an individual business unit or standardized across the enterprise. | No                                     | N/A                            | Informed by Business Intelligence                 |
| Finance Performance Reporting & Decision Support    | For just the Finance function this includes the reporting of key performance indicators (e.g. metrics) for programs, priorities, or any other areas of interest as well as the development of decision options and impact analysis. Often this involves the correlation of: goals and objectives established in strategic or annual plans, to budgets, to actual costs, and to actual outputs and outcomes.  | No                                     | N/A                            | Informed by Business Intelligence                 |
| Enterprise Analytics                                | On behalf of the enterprise (i.e. more than just the Finance function), this includes the creation and ongoing management and operations of the analytics strategy and analytics capability for the enterprise. This is complementary to other types of reporting described in other parts of the business process model (i.e. statutory and performance reporting). The analytics strategy and capability could include both financial and non-financial of a descriptive, predictive, and prescriptive nature.   | No                                     | N/A                            | Informed by Business Intelligence and Analytics   |
| Enterprise Data Governance & Architecture           | On behalf of the enterprise, this includes the policies and procedures to define, change, and access financial and performance data. Examples include establishing the definition and use of enterprise level chart of accounts, enterprise vendor data elements, enterprise customer data   | No                                     | N/A                            | Informed by Business Intelligence, Analytics, and |



| In-Scope Function                            | Description   | Function Supported by Specific Module? | Functional ERP Software Module | Notes  |
|--|---|--|--------------------------------|--|
|  | elements, and enterprise performance data elements. This also includes the policies and procedures for the structure and location of financial and performance data including establishing and managing the system of record for authoritative financial reporting, establishing and managing internal data warehouse and/or data marts, and establishing and managing external transparency or other data repositories. Often organizations allow individual business units to define and govern additional data elements germane to the respective business unit. |  |                                | possibly supported by GRC                            |
| Enterprise Info. Creation & Distribution     | On behalf of the enterprise, this includes the management and operations to support both internal and external reporting. This is the operational provisioning of the other types of reporting (i.e. statutory, performance, analytics) described elsewhere in the business process model.  | No                                     | N/A                            | Informed by Business Intelligence                    |
| Technology Strategy & Blueprint              | On behalf of the enterprise and/or for an individual business unit, this includes the leadership and management of stakeholders to define how digital and technology enabled systems, applications, and tools would be used to support the business process areas within Finance. For example, collaboration between the CFO and CIO for alignment of the entities strategic plan for Finance with the entities strategic plan for Information Technology.  | No                                     | N/A                            |  |
| Service Management                           | On behalf of the enterprise and/or for an individual business unit, this includes the day to day operation and management of digital and technology enabled systems, applications, and tools that support the business process areas within Finance. Support may be provided by internal resources or outsourced. Examples include operating the help desk, managing the applications, and managing the supporting technical infrastructure.  | No                                     | N/A                            | Informed by Business Intelligence and niche software |
| Platform, Integration & Process Architecture | On behalf of the enterprise and/or for an individual business unit, this includes the activities to design and develop digital and technology enabled systems, applications, and tools that support the business process areas within Finance. A typical example is a shared software   | No                                     | N/A                            | Informed by Business                                 |

| In-Scope Function | Description  | Function Supported by Specific Module? | Functional ERP Software Module | Notes                           |
|-------------------|--|--|--------------------------------|---------------------------------|
|                   | platform such as an Enterprise Resource Planning (ERP) system with interoperability and data exchange to separate and specialized applications that support individual business units. This also includes alignment of the business process model with the inventory of digital and technology enabled systems, applications, and tools. |  |                                | Intelligence and niche software |

Table 2.3.2: Procurement Functions in Scope for One Washington & Corresponding Software Modules Where Applicable

| In-Scope Function                | Description  | Function Supported by Specific Module? | Functional ERP Software Module  | Notes                             |
|----------------------------------|--|--|---------------------------------|-----------------------------------|
| Procurement Mission & Strategy   | On behalf of the enterprise, this includes Procurement's role in contributing to the overall strategic planning process. This includes development of procurement targets and investment priorities. This also includes the enterprise wide mission statement to let stakeholders know the long-term direction that Procurement is driving towards and the strategy to get there, for example insourcing versus outsourcing. | No                                     | N/A                             | Informed by Business Intelligence |
| Procurement Portfolio Management | On behalf of the enterprise, Procurement creates and maintains a 3-year plan that effectively manages the portfolio of projects to optimize use of resources and continuity of supply. The plan is a Blueprint that is coordinated across multiple dimensions, for example contracts due to expire, new sourcing opportunities, and catalog enablement. The plan is the basis for annual savings estimates                   | Yes                                    | Strategic Sourcing, Procurement |                                   |
| Procurement Business Strategy    | In conjunctions with enterprise strategic planning, this includes the alignment of the Procurement function to the overall mission and strategy of the organization. The strategy is usually manifested in laws, regulations, policies and procedures. Example strategies might include Procurement in the role of business partner, administrator, regulator, controller, or a combination.                                 | No                                     | N/A                             | Informed by Business Intelligence |

| In-Scope Function                            | Description   | Function Supported by Specific Module? | Functional ERP Software Module                | Notes   |
|--|---|--|---|---|
| Internal Stakeholder Management              | This includes measuring and managing internal customer satisfaction, e.g., planning and training between the Procurement organization and the departments is part of this business process.   | No                                     | N/A   | Informed by Business Intelligence   |
| Supplier Relationship Strategy               | This includes segmentation of the universe of suppliers into major groupings and the development of the strategy for each group. Usually strategies cover developing relationships to optimize value through innovation, risk mitigation and growth throughout the relationship life cycle, from solicitation thru creation of contracts, thru performance. For example, the determination of the strategy for social and/or economic preference programs for various grouping of suppliers is part of this process.  | Yes                                    | Supplier Relationship Management, Procurement |   |
| Procurement Function Management              | This includes the organizational structure, management processes, and policies and budgets of the units that provide leadership and management to all aspects of the Procurement function. This also, includes talent management activities related to competency models and job descriptions, recruitment, career and personal development, and retention. For example, it includes capability development & training which defines the skills needed in each organizational role and provides employees with training options to effectively build and maintain these skills. | No                                     | N/A   | Informed by Business Intelligence   |
| Procurement Performance & Risk Management    | This includes the establishment, management, and reporting of key performance and risk indicators (e.g. metrics) for each of the constituent business process areas (as defined by level 4 in the business process model) within the overall Procurement function. This includes legal analysis and support for terms and conditions in contracts. The establishment, management, and reporting of metrics might be unique to an individual business unit or standardized across the enterprise.  | No                                     | N/A   | Informed by Business Intelligence, Analytics, and possibly supported by GRC |
| Procurement Value Architecture & Realization | For each of the constituent business process areas (as defined by level 4 in the business process model) within the Procurement function, this includes the identification of opportunities to generate additional value for the benefit of the organization. This includes both  | No                                     | N/A   | Informed by Business Intelligence and niche software                        |

| In-Scope Function     | Description  | Function Supported by Specific Module? | Functional ERP Software Module              | Notes   |
|-----------------------|--|--|---|---|
|                       | “hard dollar” value (e.g. revenue increases and other captured value which can help offset expense of implementing an enterprise program) and “soft dollar” value (e.g. process efficiencies, process optimization, quality, customer satisfaction, etc.). This also includes projects and programs to harvest the value for identified opportunities. |  |   |   |
| Category Management   | This includes the segmentation of procurement into major categories to define buying channels. Steering users to the appropriate buying channel helps drive down the total costs of targeted goods and services with solutions that meet customers’ business needs through proactive strategies and creation of contracts.                             | Yes                                    | Catalog Management, Procurement             |   |
| Demand Management     | This includes ways to lower total cost of ownership and streamline procurement processes with existing suppliers by rationalizing / standardizing specifications, utilizing substitute goods and services, examining life cycle cost, and reducing consumption.  | Yes                                    | Strategic Sourcing, Procurement             |   |
| Inventory Management  | This includes the management of warehouses and the ordering, storage and use of goods and materials used to support agency operations. For example, depots with maintenance materials for highways and warehouses for food and other goods supporting facility based operations.   | Yes                                    | Inventory Management                        | Possibly include Finance functions like Item Management, Asset Management, Real-Estate Management |
| Strategic Sourcing    | This includes the development and implementation of a structured and prioritized approach for sourcing goods and services to realize and sustain lower total cost of ownership in partnership with the appropriate customers and supplier base.  | Yes                                    | Strategic Sourcing, Procurement             |   |
| Compliance Management | This includes how the organization is performing against published standards and metrics, provides insight of adherence to policies, and identifies areas of opportunity to drive value through process efficiencies. It includes measuring and managing department compliance to department and enterprise-wide procurement policies and standards.   | Yes                                    | Governance, Risk, and Compliance Management |   |

| In-Scope Function                       | Description  | Function Supported by Specific Module? | Functional ERP Software Module                | Notes  |
|---|--|--|---|--|
| Supplier Relationship Management        | This includes systematic management of supplier relationships and the tactical activities with managing suppliers per their segmentation. This includes monthly meetings, collecting data, issuing RFPs, score carding, diversity supplier management/growth. An example is the supplier diversity approach which might include recruiting, certifying, matchmaking, and reporting for suppliers meeting diversity criteria. | Yes                                    | Supplier Relationship Management, Procurement |  |
| Internal Spend and Buying Analysis      | This includes both detailed and summarized information on expenditures across the enterprise to support strategic sourcing decision making, category management, and other procurement processes. For example, analysis of past and future spending (including transaction information from P-Card providers) when creating a profile of a category for sourcing.  | Yes                                    | Strategic Sourcing, Procurement               | Informed by Business Intelligence and Analytics      |
| eRFX Support                            | This includes support in developing and conducting all forms of solicitations, tendering activities, and auction events. While different organizations use various nomenclature, this includes Request for Information, Request for Proposals, Request for Quotes, Invitation to Negotiate, etc.   | Yes                                    | Procurement                                   |  |
| External Market Analysis                | This includes research to understand market conditions, trends, supply base, constraints, and pricing structure to support various procurement processes. For example, analysis of past and future market conditions when creating a profile of a category for sourcing.   | No                                     | N/A   | Informed by Business Intelligence and niche software |
| Contract Support                        | This includes tracking, monitoring, and updating contracts throughout their lifecycle to proactively manage supplier and user adherence to negotiated terms and conditions. Developing and management contract templates and boilerplates, including terms and conditions, is part of this process.  | Yes                                    | Procurement Contracts, Procurement            |  |
| Requisition & Purchase Order Processing | This includes the policies and procedures for the chain of activities from identifying appropriate buying channels, through issuing and managing a purchase order with the supplier, to matching purchase orders with receipt, and handoff to accounts payable. It also includes requisitions that become purchase orders, the issuance of legally   | Yes                                    | Procurement                                   |  |



| In-Scope Function                                      | Description   | Function Supported by Specific Module? | Functional ERP Software Module       | Notes  |
|--|---|--|--------------------------------------|--|
|  | binding orders to suppliers, and submission of paper or electronic invoices. It also Include P-Card as a buying channel.  |  |                                      |  |
| Helpdesk Services                                      | This includes the management and delivery of procurement and sourcing customer support to users and suppliers.  | Yes                                    | Help Desk                            |  |
| Catalog Enablement                                     | This includes the establishment and maintenance of supplier catalogs to facilitate the purchase of goods or services from contracted suppliers to decrease requisition cycle time and drive use of established contracts.   | Yes                                    | Catalog Management, Procurement      |  |
| Receiving & Receipt Processing                         | This includes the tracking, receiving, inspection, and creation of receipts for goods and services. It also includes checking and confirming that goods and services received match what was ordered. It also includes reconciling goods and/or services received when acquired via P-Cards.  | Yes                                    | Supply Chain Management, Procurement |  |
| Spot Buy   | This supports purchasing of goods or services that do not require the full sourcing process. For example, incidental purchases below the organizations mandatory sourcing/competitive bidding threshold.  | Yes                                    | Spot Buy, Procurement                |  |
| Statutory Reporting                                    | This includes reporting required by the organization's laws or regulations. An example is a report of actual performance compared to goals for procurement associated with socio-economic programs.   | No                                     | N/A                                  | Informed by Business Intelligence and niche software |
| Procurement Reporting                                  | This includes all forms of routine and ad hoc reporting related to all aspects of procurement for departments and the enterprise. For example, both automated and manual reports.   | Yes                                    | Procurement Analytics                | Informed by Business Intelligence and niche software |
| Procurement Performance Reporting and Decision Support | For just the procurement function this includes the reporting of key performance indicators (e.g. metrics) for programs, priorities, or any other areas of interest. Often this involves the correlation of goals and objectives established in strategic or annual plans, to budgets, to actual costs, and to actual outputs and outcomes. An example is a balanced scorecard. | No                                     | N/A                                  | Informed by Business Intelligence and niche software |

| In-Scope Function  | Description  | Function Supported by Specific Module? | Functional ERP Software Module | Notes   |
|--|--|--|--------------------------------|---|
| Enterprise Procurement Data Governance and Architecture      | On behalf of the enterprise, this includes the policies and procedures to define, change, and access procurement data. This includes establishment and management of standard data definitions, for example, supplier and item master information. This also includes the policies and procedures for the structure and location of procurement data. Examples include establishing and managing the system of record for authoritative procurement reporting, establishing and managing internal data warehouse and/or data marts, and establishing and managing external transparency or other data repositories. Often organizations allow individual business units to define and govern additional data elements germane to the respective business unit. | No                                     | N/A                            | Informed by Business Intelligence, Analytics, and possibly supported by GRC |
| Enterprise Procurement Information Creation and Distribution | On behalf of the enterprise, this includes the management and operations to support both internal and external reporting. This is the operational provisioning of the other types of reporting (i.e. procurement, statutory, performance,) described elsewhere in the business process model.  | No                                     | N/A                            | Informed by Business Intelligence   |
| Technology Strategy and Blueprint                            | On behalf of the enterprise and/or for an individual business unit, this includes the leadership and management of stakeholders to define how digital and technology enabled systems, applications, and tools would be used to support the business process areas within Procurement. For example, collaboration between the CPO and CIO for alignment of the entities strategic plan for Procurement with the entities strategic plan for Information Technology.   | No                                     | N/A                            |   |
| Service Management   | On behalf of the enterprise and/or for an individual business unit, this includes the day to day operation and management of digital and technology enabled systems, applications, and tools that support the business process areas within Procurement. Support may be provided by internal resources or outsourced. Examples include managing the applications and managing the supporting technical infrastructure.   | No                                     | N/A                            | Informed by Business Intelligence and niche software                        |

| In-Scope Function                             | Description  | Function Supported by Specific Module? | Functional ERP Software Module | Notes  |
|---|--|--|--------------------------------|--|
| Platform, Integration, & Process Architecture | On behalf of the enterprise and/or for an individual business unit, this includes the activities to design and develop digital and technology enabled systems, applications, and tools that support the business process areas within Procurement. A typical example is a shared software platform such as a Procurement system with interoperability and data exchange to the financial system. Technology applications provide support for spend analysis, savings tracking, supplier management, sourcing management, good and services procurement, contract management, content management, spot buy managements, invoice management, and expense management. This also includes the creation and ongoing management of the agreed upon business process model. | No                                     | N/A                            | Informed by Business Intelligence and niche software |

## 2.4 Implementation/Phasing Approach

### 2.4.1 Introduction and Background

A critical guiding principle for the Program Blueprint is the phasing and timeline approach that will deliver the functionality for the Finance, Procurement, Budget, and HR/Payroll business process areas and related Business Intelligence capabilities. This Blueprint describes an implementation plan for the One Washington program, including activities in the pre-implementation stage (i.e. procurement strategy), the implementation stage (i.e. business improvement initiatives that are not dependent on technology as well as initiatives that are dependent on technology), and the post implementation operation and maintenance stage.

In the 2014 Business Case, three scenarios were evaluated. One scenario was to implement Finance and Procurement functionality together in a managed service deployment model. The second was to implement Procurement separate (and first) followed by Finance, again in a managed service deployment model. The third was to implement Finance and Procurement functionality together in a cloud/SaaS deployment model. Each of these scenarios had different phasing and timelines.

The 2017 One Washington Blueprint is based on the foundational assumption that the state has decided to implement Finance and Procurement functionality together, followed by Budget functionality, followed by HR/Payroll functionality, with all functionality in a cloud/SaaS deployment model.

While there are some similarities between 2014 and 2017, there are many differences. A major difference is that the ERP software market has matured. In 2014, it was uncertain if any ERP software provider could deliver functionality to satisfy the business requirements for a state like Washington in a SaaS model. In 2017, based on Accenture's work with numerous public sector entities, the ERP software providers have added functionality to satisfy over 90% of most state government requirements with baseline configuration. Another major difference is the evolution of ERP implementation methodology, from a traditional waterfall approach to a more agile approach. A third difference is the scope as the One Washington program now includes Budget, HR/Payroll and Business Intelligence functionality. The net result is that the plan for phasing and timelines in this Blueprint will deliver more functionality, in a faster timeline, and better mitigate the risk of uncertainty, than in 2014.

#### Guiding Principle

1. *One Washington will follow a phased agency / phased functionality approach for the Finance and Procurement functionality implementation.*

### 2.4.2 Supporting Activities

This section of the Program Blueprint was developed based on the following activities and has taken into consideration the following:

- Based on state input and Accenture's professional judgment, Finance and Procurement functionality will roll out in a phased agency/phased functionality approach. This determination was based on iterative conversations and analysis of options, including the advantages and disadvantages of each option, with One Washington and the Finance and Procurement business advisory groups.
- This approach delivers incremental and concrete success within the 7.5-year implementation timeframe for the One Washington program but the overall timeframe, including post implementation support (after the HR/Payroll deployment), is eight years.

- This approach creates business value that balances cost, benefits, speed, and risk.
- This approach provides a realistic schedule to accomplish procurement activities, non-technology dependent business improvement initiatives (i.e. business process redesign), and technology implementation.
- This approach aligns with Washington business cycles, i.e., fiscal year end for Finance (to the extent possible), the current timelines for Budget and calendar year end for HR/Payroll.
- Adopting this phasing approach affects several other components of the Program Blueprint, specifically the scope of functionality, the integration strategy, the staffing strategy, and the budget.

### 2.4.3 *Rationale and Recommendation*

The phasing approach has a very large number of activities. We have detailed the following major activities, below, in the following pages:

- Procurement Activities (for Finance, Procurement, Budget, HR/Payroll and Business Intelligence)
- Non-Technology Dependent Initiatives (focusing on preparation for system implementation and business improvement activities)
- Technology Dependent Initiatives (system implementation)
- Summary

#### 2.4.3.1 *Procurement Activities*

One of the major questions to be answered is the approach to sourcing and/or procuring the various elements of the overall One Washington program. State ERP projects typically involve multiple sourcing and procurement activities as illustrated below. However, because the State of Washington has already made certain procurement decisions (specifically obtaining the consulting services of North Highland and Accenture) and foundational assumptions (specifically a unified ERP with a cloud/SaaS deployment model), One Washington will need to conduct a fewer number of procurements compared to other states. The narrative below describes the typical sourcing/procurement activities other states undertake and whether and how that activity is relevant to One Washington.

- **Consulting services to help develop business requirements, create the Competitive Procurement Process (CPP) documents for ERP application software, and assist in the management of the CPP and the ensuing ERP software vendor selection and contracting process.** These types of services are often referred to as Third Party Advisory (TPA) services. One Washington has already conducted a procurement for the services of North Highland and Accenture. Within the boundaries of the state's procurement policies, these partners could help in the development of business requirements, provide advice and support in the creation of CPP documents for ERP application software, and assist in the CPP process. A dedicated state employee group, augmented by North Highland and Accenture resources, effectively eliminates the need for a TPA procurement.
- **Specialized consulting services to augment and complement the state employees on the One Washington program.** One Washington has already conducted a procurement for specialized consulting services and engaged North Highland for project management assistance. If One Washington wants specialized consulting assistance to support the non-technology dependent initiatives, One Washington has already conducted a procurement and engaged Accenture, so these services can be obtained from Accenture. In the event One Washington wants additional specialized consulting services in other areas, for example specialized legal assistance for the contracting process with the selected ERP software vendor contracting process, an additional procurement would be necessary. As circumstances dictate, One Washington would use the state's normal sourcing process to obtain additional, specialized consulting services.
- **Quality Assurance (QA) professional services.** To acquire QA, One Washington would use OFM's convenience contract or other state procurement processes. This procurement would be done in FY18 with continued QA services for the program duration.



- **ERP application and Business Intelligence software.** There are several major vendors who should be encouraged to compete in this area, for example Oracle, SAP, CGI, Workday and Infor. Consistent with guiding principle by One Washington around a “unified” versus “best-of-breed” approach. One Washington will conduct procurement and contracting of the Business Intelligence software during FY 2019 along with the procurement of both initial and expanded functionality of Finance and Procurement ERP application software. (Note: the distinction between initial and expanded functionality is described in section 2.1 of the Program Blueprint). Conducting this procurement, and the ensuing ERP software vendor selection and contracting process, will be a major activity during FY19.
- **Specialized application software.** Consistent with guiding principle by One Washington around a “unified” versus “best-of-breed” approach, it is possible the state may want to acquire certain specialized application software from vendors to meet needs that the ERP cannot provide. If decided, an additional procurement for specialized functionality would be needed. One Washington would use the state’s normal sourcing process to obtain specialized application software.
- **Infrastructure management services to provision the data center and host the ERP application.** One Washington has made the planning assumption for a cloud/SaaS deployment model. This effectively eliminates the need for an infrastructure management services procurement.
- **Application management services to operate and maintain the ERP application.** One Washington has made the planning assumption for a cloud/SaaS deployment model. This effectively eliminates the need for an application management services procurement.
- **Technical infrastructure and hardware.** Notwithstanding the planning assumption for a cloud/SaaS deployment model, it is likely that the state will need to enhance its current technical architecture. This might include network connectivity, middleware like an enterprise service bus and new end user access devices (i.e. computers with internet connectivity). If needed, One Washington would use the WaTech sourcing process to obtain additional technical infrastructure and hardware.
- **Systems integration/implementation consulting services.** One Washington has already conducted a procurement for a strategic partner and engaged Accenture. This scope of services includes systems integration/implementation. This effectively eliminates the need for a systems integration/implementation procurement.

Table 2.4.1 below summarizes the types of procurements planned in FY19

| Type of procurement   | Comments   |
|---|--|
| Specialized consulting services to augment and complement the state employees on the One Washington program | If needed, One Washington would use the state’s normal sourcing process to obtain additional, specialized consulting services.                             |
| QA professional services  | Quality Assurance services are required. One Washington would use OFM’s convenience contract or other state procurement process to procure these services. |
| ERP application and Business Intelligence software  | Conducting this procurement and the ensuing ERP software vendor selection and contracting process will be the major FY19 activity.                         |
| Specialized application software  | If needed, One Washington would use the state’s normal sourcing process to obtain specialized application software.  |
| Technical infrastructure and hardware   | If needed, One Washington would use the WaTech sourcing process to obtain additional technical infrastructure and hardware.                                |

The major effort in FY19 will be the procurement of ERP application software. This procurement has many aspects, including the definition of business and technical requirements, market research, writing the CPP document (i.e. the RFP and evaluation scoring criteria), evaluating ERP software vendor proposals (including vendor demos), and selecting, negotiating, and contracting with the vendor with the best value proposal.

The traditional approach to definition of business and technical requirements is to spend several months defining literally thousands of detailed requirements. Experience indicates that most requirements (80-85%) are the same from state to state. The traditional approach is used when developing code, but not in the use of a SaaS program, where solutions are configured to meet customer business requirements rather than developed or “hard coded”. A forward-looking approach is to focus on required business outcomes, which would result in a few hundred requirements rather than a few thousand requirements. For the Program Blueprint, we assume the business outcome approach and plan eight months to complete and document business/technical requirements.

When staff conducted site visits to the states of Wisconsin, Arizona, and New York, who had all recently completed a successful ERP implementation, they learned each state’s perspective on what made their implementation successful and what they would change based on how the projects unfolded. We have included those states lessons learned into our process.

Market research and writing of the CPP document (i.e. the RFP), can be started in FY18. One Washington can invite the major ERP software vendors to demonstrate capability, providing the state with a useful exposure to modern ERP software use and capabilities. Concurrently, the writing of the CPP document and definition of business/technical requirements can begin. Examples and templates from similar RFPs can be used to jumpstart the process. For the Program Blueprint, we assume this approach and plan to complete and publish the CPP document in eight months.

Another leading practice is to expose a draft CPP in a “Request for Information” process. One Washington can share its intent on scope, deployment model, phasing and timelines, and similar matters and ask the ERP application software providers to provide reaction and comment. In this process, One Washington can also ask the ERP application software providers certain questions, for example the required technical infrastructure needed to operate their software. The information obtained via this process can be used to refine the CPP document. For the Program Blueprint, we assume this approach and plan one month for vendor review and comment to the draft CPP.

The next step is for vendors to develop proposals. Some states allow a relatively short timeframe like one month; others allow a more extended timeframe like three months. For the Program Blueprint, we plan two months for this activity.

The evaluation process includes the creation of the evaluation team, review and scoring of the business, technical, and cost proposals, conducting oral interviews and software demonstrations, and final scoring to determine the apparently successful vendor. We plan two months for this process.

The final step is negotiation and execution of the contract. For the Program Blueprint, we plan two months for this process.

The result of these activities, assume a start of July 1, 2018, will be a contract for Finance/Procurement ERP application software by October 30, 2019.

If the state determines that it needs specialized software that the ERP software does not provide, additional procurement activity will be needed. This option is consistent with the guiding principle for a “unified” vs “best-of-breed” approach. If an unmet requirement is identified, this procurement should be planned after the initial ERP application software is chosen, in FY20. This does not compromise the overall One Washington timeline since deployment of expanded functionality is not scheduled until later in the schedule.

The procurement for the technical infrastructure and hardware is dependent on the decision for ERP application software. This procurement needs to be scheduled and conducted as soon as possible after ERP software selection.

The procurement of QA services for the entire program needs to be scheduled and conducted starting FY18. For specialized consulting services, the nature and timing of such procurements, will be determined on an as needed basis.

The high-level plan for activities related to procurement of the Finance, Procurement and Business Intelligence functionality is depicted in Figure 2.4.1 below.

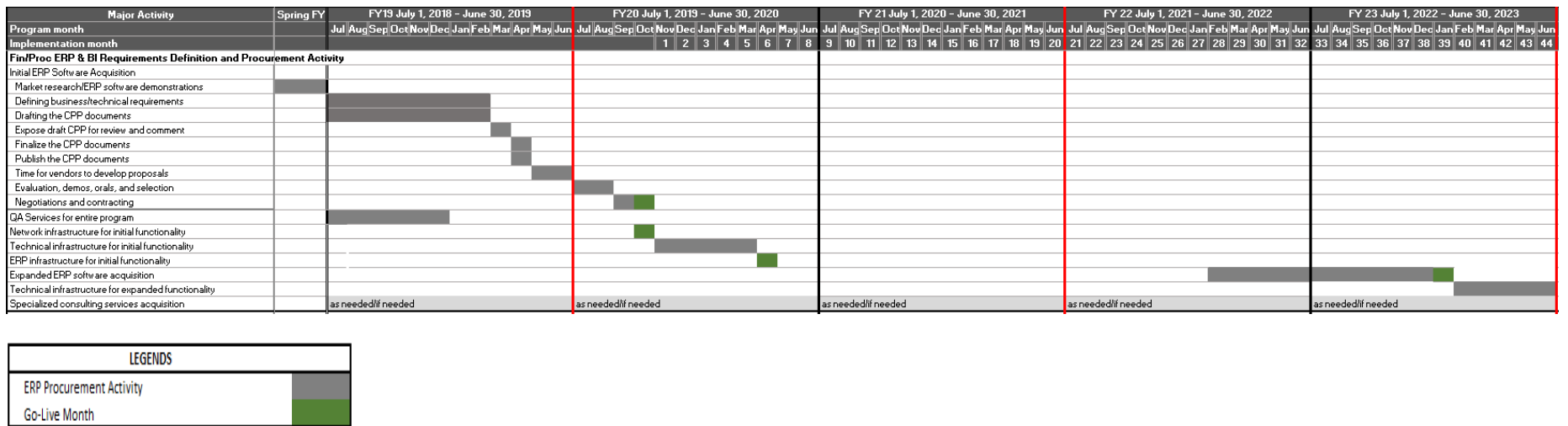


Figure 2.4.1: Procurements needed to acquire Finance, Procurement and Business Intelligence functionality

Later, the One Washington program will procure Budget and HR/Payroll functionality. This will be done in a similar manner as depicted in Figure 2.4.2 below:

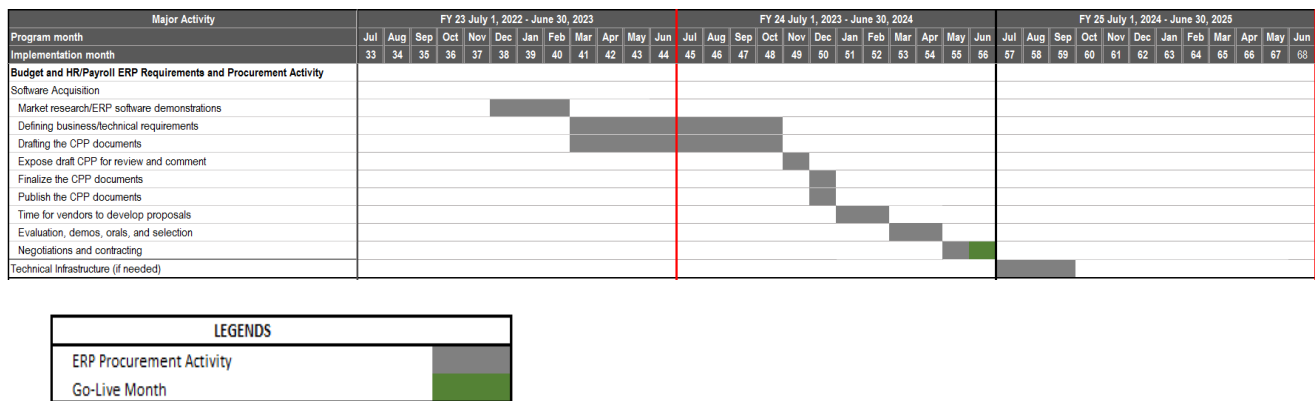


Figure 2.4.2: Procurements needed to acquire Budget and HR/Payroll functionality

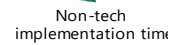
### 2.4.3.2 Non-Technology Dependent Initiatives

The phasing plan includes activities in the implementation stage for business improvement initiatives that are not dependent on new technology. These are initiatives that focus on business process redesign, empowering the workforce, and updating policies and procedures, and are complementary to the technology implementation. These initiatives, described in detail in section 3 of the Program Blueprint, are summarized below:

- Assess Procurement organizational strategy. This includes a review of laws, regulations, and policies, launching strategic sourcing, developing an organizational strategy.
- Finance organizational strategy and readiness. This includes consolidating statewide master payee and customer files, review of laws, regulations, and policies, improving and standardizing accounting practices, developing an organizational strategy, and reviewing selected business process areas for standardization and improvement.
- Define and implement Procurement key performance indicators. This includes measures and metrics on key aspects of the Procurement function.
- Assess the ability for intercept/offset for delinquent debt.
- Launch Finance Community of Practice for project accounting, cost accounting, asset accounting, statutory reporting, and analytics.
- Launch Finance Community of Practice for grants management.
- Launch Procurement Community of Practice for solicitation processes.
- Launch Procurement Community of Practice for supplier relationship management.
- Launch Finance Community of Practice for non-tax revenue management.
- Launch Finance Community of Practice for indirect cost allocation.
- Management of the One Washington program. This includes communicating a compelling business case and delivering successful incremental projects to earn the support of the Governor and Legislature.



The phasing approach for these business improvement initiatives for the FY19-FY26 timeframe is depicted in Figure 2.4.3. Please refer to the attached document for detailed information.



| Procurement and technology dependent initiatives timeline |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
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| Major Activity  | FY19 July 1, 2019 - June 30, 2019 |     |     |     |     |     |     |     |     |     |     |     | FY20 July 1, 2019 - June 30, 2020 |     |     |     |     |     |     |     |     |     |     |     | FY21 July 1, 2020 - June 30, 2021 |     |     |     |     |     |     |     |     |     |     |     | FY22 July 1, 2021 - June 30, 2022 |     |     |     |     |     |     |     |     |     |     |     | FY23 July 1, 2022 - June 30, 2023 |     |     |     |     |     |     |     |     |     |     |     | FY24 July 1, 2023 - June 30, 2024 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| Program month   | Jul                               | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul                               | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul                               | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul                               | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul                               | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| Implementation month                                      |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |     |     |     |     |     |     |     |     |     |     |     |                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | </ |

| LEGEND               |  |
|----------------------|--|
| Non-tech initiatives |  |

Figure 2.4.3: Business improvement initiatives complementary to technology

### 2.4.3.3 Technology Dependent Initiatives

#### *Phasing Approach*

For the implementation of new technology to deliver Finance and Procurement functionality, the phasing approach is to incrementally rollout both functionality and agencies. This conclusion is based on the following factors:

- The largest states (e.g. California, Texas, New York, Florida, and Illinois) and, peer states (such as Virginia and Massachusetts) have taken this approach. Washington is one of the largest, and more complex states.
- This phasing approach allows time for organizational change management, including the definition and adoption of standardized master data, workflows, and business processes. Given Washington's federated operating model and culture, allowing sufficient time for business process redesign and organizational change management is fundamentally important.
- This approach allows more time for designing, testing, and implementing the One Washington data conversion process and integration architecture. This is important as Washington has a complicated ecosystem of systems to be replaced and/or interfaced, with over 200 existing systems that will be impacted for just Finance and Procurement.
- The timeline will take advantage of continuing advances in ERP software maturity. All the major ERP software providers have a roadmap for ongoing software enhancements. These major ERP software providers have stated their intent to increase the robustness and functionality of their ERP software for state governments within the timeframe of the recommended One Washington phasing.
- The Finance solution will replace multiple accounting systems, and there is no current statewide Procurement system, making this a more challenging undertaking. This phasing approach mitigates both technical and business risk factors.
- A fundamental principle of One Washington is to build confidence with a series of incremental, affordable, and successful initiatives. This phasing approach best supports this principle.

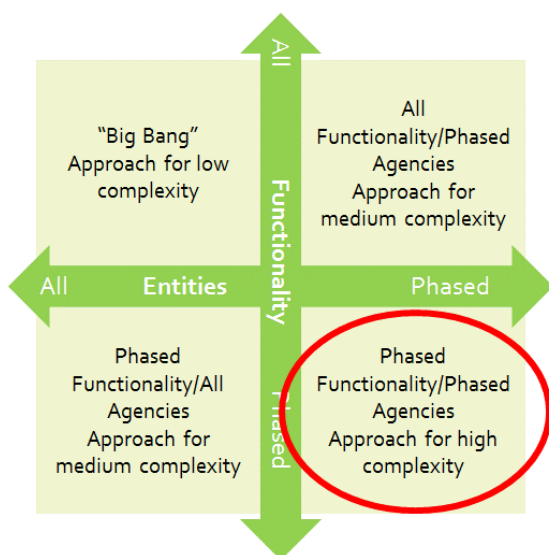
For Budget and HR/Payroll functionality, the phasing approach is to rollout full functionality to all agencies. Washington has enterprise systems for Budget and HR/Payroll. Transitioning from a single enterprise system to a new enterprise system does not have the same degree of complexity as is the case for Finance and Procurement. This phasing approach will be reviewed and, if warranted, updated in future versions of the Program Blueprint.

From a functionality perspective, ERP is a suite of related software modules, each of which support certain business process areas. For example, the financial suite is comprised of multiple software modules for general ledger, accounts payable, accounts receivable, grants management, cash management, etc. Similarly, the Procurement suite is composed of modules for purchasing, strategic sourcing, supplier registration, etc. There are phasing options within a suite, for example the various modules within the financial suite. Also, there are phasing options across the suites, for example Financial followed by Procurement. Typically, functionality is phased into releases. As an example, within the financial suite there could be a release of foundational financial modules (e.g. general ledger, accounts payable, accounts receivable, etc.), followed by a second release of "expanded" financial modules (e.g. grantor management, etc.).

From an agency perspective, states think of the organizations that will cut over to the new software on a phased basis, often referred to as waves. For example, a small group of agencies might be the initial wave, followed by additional agencies deploying the new software in a second wave, with the rest of the agencies of the government adopting the new software in a third wave. Usually initial wave agencies are selected as the ones most critical to demonstrate an early success, with other agencies grouped in subsequent waves based on agreed upon criteria.

We examined the advantages and disadvantages of four options for phasing aligned to two dimensions, phasing by functionality (i.e. software module) and phasing by entity (i.e. agency). This analysis supports the conclusion depicted in Figure 2.4.4 below.

## Phasing options



Considerations for phasing **functionality**:

- Degree of technical interdependency between the software modules
- Speed to retire legacy and shadow systems
- Speed to enable new features, functions, capability and thus business benefits
- Technical risk, e.g. regression testing for multiple releases

Considerations for phasing **entities**:

- Degree to which the entities are supportive to adopt the new system
- Degree to which the entities have the technical connectivity and devices to access the new system
- Degree to which entities desire the changes to obtain the business benefits
- Degree to which the entities are prepared and ready to embrace the change, e.g. training and readiness

Figure 2.4.4 Phasing options

### Functional Scope

From the perspective of ERP software, there are certain software modules which are inherently interdependent. In other words, all the major ERP software suites are designed so that foundational software modules will not operate in the absence of related software modules. However, the major ERP software suites intentionally design some software modules for implementation as "expanded" functionality. Foundational software modules must be implemented initially and together and "expanded" software modules can be phased and implemented at later times.

Table 2.4.2 below shows the distribution of initial and expanded functionality planned for One Washington. This could change at the time of ERP software acquisition.

Table 2.4.2: Distribution of planned functionality

| Finance                       | Procurement                      | Budget                        | HR/Payroll                    |
|-------------------------------|----------------------------------|-------------------------------|-------------------------------|
| Initial Release Functionality | Initial Release Functionality    | Initial Release Functionality | Initial Release Functionality |
| General Ledger Accounting     | Requisitions and purchase orders | Operating and capital budget  | Payroll                       |

| Finance  | Procurement                              | Budget                                | HR/Payroll                                    |
|--|--|---------------------------------------|---|
| Specialized accounting, e.g. project accounting, cost accounting, grantee accounting, Federal Highway accounting | Contract management                      | Revenues and expenses                 | Primary HR functions                          |
| Budgetary control, e.g. encumbrances, commitment control   | Receiving                                | Scenario planning and forecasting     | Benefits administration                       |
| Asset management and accounting  | Sourcing, e.g. RFP, RFQ, RFX             | Publishing the budget book            | Position classification                       |
| Accounts payable   | Supplier Relationship management         | Master data                           | Time and attendance                           |
| Accounts receivable  | Category management                      | Reporting and Business Intelligence   | Compensation planning                         |
| Travel and expense   | Catalog purchasing                       |                                       | Recruitment                                   |
| Cash management, e.g. local banking and cash control   | Master data, e.g. suppliers, commodities |                                       | Development                                   |
| Master data, e.g. chart of accounts, payees, suppliers   | Reporting and Business Intelligence      |                                       | Labor relations                               |
| Reporting and Business Intelligence  |  |                                       | Performance evaluation                        |
|  |  |                                       | Health and safety                             |
|  |  |                                       | Master data, e.g. positions, job descriptions |
|  |  |                                       | Reporting and Business Intelligence           |
| <b>Expanded Release Functionality</b>  | <b>Expanded Release Functionality</b>    | <b>Expanded Release Functionality</b> | <b>Expanded Release Functionality</b>         |
| Grantor management   | Inventory management                     |                                       |   |

One Washington plans to implement the business process areas and functionality for Finance and Procurement together. A leading practice is to channel end users to preferred sources of supply and to efficiently integrate the procurement functions with the Finance functions in a holistic “procure-to-pay” chain of activities. This approach for channeling end users and seamless integration between Finance and Procurement is illustrated in Figure 2.4.5 below.

## Components of a Typical Procure to Pay Process

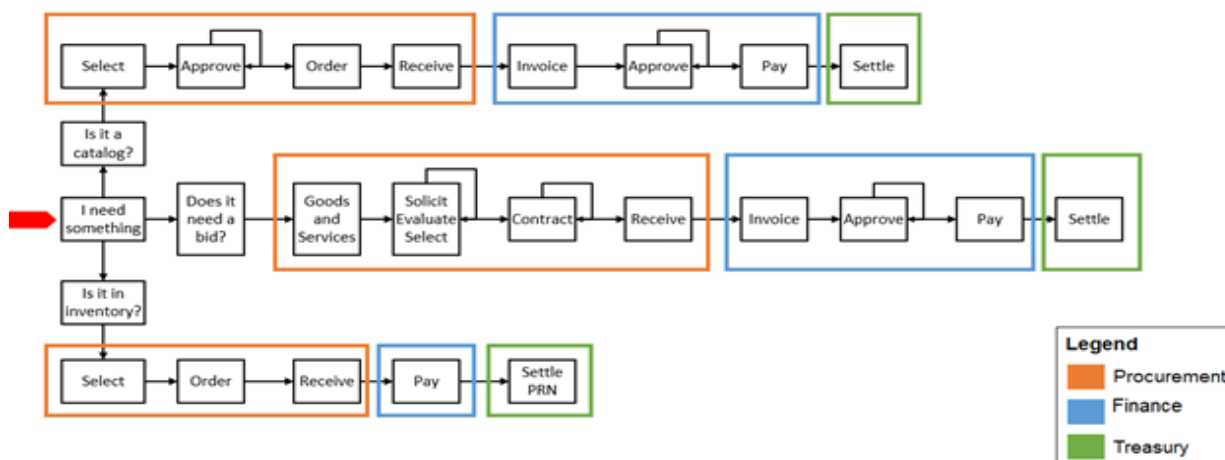


Figure 2.4.5: Integrated Procure-to-Pay process flow

One Washington plans to implement the business process areas for Budget after the implementation of Finance and Procurement because the Budget system is highly dependent on aspects of the Finance system, such as the chart of accounts. One Washington plans to implement the business process areas for HR/Payroll towards the end of the program. The current HR/Payroll system is relatively modern (compared to the other Washington systems), so the other systems are scheduled for implementation ahead of it.

### Organizational Scope

The implementation of initial Finance and Procurement functionality will be rolled out to agencies in four waves. The determination of which agencies go-live in which wave will be based on data and analysis of the following agency attributes:

- Proportion of the budget
- Number of AFRS users
- Number of procurement users
- Agency business requirements
- Use of fund types, e.g. General Fund, Special Revenue Funds, Capital Funds, and Internal Service Funds
- Agency inventory of reports, interfaces, conversions, workflows, and forms (RICWF)
- Technical readiness for cloud connectivity and end user devices
- Degree of willingness and support for the design and adoption of the One Washington program
- Budgetary capacity to engage in the design and implementation
- Both business and IT resource capacity to engage in the design and implementation
- Agency technical imperatives, e.g. broken financial systems, non-existent procurement systems, and agency systems at end of life
- Agency business imperatives, e.g. new business requirements and common business requirements among a group of similar agencies

This data will be collected in the next version of the Program Blueprint. A graphical representation of this matrix of agency attributes is included in the Appendix.

Based on this analysis, agencies will be matched to implementation waves using the criteria listed in Table 2.4.3 below.



Table 2.4.3: Agency Selection Criteria

| Criteria  | Description   |
|---|---|
| Contributes to Baseline Configuration                   | Accounts for 80% of the common workflows, enterprise wide business rules, and master data.                                      |
| Fund Type   | Includes General Funds, Special Revenue Funds, Capital Funds, and Internal Service Funds.                                       |
| Technical Readiness                                     | Considers network infrastructure, cloud connectivity, and end-user devices.   |
| Executive Buy-In and Support                            | Addresses degree of willingness and support for design and adoption of the One Washington program and resource capacity.        |
| Business Buy-In and Support                             | Addresses degree of willingness and support from Finance and Procurement business community.                                    |
| Technical Imperatives                                   | Addresses agency needs, for example, broken financial systems, non-existent procurement systems, agency systems at end of life. |
| Business Imperatives and Connectivity to other Agencies | Addresses agency needs, for example, new business requirements, common business requirements among a group of similar agencies. |

At the current time, individual agencies have not been scheduled to a specific wave. This will be planned in later versions of the Program Blueprint. Table 2.4.4 shows the principles that will guide the planning for matching agencies to waves.

Table 2.4.4: Principles to match agencies to waves for Finance and Procurement

| Implementation Wave              | Detail   |
|----------------------------------|--|
| <b>Initial Release - Wave 1</b>  | <ul style="list-style-type: none"> <li>Agencies engaged by invitation, allowing One Washington to control size and mix for affordability</li> <li>Engage agencies that account for &gt;50% of the budget to show adoption</li> <li>Engage a mix of agencies that will use most of the initial functionality to help design the baseline configuration and common business rules</li> <li>Engage a mix of small, medium, and large agencies to demonstrate that the solution works for agencies of all sizes</li> <li>Engage a mix of agencies that use general fund, special revenue funds, capital funds, and internal service funds to demonstrate that the solution works for all fund types</li> </ul> |
| <b>Initial Release - Wave 2</b>  | <ul style="list-style-type: none"> <li>One Washington will work with agencies to schedule them into this wave, allowing One Washington to control size and mix for affordability.</li> </ul>   |
| <b>Initial Release - Wave 3</b>  | <ul style="list-style-type: none"> <li>All other agencies.</li> </ul>  |
| <b>Expanded Release - Wave 4</b> | <ul style="list-style-type: none"> <li>During development of version 2 of the Program Blueprint, we engage in selective interviews and/or meetings to confirm which agencies require expanded functionality to meet their business needs</li> </ul>  |

The implementation for expanded Finance and Procurement functionality will be for all agencies in wave 4.

The implementation of Budget functionality will be for all agencies in a single wave.

The implementation of HR/Payroll functionality will be for all agencies in a single wave.

The implementation for Business Intelligence will occur with Finance and Procurement and be extended to Budget and HR/Payroll.

### *Recommended Phasing Timeline and Activities*

Each wave addresses defined functionality and agencies. It takes time to design, configure, test, and deploy modern ERP systems. If not enough time is planned, the risk of errors and re-work increases. If too much time is planned, money is wasted and business benefits are delayed. Based on experience from other states, there is a range of timing parameters ranging from relatively short (i.e. aggressive) to relatively long (i.e. conservative). As described above, to determine the optimal timeline for the One Washington program there are many factors to be considered.

The net result of analyzing these factors for the One Washington program is a set of timelines that is in the middle of the range, compared to experience in other state governments and organizations. These timelines are neither especially short (i.e. aggressive) nor especially long (i.e. conservative). While these phasing and timeline assumptions are the basis for planning the Program Blueprint, the phasing and timeline approach is subject to change and elaboration as additional data and analysis is developed over time.

The timeline for implementation of Finance, Procurement and Business Intelligence is summarized in Figure 2.4.6. For this version of the Program Blueprint, detailed planning has been done for the Finance and Procurement functionality.

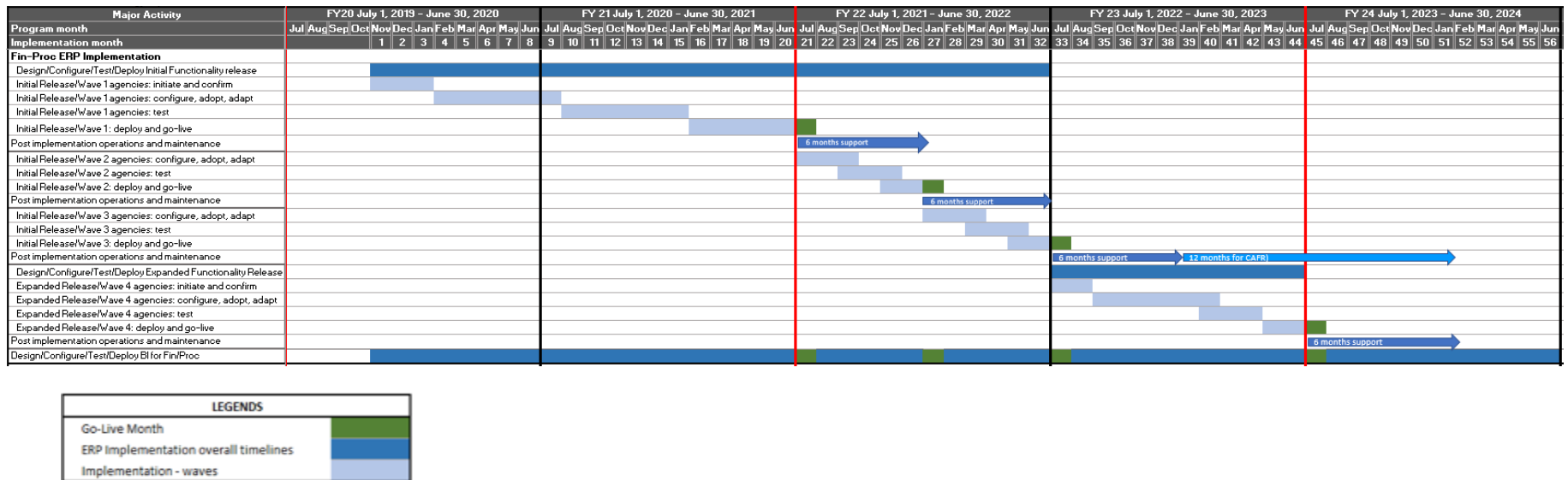


Figure 2.4.6: Timelines for Finance, Procurement, and Business Intelligence implementation.

The timeline for implementation of Budget and HR/Payroll is summarized in Figure 2.4.7 below. For this version of the Program Blueprint, general and high-level planning is depicted for Budget and HR/Payroll functionality. (Note: The gap between the end of Finance deployment and start of Budget and HR/Payroll implementation is depicted in Figure 2.4.2: Procurements needed to acquire Budget and HR/Payroll functionality.)

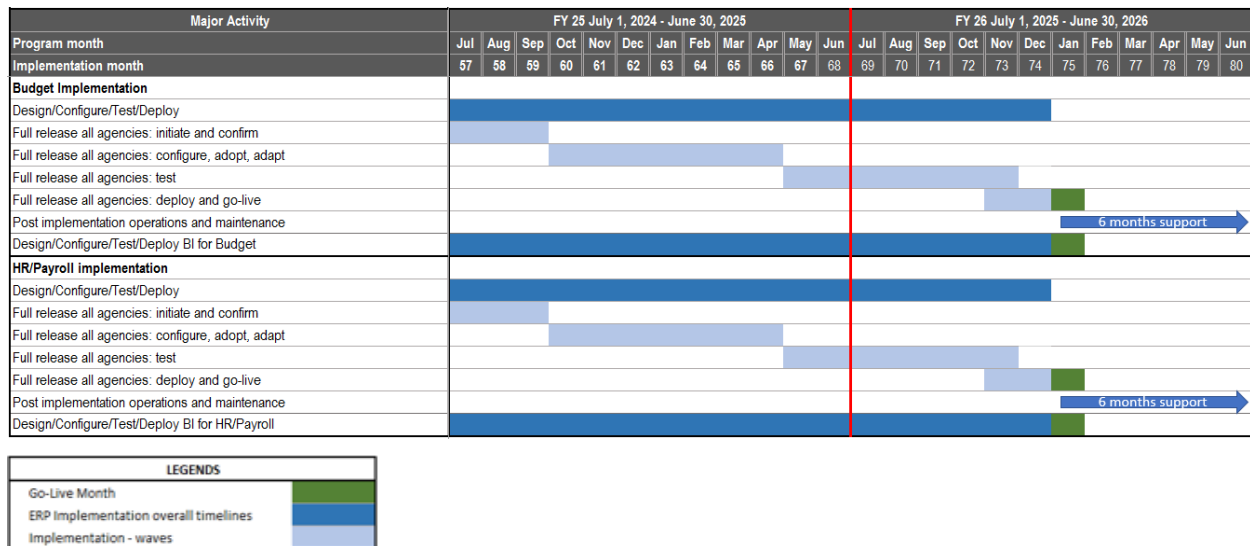


Figure 2.4.7: Timelines for Budget and HR /Payroll Implementation

A planning assumption within each wave is to employ an agile-like implementation methodology. The initiate and confirm phase includes mobilizing the project, confirming detail requirements, and bringing a pre-configured instance (prototype 0) of the solution. The configure-adopt-adapt phase builds upon the initial prototype and includes detail design for adopting the solution functionality as delivered, or adapting business processes to the solution. Additional prototypes are configured. The testing phase includes all types of testing, including integration and user acceptance. The deploy and go live stage includes final user and technical readiness and cut-over to the new system. This iterative approach is illustrated in Figure 2.4.8 below.

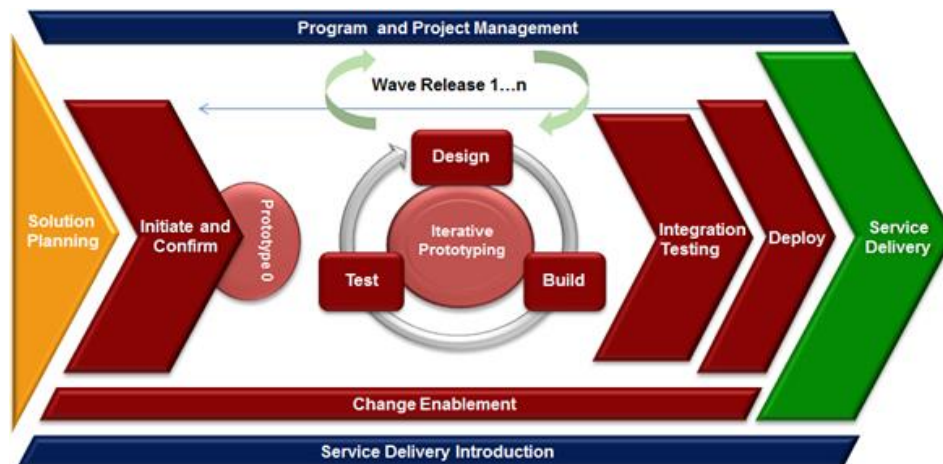


Figure 2.4.8: Agile methodology for implementation

### Summary

We include in this section two summary views of the recommended timeline – a table (Table 2.4.5) showing major activities by date, and a high-level Gantt chart. Using July 1, 2018 as the starting point, this is a 7.5-year (90 month) program to accomplish full implementation of Finance, Procurement, Budget, and HR/Payroll functionality.

Table 2.4.5: Major Activities by date

| Activity   | Date                             |
|--|----------------------------------|
| Develop business requirements, conduct Finance/Procurement/Business Intelligence software acquisition and related procurements | July 1, 2018 – October 30, 2019  |
| Go live with initial Finance and Procurement functionality and Business Intelligence for wave 1                                | July 1, 2021                     |
| Go live with initial Finance and Procurement functionality and Business Intelligence for wave 2                                | January 1, 2022                  |
| Go live for initial Finance and Procurement functionality and Business Intelligence for wave 3                                 | July 1, 2022                     |
| Go live with expanded Finance and Procurement functionality and Business Intelligence for all agencies                         | July 1, 2023                     |
| Decommission AFRS and TRAINS and One Washington becomes the system of record   | July, 2023                       |
| Develop business requirements and conduct Budget and HR/Payroll software acquisition and related procurements                  | December 1, 2022 - June 30, 2024 |
| Go live with full Budget functionality and Business Intelligence for all agencies  | January 1, 2026                  |
| Go live with full HR/Payroll functionality and Business Intelligence with full functionality for all agencies                  | January 1, 2026                  |
| Decommission HRIS and One Washington becomes the system of record  | January, 2026                    |

The figure below shows the summary of the master Gantt chart



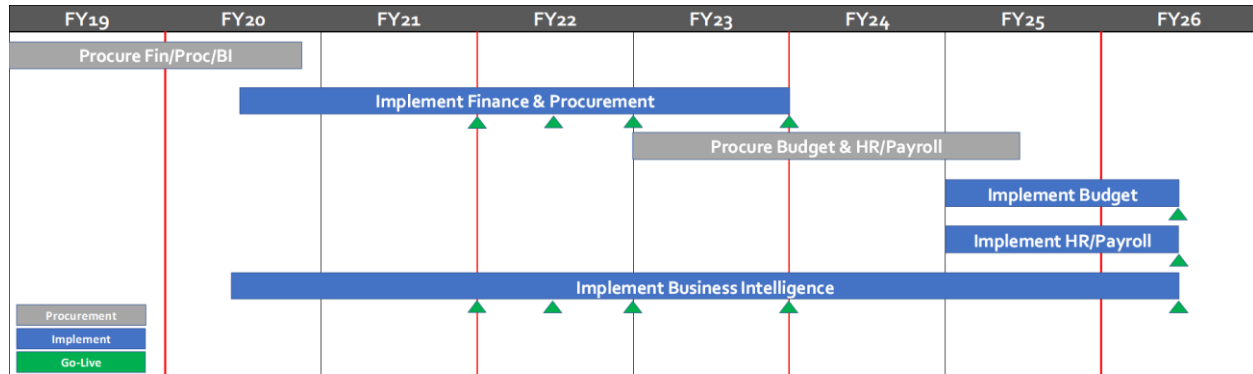


Figure 2.4.9: Summary of the Gantt Chart

## 2.5 Integration Approach

### 2.5.1 Executive Summary

The integration approach defines the future-state interface approach between the One Washington Finance, Procurement, HR/Payroll, and Budget applications and other systems with which the program will interface. Interfacing systems may include other state enterprise systems, systems managed by the various state agencies, and external systems.

While this section defines the future-state, it also serves as the foundation for the development of the Integration Implementation Plan which will detail the expectations for agencies, roles and responsibilities, implementation methodologies and expectations of effort between the One Washington program and other state agencies. Further details of the integration strategy for the One Washington program are described in the Integration Strategy deliverable.

### 2.5.2 Background and Introduction

This section outlines the high-level integration approach and guiding principles for interfaces between One Washington (Finance, Procurement, HR/Payroll, and Budget) and other systems with which One Washington will interface. To facilitate the development of the Integration Implementation Plan, this strategy will discuss the following topics:

- High-level approach and guiding principles
- Integration methodologies
- Data conversion approach

One Washington's integration strategy will design an open architecture approach that facilitates data exchange and application interoperability with multiple legacy and external systems while supporting multiple technologies. Current state systems are not well integrated with one another, rely on aging technologies, and require extensive effort by staff to maintain and function.

The final objective of the Integration Approach is to support the guiding principle of providing a unified system of record for Finance, Procurement, Budget, and HR/Payroll. A unified system of record is a term that describes an information storage system that is the authoritative data source for a given set of data. ERP solutions provide a unified system of record and provide the following benefits:

- Accurate and timely data for decision makers
- Reduced risk of major system failure
- More staff time devoted to delivering the mission rather than maintaining systems
- Critical capabilities maintained without having to own all the technology
- Process efficiencies as routine tasks are automated

The Integration Approach was developed by the One Washington program based on a review of existing documentation and discussions with technical groups and agency staff which included:

- Applicable Policies – such as “Securing Information Technology Assets” – Policy: 141
- Current Capabilities – such as Informatica and Business Objects
- Current state of infrastructure

### 2.5.3 Supporting Activities

To finalize the Integration Implementation Plan, the One Washington program will work with agencies to identify and document current interfaces, interfacing systems, and requirements. This information will be used to determine the level of effort and remediation required during implementation. Remediation considerations will include data conversion, data clean-up, and other technology requirements.

After the procurement of a specific software solution is complete, One Washington will work with agencies to finalize the interface types, standards and formats. The One Washington program will include limited functional SMEs, developers and testers to work with agencies throughout implementation. During implementation, agency resources will be required to provide test files to or from the ERP. Further details on roles, responsibilities, and other considerations will be described in the Integration Implementation Plan.

### 2.5.4 Rationale and Recommendation

The integration approach is based on the principle of leveraging service-oriented architecture (SOA) to provide automated real-time interfaces. SOA would allow agencies to send and receive data in a variety of formats and methods that support standard specifications. The standard specifications for integrations with the ERP will be further defined during the implementation design phase of the One Washington program. The integration plan will also need to support multiple implementation waves for Finance and Procurement. There will be one release for Budget and HR/Payroll. One Washington will plan for the availability of temporary interfaces between the ERP and legacy systems until all agencies are migrated to the ERP (see figure 2.5.1).

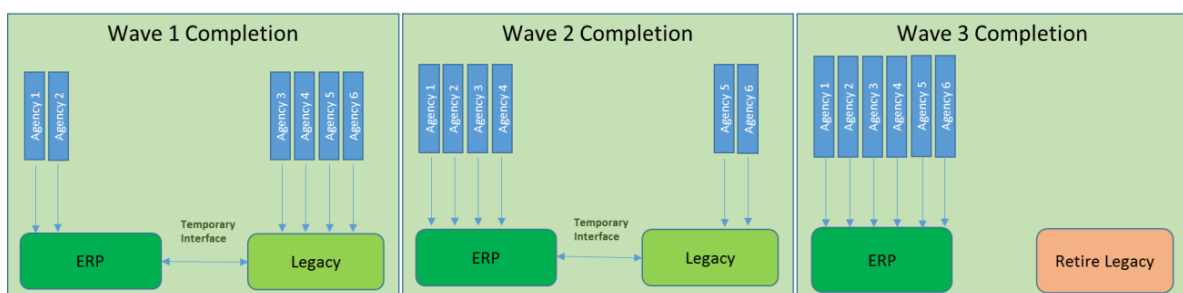


Figure 2.5.1: Implementation Waves

### Integration with Inbound (to One Washington) Interfaces

The preferred method of integration with the ERP is leveraging a SOA solution which provides the greatest flexibility. One Washington will also support direct and indirect interfacing methods with the ERP system:

1. Interface with middleware: Middleware involves using a secondary application which will connect an agency's line of business application to the ERP and act as an "interface layer".
2. Interface directly: Direct interfacing involves direct communication with the ERP application. There are no middle systems to filter or pre-process data sent to or from the ERP application.
3. Interface indirectly: Indirect interfacing involves using another application in conjunction with the ERP application or middleware. This application acts as a "middleman" to the middleware from the legacy system. Indirect interfacing is essentially the exceptions process in the event a system cannot utilize middleware or interface directly.

### Integration with Outbound (from the One Washington) Interfaces

The integration strategy will support capabilities and requirements to send outbound files to external systems. During the development of the integration implementation plan, the following analysis will be completed to determine the interface type:

1. Review the capabilities of the external system
2. Review the requirements of the external system
3. Apply the same interface methods described in the prior section: "Integration with Inbound Interfaces"

### Data Conversion

Data conversion is a key component of the Integration Implementation Plan. The data conversion approach is to convert data in waves:

- The initial functionality for Finance and Procurement will occur in three waves. In each wave, a set of state agencies will be implemented and converted.
- Budget and HR/Payroll will follow the Finance and Procurement rollout, and each of these business function will have one planned release.

Both data conversion and interface implementation are required for successful transition to the new ERP solution. Once all agencies are migrated, the ERP will be the single system of record for the corresponding business function. Further details on data conversion, including methodologies, are documented in the Program Blueprint data conversion section.

## 2.6 Master Data Management

### 2.6.1 Background and Introduction

The One Washington Master Data Management (MDM) strategy will build on recent and successful examples and experiences. In fact, the major principles and elements of the MDM strategy already exist and are currently in operation. This section of the Program Blueprint describes at a high level how the MDM strategy will be expanded and formalized over the course of the One Washington program.

The concepts of MDM were discussed in the 2014 ERP Assessment and Business Case. These concepts, while not called MDM at that time, specifically arose in business process redesign approach and were exemplified with recommendations to undertake a chart of accounts redesign, the development of a reporting strategy, an initiative to rationalize payee files, and a similar initiative to rationalize customer files. These four recommendations are all examples of master data management. In 2015-16, chart of accounts work was completed to streamline expenditure coding and begin refinement of the COA, which serves as a great example of the MDM principles and approach that will be carried forward in the One Washington Blueprint. More recently, the state has launched other initiatives, including the Procurement Readiness workgroup, which provides a solid example and base of experience for the MDM strategy that will be carried forward. Another example underway is developing a business intelligence strategy.

These experiences provide both the foundation and momentum for the One Washington MDM strategy to be expanded and formalized.

The One Washington Master Data Management strategy enables the consistency, accuracy, stewardship, and accountability of the core information for the Finance, Procurement, Budget, and HR/Payroll functionality that will be in the new ERP. The strategy has several benefits:

- Provides a single, authoritative version of the truth (i.e. system of record)
- Enables an integrated data warehouse and information delivery to other applications such as business intelligence
- Creates operational efficiencies such as reduced data redundancy, data flows that are predictable, repeatable, and more accurate; data that is acquired, processed, published, and managed in a uniform way across the enterprise; and reduced costs in maintaining data (fewer duplicates, reduced infrastructure redundancy, and less re-work)
- Facilitates application interoperability (e.g. integration is extensible to other applications inside the state and to outside entities, such as vendors)
- Enhances compliance (e.g. data standards are documented, applied and enforced, roles and responsibilities are defined, and processes are repeatable, sustainable and practical)

The MDM strategy impacts several other components of the Program Blueprint. It is not a strategy that can be executed in a stand-alone fashion or completed once and not revisited or updated. For example, the MDM strategy influences the reporting and business intelligence approach, the data conversion approach, several business improvement initiatives (such as rationalizing the payee files), the phasing plan, and the design and implementation of Finance, Procurement, Budget, and HR/Payroll functionality in the new ERP. The Blueprint emphasizes the importance of MDM as it is the foundation of the state's information strategy, and improving access to quality, accurate, comprehensive, and meaningful information is one of the primary justifications for the One Washington program.

### 2.6.2 *Rationale and Recommendation*

This version of the Program Blueprint establishes the design of the MDM strategy, and will be further expanded upon over the course of ensuing versions of the Program Blueprint.

1. The MDM strategy identifies the nature of the data and defines the governance and decision-making process for enterprise master data, shared master data, and local master data. As demonstrated by the experience in the chart of accounts effort, there will be data that is required for enterprise purposes that must be defined, managed, and stored in enterprise systems. There will also be data required for a group of agencies sharing common business needs, which for convenience and efficiency, could be defined, managed and stored in enterprise systems. There could even be data required for single agency business needs, which for convenience and efficiency, could be defined, managed, and stored in enterprise systems. The MDM strategy will provide the decision-making process essential to sort through these issues in Washington's federated operating model and culture. The requirement to balance the needs of the enterprise with the needs of the agencies is a central feature of the One Washington MDM strategy, as illustrated in Figure 2.6.1.



Figure 2.6.1: The MDM strategy will address global, shared, and local master data

The decision-making process engages multiple stakeholders in a governance process. This includes:

- Agency managers and end-users. This applies to both centralized, control agencies as well as line of business, operating agencies. These stakeholders can make requests to create/read/update/delete master data. These are the people who best know their business and information needs.
- A coordinating team to review and make recommendations on these requests. This is both a business and technical function.
- Four executive oversight committees (Finance, Procurement, Budget, HR/Payroll), each chaired by the business owner relevant to the request. For example, Statewide Accounting is the business owner for master data requests pertaining to Finance. The oversight committee reviews requests and makes decisions. The oversight committee also sets master data management policies and standards for their respective domains. This is primarily a business function. If the master data is owned by more than one domain (for example master data that goes between Finance and Budget), each respective committee will need to be engaged.
- An implementation group. This group will execute the master data changes to the appropriate systems and data repository pursuant to standards and policies. This is a technical function.

This process is represented in Figure 2.6.2 below.



Figure 2.6.2: MDM governance and decision making process

In the initial phase of the One Washington program, the focus is on Finance and Procurement. The participants in the process described above will be primarily representing the interests and needs of the Finance and Procurement communities. As the One Washington program evolves to include greater focus on the Budget and HR/Payroll areas, those communities will be engaged.



2. The MDM strategy is an ongoing activity. As mentioned earlier, many aspects are already underway. During the pre-implementation stage of the One Washington program, the emphasis is on planning and preparation. Steps taken in this stage will simplify and expedite the subsequent implementation of the new ERP. The immediate focus is on Finance and Procurement as that functionality is the priority.

During the implementation stage, the strategy will be followed to guide the process to identify and set direction on master data that will be converted and/or created to design and configure the Finance and Procurement functionality in the new ERP. Special attention will be paid to reporting and the information needs of the multiple stakeholders, and the emphasis is on populating the new ERP with data to rapidly enable enhanced information and reporting. This process will continue as the program shifts to the Budget and HR/Payroll areas.

The MDM work, such as the outreach to stakeholders and activities with the governance/decision-making process, will be highly active in this timeframe.

During the post-implementation stage, there will be a need to occasionally update master data. Requests to create/read/update/delete master data will be managed pursuant to the governance and decision-making process and record retention.

3. The MDM strategy is inclusive and proactively engages stakeholders. Several techniques will be used to foster inclusiveness and engagement. For example, one technique employs the principles of design thinking to identify parties with an interest in master data. This technique identifies stakeholders where each stakeholder is a target for outreach.

A technique to be used in the outreach process is to ask stakeholders what questions they cannot get answered now which often provides insight to the nature of the required master data to address such questions. This technique was very successful in the chart of accounts effort, an example of which is in Table 2.6.1.

Table 2.6.1: Examples from the chart of accounts effort of questions that helped to identify master data elements

| Financial Management Focus Area | Use Case   | COA Element(s) Involved in Addressing Use Case                                   | Comments  |
|---------------------------------|--|--|---|
| Budget Management               | How quickly can actual expenditures be recorded and compared to budgeted amounts?  | Activity<br>Account<br>Fund<br>Expenditure<br>Program<br>Organization<br>Project | Actual versus budget expenditures can be compared as often as the current data is posted within the General Ledger. |
|                                 | How does an agency crosswalk its technical budget structure to conform to the overarching policy direction of the Governor or the agency itself? | Program<br>Organization  |   |

| Financial Management Focus Area | Use Case   | COA Element(s) Involved in Addressing Use Case   | Comments  |
|---------------------------------|--|--|---|
|                                 | How can spending be measured against performance outcomes or results delivered?  | <u>Primary structural elements:</u><br>Government Service Unit<br>Account<br>Fund<br>Expenditure Authority<br>Program<br>Organization<br>Project | All structural elements involved; performance outcomes can be associated to statistical information within the structural elements.   |
|                                 | What information is necessary to develop a budget? What information is unused in the process?  | <u>Selected structural elements:</u><br>Government Service Unit<br>Expenditure Authority<br>Organization   | Budgets can be developed through analysis of actual spend associated to the structural elements; results would then be populated to the appropriate budget units in the budget subsystem. |
|                                 | How are revenues, expenses, appropriations, allotments, cost allocation, cash flow, variances, budgets, and history managed and tracked? | <u>Primary structural elements:</u><br>Government Service Unit<br>Account<br>Fund<br>Expenditure Authority<br>Program<br>Organization<br>Project | Results can be managed and tracked through the association of all the structural elements to actual and budget data types.  |
|                                 | How is capital budgeting associated with bond accounts, investment types, and performance?   | Not applicable   |   |
|                                 | How can appropriation cash flow funding be compared to full project cash flow funding?   | <u>Selected structural elements:</u><br>Expenditure Authority<br>Program<br>Organization<br>Project  | The structural elements can support appropriation cash flow funding to full project cash flow funding.  |
|                                 | How can anomalies in data (e.g., vacancy savings) be determined?   | <u>Primary structural elements:</u><br>Government Service Unit<br>Account<br>Fund<br>Expenditure Authority<br>Program<br>Organization<br>Project | Anomalies can be determined through all structural coding elements by leveraging available reporting tools' drilldown-and-drill back techniques.  |

| Financial Management Focus Area | Use Case   | COA Element(s) Involved in Addressing Use Case   | Comments   |
|---------------------------------|--|--|--|
| COA Governance                  | How can audit requirements become aligned with chart of accounts data in a manner that reduces the amount of manual work required for an audit?            | <u>Primary structural elements:</u><br>Government Service Unit<br>Account<br>Fund<br>Expenditure Authority<br>Program<br>Organization<br>Project | Audit requirements would have to be specifically tied to the structural elements.  |
|                                 | What detective or predictive reports can determine fraudulent data? Unnecessary data?  | <u>Primary structural elements:</u><br>Government Service Unit<br>Account<br>Fund<br>Expenditure Authority<br>Program<br>Organization<br>Project | Structural elements may partially support predictive analytics.  |
|                                 | How can statewide compliance with the intended use of the chart of accounts be attained? How can consistent use be enforced and tracked?                   | All structural elements  | A centralized governance process and clear policies regarding use of the structural elements would be required.  |
|                                 | What are the new categories of risk and how would this affect the chart of accounts? What controls need to be put in place for the new categories of risk? | All structural elements  | Access controls to the maintenance of the structural elements within the COA would be required. In addition, clear change policies and procedures implemented through a centralized governance process would be required to ensure the ongoing integrity of the COA. |
|                                 | How can agencies achieve the ability to organize data at various levels in the data hierarchy?   | All structural elements  | Data would be organized by reporting hierarchies for any of the structural elements.   |
|                                 | How can agencies link their data requirements to those of the Legislature? How can agencies achieve and maintain transparency with the Legislature?        | All structural elements  | Legislative data can be associated to structural elements or descriptive data elements within the COA. If the required data are Financial in nature, they are more likely to be associated through the ERP system than within the COA structure.                     |

| Financial Management Focus Area | Use Case   | COA Element(s) Involved in Addressing Use Case                         | Comments   |
|---------------------------------|--|--|--|
|                                 | How can an agency or the state compare to benchmarks or standards within state government? Is there a means by which to compare certain agency activities to similar activities at other agencies? | All structural elements  | Agency activities can be defined and tracked either in a structural element or in an activity defined in a project sub ledger.   |
| Disclosure Data Management      | How can confidence in data and underlying disclosures be increased?  | All structural elements  | Confidence can be maintained by creating consistent classifications of structural elements within the new COA and maintaining uniform governance standards regarding maintenance of new coding elements. |
|                                 | How can disclosures become part of the system of record?   | Selected structural elements depending on specific agency requirements | Disclosures can be included in the system of record using a separate disclosure system that is integrated with the financial system and specific structural elements.                                    |
|                                 | How can the preparation of bond offering statements be supported?  | All structural elements  | Structural elements support the reporting of actual transactions required for bond offering disclosures.   |
|                                 | How can asset inventory be tracked?  | <u>Selected structural elements:</u><br>Account<br>Organization        | Inventory can be tracked using an asset subsystem associating the Account structural element to specific assets in the inventory.  |

Through this outreach process, the needs for master data will be identified and brought forward to the program for appropriate consideration and disposition with the governance/decision-making process. As previously mentioned, some of this outreach and engagement has already occurred, and more is planned in FY19. As the program approaches the implementation stage, additional research will be done to gather MDM requirements. This includes a review of current data systems, data dictionaries, data models, and documentation from AFRS and other relevant systems.

4. The One Washington MDM strategy is consistent with industry leading practices, as illustrated in Table 2.6.2 below.

Table 2.6.2: The One Washington MDM strategy aligns to industry leading practices

| Master Data Management Leading Practices   | One Washington MDM Strategy |
|--|-----------------------------|
| <ul style="list-style-type: none"> <li>Defining the full lifecycle of master data – from data creation to data retirement – across all applicable systems</li> </ul>   | ✓                           |
| <ul style="list-style-type: none"> <li>Recognizing, articulating and enforcing approval and validation procedures for creating, reading, updating and “deleting” master data</li> </ul>  | ✓                           |
| <ul style="list-style-type: none"> <li>Assessing and updating data processes regularly – to improve efficiencies, increase data quality or adapt processes to new business needs</li> </ul>  | ✓                           |
| <ul style="list-style-type: none"> <li>Defining master data requirements and standards by considering both short and long-term application, transactional and reporting needs</li> </ul>   | ✓                           |
| <ul style="list-style-type: none"> <li>Putting a comprehensive data quality program in place to profile, cleanse, and monitor data on an on-going basis (data quality is a subset of master data management)</li> </ul>  | ✓                           |
| <ul style="list-style-type: none"> <li>Utilizing technology solutions (Business Process Management Tools, Portals, Master Data Management Toolsets) to facilitate/expedite data update processes, enforcement of standards, master data harmonization and/or consolidation</li> </ul>  | ✓                           |
| <ul style="list-style-type: none"> <li>Documenting, publishing and actively maintaining an enterprise data model</li> </ul>  | ✓                           |
| <ul style="list-style-type: none"> <li>Defining and assigning roles and responsibilities for resources to make key, critical business decisions regarding data and assigning resources to carry out those decisions (data governance is a subset of master data management)</li> </ul> | ✓                           |

An effective One Washington MDM strategy with strong governance is key to a successful implementation. For example, decisions made by the MDM governance body on re-used versus new master data would determine the degree to which conversion of existing master data, or creation and manual entry of new master data, is needed. As another example, there must be a clear designation of the system of record for each master data element. If the new ERP is designated as the system of record, then no other action is needed. However, if the ERP is not designated as the system of record for a master data element, additional processes would be needed to synchronize the master data in the ERP with the designated system of record. This relationship between MDM and the implementation activities is illustrated in Figure 2.6.3.



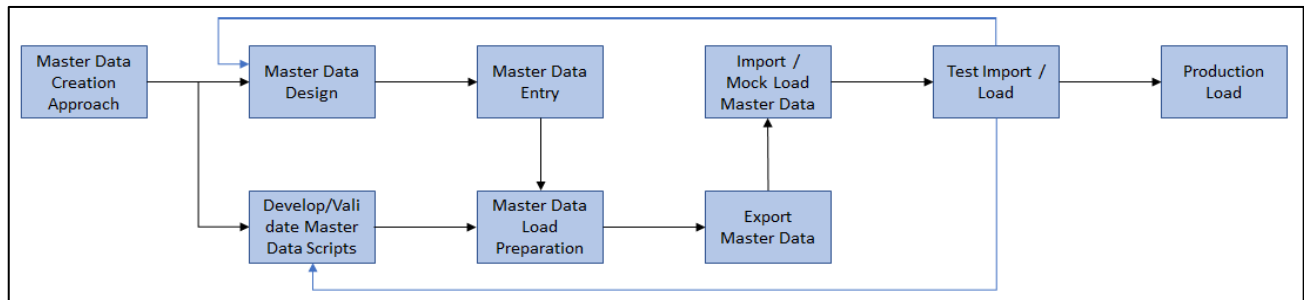


Figure 2.6.3: Process flow of master data into the One Washington system

There are two approaches to loading master data into the new system:

- 1) Automated loading via data conversion. This approach would be used when master data in existing systems is confirmed to continue to exist in the new ERP, and thus can be migrated via the conversion process. In this approach, master data would undergo the same processes as other data conversions (e.g. extraction, cleaning, translation, loading, etc.). Please refer to the Appendix for the full description of data conversion. The conversion and testing of master data will happen in one of two timelines. One option is that it occurs concurrently, but sequenced first, with other data conversion. Sequenced first allows other conversion data that refers to master data elements to complete the validation steps without failure. The other option is to schedule a load of master data alone. This option has the advantages of allowing manual data entry and more realistic test data in the new system, but the disadvantage of two conversion and testing cycles. The selection of the preferred option will be made during the design and configuration phases of the ERP software implementation.
- 2) Manual creation and entry. This approach would be used when there is new master data. In this case, the new master data would need to be created by the functional team per the decisions of the oversight committee referred to earlier. Considering the age of current Washington systems and the absence of a statewide procurement system, it is likely that several elements of new master data will need to be created. Manual creation and entry of master data to the new ERP would be the responsibility of the functional team. There are three methods. One is manual data entry. This method is best for master data that has complex requirements or serves as a control element to other data. The second is to enter the data to a file specified by the ERP and then upload that file to the ERP. This method works well when consolidating master data from many decision-making sources. This method would allow different agencies to add master data into a file following a specified format and then load all the master data to the ERP at the same time. The third is to enter the data to a uniquely created file and then upload it to the ERP. This process could be used if master data is held by a system other than One Washington (for example the system of record for the master data will not be the ERP). Further analysis would be needed to determine if this approach would be required for the program.

In summary, the master data can be loaded in the new ERP system either by automated loading process via data conversion or by manual creation and entry. The preferred approach for loading master data will depend on whether the existing data is confirmed to continue in the new ERP system or if any new master data needs to be added. The approach will be defined during the implementation phase.

## 2.7 Data Conversion

### 2.7.1 Background and Introduction

This section of the Program Blueprint gives a high-level description of the overall approach for data conversion from the legacy systems into the ERP systems for Finance, Procurement, Budget and HR/Payroll. This section defines the scope of conversion, the methods to be used, the general timeframe over which the conversion is planned to occur, data cleansing requirements, and data validation.

The scope of data conversion described in this section is generic and will be refined during the implementation design phase. Decisions will need to be made regarding how much data needs to be converted. While there may be a desire to convert all applicable legacy data, there are consequences in rigidly following that approach as discussed in the Appendix. The strategies discussed in this section are also applicable to master data (see section 2.6 for details of master data management).

Details of data conversion approach and the scope for different functional areas for the state can be found in Appendix *Data Conversion*.

### 2.7.2 Scope of Data Conversion

Data elements for Finance, Procurement, Budget and HR/Payroll functions that are deemed relevant for data conversion were defined by combining subject matter expertise with a series of interviews and workshops involving state and agency technical as well as functional staff. These are listed and discussed in more detail in the Appendix. This list is not exhaustive and may change based on further discussions and analysis during the design phase of the program. As the program approaches implementation, further research will be done to gather data conversion requirements. Relevant stakeholders will be actively engaged in these discussions and their inputs will be considered during analysis and in finalizing the scope.

### 2.7.3 Assumptions

Table 2.7.1 below outlines the major assumptions made in the development of the data conversion approach. These are critical to both the approach and the indicative timeframes.

Table 2.7.1: Assumptions for Data Conversion

| Assumption  |
|---|
| 1. The conversion plan includes three mock conversions for each module per wave.  |
| 2. Agencies will follow best practices for data conversions and extracts from legacy systems to maintain consistency.   |
| 3. Configuration data, like workflow and approval data (except for Master Data such as department, location, vendors, customers, chart of account elements, purchasing categories and items), will not be populated via the data conversion process. These tables will be populated by the One Washington program functional teams and will need to be executed prior to converting data. |
| 4. Whenever possible, the ERP solutions recommended conversion program(s) will be leveraged.  |
| 5. Prior to implementation and conversion activity, agencies will perform legacy system data clean up, reconciliation and data extract required for conversion.   |

| Assumption  |
|---|
| <p>6. When data clean-up requirements and issues are discovered and reported during conversion, all data clean-up activities will be performed by state legacy system resources within the legacy systems. These resources will be required to perform one of two possible actions:</p> <ol style="list-style-type: none"> <li>1) Clean up the identified data within the legacy database and provide an updated extract with which the process can be repeated.</li> <li>2) Determine the data quality is of an acceptable level to begin the conversion process.</li> </ol> |
| <p>7. The One Washington program will work with agencies to resolve data content issues.</p>  |

#### 2.7.4 Rationale and Recommendation

The data conversion effort will be managed through several stages. These stages include developing a data conversion approach, creating a data conversion design, developing the conversion program, cleansing data, preparing for data conversion, mock conversion, and production conversion. Figure 2.7.1 illustrates the general end-to-end process flow for data conversion.

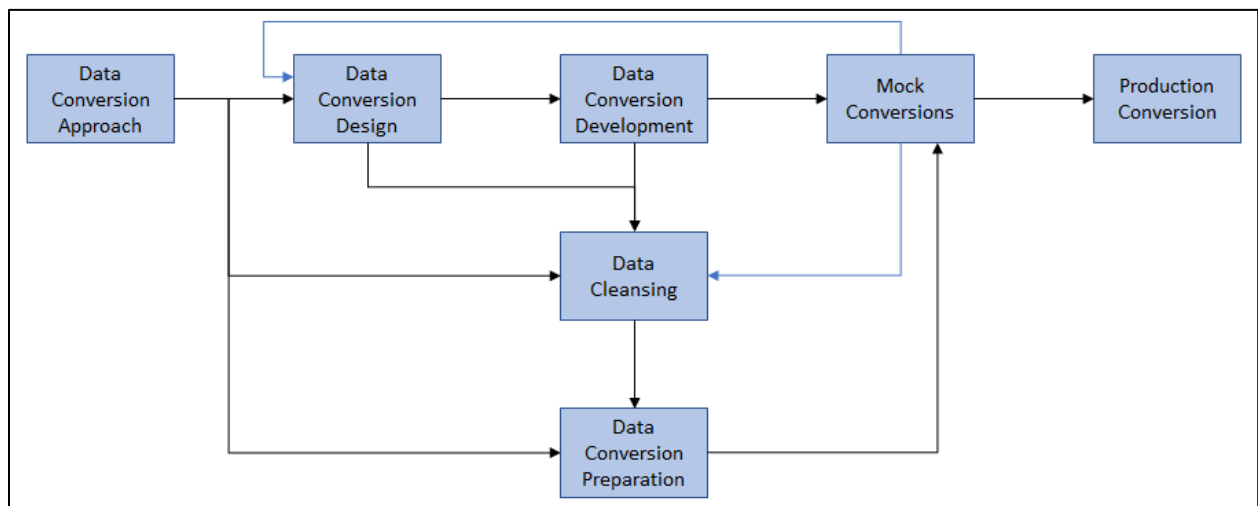


Figure 2.7.1: End-to-end Data Conversion Process Flow

The paragraphs below summarize each step of the process flow. Detailed description of these steps is provided the Appendix.

#### Data Conversion Approach Phase

Developing the data conversion strategy and approach involves determining the high-level requirements and considerations. It will be used to structure and deliver a successful data conversion from the legacy data sources to the new ERP system. This is performed within the framework of the project scope, execution environment, resourcing constraints and the implementation schedule.

#### Data Conversion Design Phase

Data mapping will be performed based on the scope established by the data conversion strategy and approach and with knowledge of the functionality used in the “to be” business processes. Detailed conversion requirements will be defined during this phase and will be captured in design and data mapping documents. These detailed requirements will include:

- Extraction requirements to indicate which data will be pulled from source systems to be converted into the new ERP for Finance, Procurement, HR/Payroll, and Budget applications

- Data mapping templates and required translations
- Processing rules and load sequences
- Data validation requirements

Based on this scope, data fields are mapped to the legacy systems, records and fields. This requires an understanding of the source and target database structures and functional knowledge of both the source system and the ERP applications. Progress is made by mapping conversion areas, then records, followed by specific fields. Data mapping will range from simple to complex field to field mappings which will involve detailed logic and relationships (e.g. one-to-many data mapping, etc.)

### **Data Conversion Development Phase**

Extract and load programs defined during the design phase will be developed, documented and tested.

### **Data Conversion Preparation Phase**

The data conversion preparation phase will provide an opportunity to finalize the overall data conversion process and schedule. This incorporates the timeframes for each of the conversion windows, the conversion tasks and the responsibility for each task. Adjustments to the conversion window can be done to accommodate any changes resulting from the data conversion development phase.

### **Data Cleansing Phase**

Data cleansing needs will be identified during the approach, design, development and testing phases of the conversion. Data cleansing requests are to be logged in a data cleansing log by One Washington. The One Washington program will coordinate the process by providing feedback on cleansing needs, as well as proposed solutions to data quality issues. The state agencies or system and business owners are responsible for making any physical changes to the source data for the purpose of data cleansing.

### **Mock Conversion Phase**

The mock conversion phase will allow the One Washington program to conduct low risk mock conversions in the ERP test environment prior to go-live. The mock conversions test and identify as many issues as possible with programs, data, procedures and reconciliation. These issues are then resolved at the earliest point in time.

### **Production Conversion Phase**

This phase will involve performing all tasks required for the actual full volume legacy systems data load into the Finance, Procurement, HR/Payroll, and Budget applications. Time and dependencies are critical, so it is vital that the conversion windows are managed in a coordinated, methodical and efficient manner. Delays during the production conversion windows will impact the deployment of the solution into the production environment.

## **2.8 Reporting Capabilities**

### **2.8.1 Background and Introduction**

The development of reporting capabilities will build upon some aspects of the state's Chart of Accounts effort conducted in 2014. During that work, leadership from across the state identified use cases where better data would help them conduct business more effectively. The development of reporting capabilities is the first step to enable the State of Washington to answer "burning questions" for business as identified by financial and procurement leadership from across state agencies, such as "Can expenditures be tracked by type of business (e.g., woman-owned, minority-owned, etc.)?" and "Can a specific business' expenditures be tracked?" as well as use cases for advanced, predictive reporting such as "How can forecasted and actual revenues be compared more accurately?"

By implementing a reporting capability as part of the One Washington program, the state ensures the authorizing environment and leadership has the data they need to make better informed decisions.

This section defines reporting capabilities for the One Washington implementation. A solution for the state is most effective when enabled with synchronized reporting capabilities across different agencies and departments. Improved access to data in simplified reports will enable the authorizing environment and leadership across the state to benefit from the integrated system, better understand the daily operations of organizations, and make better informed business decisions.

The reporting approach can be summarized as follows:

- Leverage the delivered reporting capabilities of the selected ERP as much as possible
- Supplement the delivered reporting capabilities of the selected ERP with custom reports based in the ERP system, either by modifying delivered reports or by creating new reports
- Continue to use Business Objects reporting capability for reporting on data in systems not integrated with the ERP

### 2.8.2 Scope of Reporting Capabilities

This approach will cover the reporting mechanisms that are already used by the state and can be leveraged by the selected ERP application as well as those delivered by the ERP solution themselves. While business intelligence (BI) reporting is a portion of the overall reporting strategy, ERP systems generally provide relatively limited capabilities in BI reporting compared to add-on systems and products developed specifically to provide robust BI reports. A parallel BI strategy work stream is underway to determine the overall BI approach and will be integrated with the Program Blueprint in later versions.

### 2.8.3 Assumptions

Table 2.8.1 below outlines the major assumptions made in the development of the reporting approach

Table 2.8.1: Assumptions informing the reporting capabilities

| Assumptions   |
|---|
| 1. The delivered reporting tools from the selected ERP will be leveraged as much as possible for reporting in the ERP applications.   |
| 2. Washington stakeholders need to keep the current reporting tool (Business Objects) active as a reporting tool.   |
| 3. The BI strategy will be developed in a parallel effort.  |
| 4. Not all disparate systems will be retired with the implementation of the ERP application(s).   |
| 5. Not all data will be converted with the implementation of the ERP application(s).  |
| 6. Washington's selection of ERP application software will consider the suitability of the software's BI capability and/or the capability to fully integrate with add-on BI applications. |

### 2.8.4 One Washington Reporting Capabilities



Table 2.8.2: Washington's current reporting capability

| Functional Area | Current State of Reporting   |
|-----------------|--|
| HR              | HR functional areas across the state currently use an SAP ERP. HR reports are being delivered out of the SAP interface. A new HR/Payroll data warehouse is scheduled to be completed in January 2018.  |
| Budget          | Budgeting applications are disparate across state agencies and therefore budget reporting capabilities are complex. However, much of the data for budget can be accumulated and reported from Business Objects (a separate reporting product from SAP) that is integrated with various sources of budget data. Business Object's Web Intelligence tool allows for reporting from a single system at a time.  |
| Procurement     | Procurement functions are disparate processes or systems across agencies with no aggregation. Procurement data is maintained within different agencies and no standard reporting approach has been adopted.  |
| Finance         | Finance functions are comprised of disparate systems across the state with most data aggregated into the AFRS system. A very limited amount of reporting happens in the current AFRS system. There is very niche reporting that only is used by a few specific areas within the state. Some reporting is done from the disparate systems themselves. Reporting from AFRS was discontinued in favor of using the reporting capability offered with Business Objects. Department of Transportation uses the Transportation Reporting and Accounting Information System (TRAINS). |

### Reporting Approach

Based on the current state of reporting in Washington (see Table 2.8.2 above), including several existing report types currently used by agencies to execute their business functions, the ERP reporting approach for the One Washington program is as follows:

- Leverage the delivered reporting capabilities of the selected ERP as much as feasible. The capabilities of delivered reporting tools are robust enough to serve most requirements the state may have. This would be the case for procurement as this is the first-time enterprise data for procurement will be available. With aggregate data in the ERPs, instead of data in disparate systems, the ERP reporting solutions provide a means by which data can be reported efficiently and in real-time.
- Supplement the delivered reporting capabilities of the selected ERP with custom reports based in the ERP system, either by modifying delivered reports or by creating new reports (refer to section 2.8.5.2 on custom report development below).
- Continue to use Business Objects reporting capability for reporting on data in systems not integrated into the ERP.

It is not recommended that an add-on reporting tool be obtained and used to perform the same or similar enterprise wide reporting that ERPs deliver, especially for transactional reporting. Add-on reporting options may be needed in the future for the state's BI reporting needs, as discussed in section 2.8.5.4.

### 2.8.5 Rationale for Reporting Capabilities

A modern ERP will provide added capabilities that will address current reporting challenges for the state. These challenges are the result of having multiple applications and system of records. The capabilities are summarized in the below Table 2.8.3

Table 2.8.3: ERP Capabilities

| Capability                           | Description   |
|--------------------------------------|---|
| Leveraging delivered functionality   | Many report requests can be met using the capabilities delivered within the ERP.  |
| Transparency of complex calculations | ERPs give transparency to complex calculations and make that data available through reporting and dashboards.               |
| Real-time data                       | ERPs provide reporting capabilities and dashboards that allow data analysis in real time.                                   |
| Drilldown capabilities               | ERP reporting tools allow users to easily move from a higher-level view to a more detailed view of the data being analyzed. |
| Ad-hoc reporting capabilities        | ERPs provide for flexibility and easy access for users to build their own queries.  |

#### 2.8.5.1 Transactional Reporting versus BI

To set the context for how the state defines its reporting approach, it is important to understand the difference between transactional reporting and BI. Transactional reporting supports the day-to-day operations of an organization. Every modern ERP comes with delivered reports for transactional reporting, and these delivered reports form the basis of the One Washington reporting approach. In contrast, BI enables business performance improvement by providing actionable information for decision making and is typically delivered separate from an ERP system. BI can be segmented into descriptive analytics (what happened and why) and predictive analytics (what will happen next). Transactional reporting is usually best consumed by individuals close to the business process, while BI reports show the “bigger picture” and are usually consumed by senior leadership and executives. Transactional reporting and BI reporting will be developed as complementary tools as they provide distinctly different advantages, often leveraging the same data sources. It is critical that values presented in operational reports correspond directly with values contained in BI tools.

Primary distinctions and functions of transactional reporting and BI are summarized in Table 2.8.4 below:

Table 2.8.4: Transactional Reports versus BI

| Transactional Reporting  | BI  |
|--|---|
| <ul style="list-style-type: none"> <li>Typically delivered as a pre-built tool with ERP software</li> <li>Facilitate daily business transactions with customers, suppliers and agencies</li> <li>Enable real-time reporting to support operational decision-making</li> <li>Produce static reports in standard formats with limited ability to interact with the data</li> <li>Provide straight-forward aggregation and calculations</li> <li>Provide data elements and structure which can be leveraged for related BI reports</li> </ul> | <ul style="list-style-type: none"> <li>Typically delivered as add-on software which builds on ERP capability and data structure</li> <li>Show aggregated or summarized business performance trends over time</li> <li>Produce highly interactive reports to support analytical decision making</li> <li>Facilitate investigative and detailed ad-hoc reporting</li> <li>Support different presentation formats and allow users to dynamically move from a summarized view to a more detailed view through drill downs and guided navigation</li> <li>Perform complex calculations and data aggregation</li> </ul> |

Figure 2.8.1 below illustrates how the different types of reporting build upon each other to provide full range of capabilities to different audiences. Typically, BI functions begin at the Summary Reporting level in the figure below and end at the Strategic Analytics level. Transactional reporting begins at the Transactional Reporting level and typically includes some of the Summary Reporting functions.

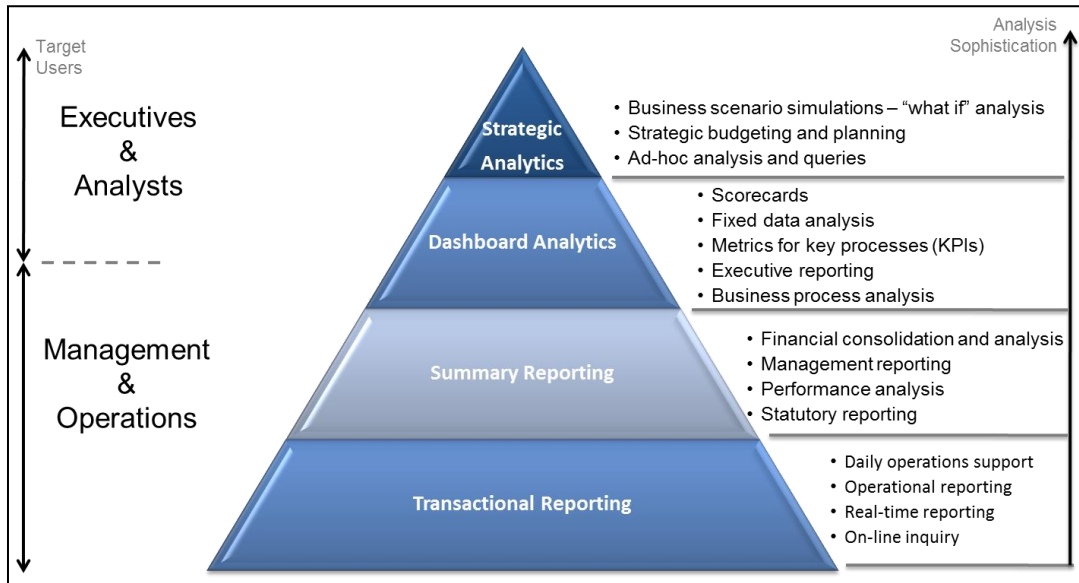


Figure 2.8.1: Transactional reporting provides the basis for BI

The details of the specific BI strategy for Washington will be part of a separate future initiative and the outcome of the BI strategy development will be incorporated into the Program Blueprint when finalized. The chosen ERP application must deliver the capability to run BI or fully integrate with add-on BI applications (refer to sixth assumption in section 2.8.3 above).

#### 2.8.5.2 Developing Custom Reports

For reporting requirements not met by the delivered transactional reports in the ERP, custom reports may be developed. Development of custom reports will generally follow the process for developing custom interfaces as described below:

- Functional leads and SMEs from the selected implementation partner and the State of Washington gather and document report requirements. Functional leads and SMEs also receive report examples directly from agencies.
- Using the report requirements, the functional teams perform a fit/gap analysis on the requirements to align to delivered functionality. At this point, requirements may be identified that are out of scope, requiring hand-off to other teams.
- Once all the gaps are identified, the functional teams propose gap solutions to meet the requirement. The reporting requirements identified as approved gaps will be added to the RICEFW (Reports, Interface, Conversion, Enhancements, Forms, Workflow) Inventory.
- The RICEFW report items are prioritized for development based on the established and ordered reporting categories. Typical reporting categories are:
  - Statutory/Regulatory (Priority 1)
  - Integral to Business Process (Priority 2)
  - Process Supporting/Analysis (Priority 3)
  - Monitoring/Post Audit (Priority 4)
  - Ad-hoc/User-specific (Priority 5)

Options for meeting the reporting requirements can include modification of a delivered report or development of a new report. In the future, requirements may be met through an add-on reporting solution if one is added. Requirements focus on operational, management, and executive level reports in addition to those required by statute. Many reports will require discussion to evaluate several criteria (e.g., audience, performance) and determine the appropriate solution. After gathering and refining, requirements will be translated into functional and technical design.

### Report Alignment

After gathering and refining the report requirements, the functional team will coordinate an assessment of the requirements and align them to the appropriate place to develop. This could be in the ERP, an add-on system, or Business Objects (see section 2.8.5.3 below).

The tool that will be used to identify the appropriate place to develop reports using specific criteria is the Report Classification Matrix (Table 2.8.4 below). The Report Classification Matrix consists of six criteria used to “score” reporting requirements to determine what type of reporting (operational or analytical) they are and thus what application would be the best fit for development.

Table 2.8.5: Report Classification Matrix

| Criteria   | Description  |
|--|--|
| <b>Leveraging delivered functionality</b>                          | Many report requests can be met using the capabilities included within the standard ERP delivered reports and should be utilized whenever possible. The functional SMEs should make future users aware of which reports will be available to them. In most cases, a fit to a delivered report functionality is preferred over a custom solution.   |
| <b>Nature of the report: strategic versus tactical</b>             | Reports that are strategic in nature are a better fit for other reporting solutions like BI, and reports that are more tactical in nature are a better fit for the ERP environment. Strategic reports typically use aggregated or calculated data. They can often be represented using graphs, and examples including trend reports. Tactical or operational reports typically use granular data. They will often be represented using a table that will include many rows. An example would be a table that displays all open requisitions for a given month. |
| <b>Complexity of calculations and impact on system performance</b> | The more complex the calculations being performed, the larger the impact on performance the querying process will have. The impact of the performance on other functions of the system should be considered.   |
| <b>Real-time data</b>  | Other reporting tools pull data from other source systems and store them in a de-normalized database. The data loading schedule can vary but the data stored in the other reporting tools is not available in real time (data created in the transactional system is not available in the other reporting tool until a data load is executed). If real-time data is needed to meet the requirements being analyzed, the timing of dependent data sources should be considered.   |
| <b>Drilldown capabilities</b>                                      | Drilldown capabilities can be setup in some reporting tools to allow users to easily move from a higher-level view to a more detailed view of the data being analyzed. By clicking on a specific value, a user can go from looking at a yearly aggregated value to quarterly aggregated data. If the user then wishes to look at details for a given quarter, he/she can click on the appropriate  |

| Criteria                             | Description   |
|--------------------------------------|---|
|                                      | quarter value and 'drilldown' to the monthly details. Many reporting technologies do not support this, so this may require an external reporting tool.  |
| <b>Ad-hoc reporting capabilities</b> | To meet some of the reporting requirements, users may need the flexibility to build their own queries. For example, if a requirement is to monitor issues in the requisition approval process, this requirement may be met by a combination of a strategic report (report showing the average number of days for a requisition to be approved) and ad hoc querying. For example, if a manager notices that the average number of days for a requisition to be approved is not meeting standards, they will need to do a deeper dive into the data to understand the cause of the delay by creating/using ad-hoc queries. These queries allow the manager to track down the source of the issue by allowing him to view data from multiple perspectives. |

### 2.8.5.3 Leveraging the State's Existing Reporting Capabilities

As previously discussed, the State of Washington currently employs Business Objects as the enterprise reporting tool for both Finance and Budget. Business Objects is currently utilized for all reporting needs and was developed as a solution because the current Financial and Budgeting systems did not have robust reporting capabilities. Business Objects also enables the aggregation of data from disparate systems. Figure 2.8.2 below depicts the current Business Objects landscape for the State of Washington's reporting.

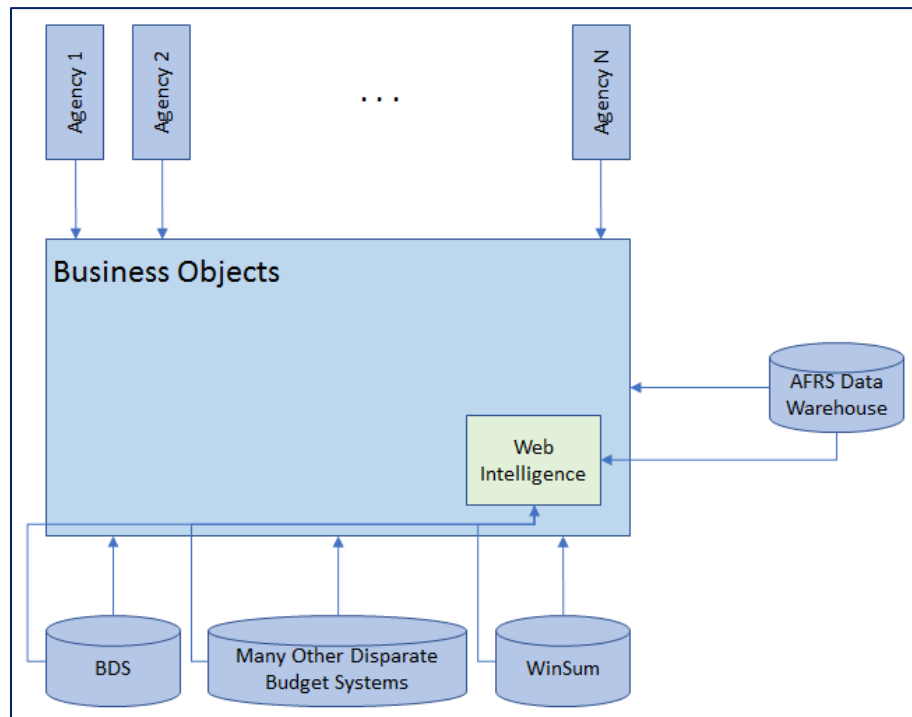


Figure 2.8.2: Current Business Objects landscape

Business Objects integrates with many data sources and aggregates that data into one area. Agency systems connect with Business Objects and use the delivered functionality of Web Intelligence (Webi) and other reporting functionality to retrieve the data they require. The solution is not currently a real-time solution because data must



be loaded into the de-normalized databases before the newer data can be used. Business Objects also does not contain standard reports for any function; all reports must be developed within the tool.

For the purposes of the One Washington reporting capabilities, Business Objects will provide reporting for any data that resides in systems not integrated to the ERP. In addition, the One Washington program can continue to leverage the Business Objects reporting tool by pointing the Business Objects reporting tool to the new ERP data, as is the case with the legacy systems. There are three major reasons to continue to use the Business Objects reporting tool:

1. Doing so allows the Business Objects reporting tool to function as it does now, so the method of data reporting will remain the same, meaning minimal change for users.
2. Not all disparate systems will be replaced with the implementation of an ERP, and legacy systems that are retained will have data that must be aggregated with the ERP data.
3. Most importantly, warehoused data can continue to be accessed from Business Objects. Not all data may be converted during the implementation, so the capability for users to access the warehoused data is an option to fill in those gaps.

This solution will need to be re-examined after the completion of the BI strategy initiative.

#### 2.8.5.4 Add-on Reporting Products

Most reports that come delivered with ERPs are transactional, with some summary reports as well (refer to above figure 2.8.2 above). Most major ERPs and their delivered reports integrate with add-on reporting products. Examples of add-on reporting products are included in Table 2.8.5 below.

Table 2.8.5: Examples of add-on reporting products

| Vendor | Add-on Reporting Product  |
|--------|---|
| SAP    | Crystal Reports is a reporting tool which can integrate with ERPs like PeopleSoft |
| Java   | BI Report Tool (BIRT) which can integrate with Workday                            |
| Oracle | Oracle's BI Enterprise Edition (OBIEE) which can integrate with many ERPs         |

#### 2.8.6 Other Reporting Considerations

##### 2.8.6.1 Report and Data Governance

One Washington must establish well-defined report and data governance and communicate process and expectations thoroughly statewide. Report and data governance is necessary both during the program implementation as well as in post-implementation operations. Listed below are a few key considerations in establishing report and data governance:

- One Washington will create a governance process to define the strategic direction for reports. The governance process should have representation from IT and business functions, including representatives from across state agencies and from each business function (e.g. Finance, Procurement, Budget and HR/Payroll). The process should also represent the interests of different audiences including executive, management and operational levels. By having a diverse group involved in the governance process, One Washington will develop and operate a reporting solution that provides the most possible value for users' varied needs across the enterprise.
- For each report or reporting area, define the system of record or authoritative data source and a single report owner. By having a clear understanding of the report source and a single owner/point of contact for a report, One Washington can facilitate questions or requests for changes more efficiently. For manually produced

reports, defining the owner can prevent different parts of the business from creating and/or distributing similar reports.

- Report owners need to provide clear definitions for business rules in order for report consumers to have a consistent understanding of the information contained in the report (e.g. cash basis vs. accrual basis). On most reports, it is important for relevant parts of these definitions to exist as footnotes on the report as it is distributed throughout the agencies.
- End user governance is needed to establish the security guidelines and privileges (e.g. report creation or publication) for end users. Defining processes to grant access, provide support and validate ad hoc reports are other components of end user governance that One Washington needs to address.

#### 2.8.6.2 *Report Access, Distribution, and Retention*

Insightful reports provide little value without the right access and distribution mechanisms in place. Successful reporting relies on easy access to information. If users have a difficult time accessing their reports, they can quickly become disenfranchised and start looking for alternative ways to get information, including reverting to asking others to manually provide it or creating their own shadow reporting system.

The ERP functional and technical teams will evaluate the various audiences and determine their requirements for viewing reports. As often as possible, One Washington should promote a “pull” method to report distribution where report consumers retrieve the reports when necessary. This differs from the “push” method where many reports are delivered to report consumers. The pull approach often leads to higher engagement of the report consumer and eliminates unnecessary distribution to individuals who don’t use the reports.

Requirements may dictate scheduling of ERP reports that are used on a regular basis (e.g. daily, monthly) and use of a report repository (e.g. Microsoft SharePoint) to store reports where consumers can retrieve the reports. Across the functions, reports are currently distributed in various ways:

- Reports are generated, either directly in the source system or manually prepared, then posted to a website or emailed to a distribution list.
- Reports are directly executed in the source system by the end users on demand.
- Reports are batch processed in the source system and posted to agency-specific network drives for users to log in to retrieve.

Individual report distribution decisions can be decided once requirements are defined, indicating a need to serve the ERP reporting audience with a different distribution mechanism.

Requirements may also dictate the need to retain selected reports for a period of retention as defined by the state’s records retention policies. These retention requirements will be included in the detailed report design specifications.

#### 2.8.7 *Security and Transparency*

The One Washington program will implement reporting with a view towards transparency. With many ERP implementations, people want to limit the number of users who can access the data. This approach typically makes the most sense if users can edit data or if the data is sensitive or legally protected. However, from a reporting perspective, being unnecessarily protective of data can limit its value. Transparency and availability of data can foster business improvement by enabling agencies to compare performance with other agencies. Transparency enables management to see the same reports that executives view to manage their business.

Washington’s Open Data policy states that data should be publicly available to increase “government transparency, effectiveness, and accountability, allowing government agencies as well as citizens to browse, interpret trends, and draw attention to issues with greater efficiency.” The One Washington program will interface with state’s existing

Open Data program. However, when considering Open Data with regard to the ERP, there are several policy and procedural questions that need to be addressed by One Washington.

Most, but not all, of the data generated by the ERP will be determined as appropriate for public disclosure as “open data”. However, some of the data generated by the ERP may be determined as not appropriate to public disclosure, for example personally identifiable information, data protected by HIPPA, and data that is deemed by the state to be confidential. One Washington will need to use a data governance and decision making process to determine what data generated by the ERP is appropriate for disclosure as open data and what data is not. These policy issues would be addressed within the context of Washington’s Open Data policy. One Washington will also need to create procedural mechanisms to implement the policy decisions. This will provide the guidance to the staff operating the ERP as to what reports (and data on reports) are to be made public, and what data queries (e.g. reporting databases) are to be made public. There are many options to consider regarding the design of procedural mechanisms. These will be explored in the Program Blueprint version 2.

Transparency in data must be balanced with concerns for security. There are exceptions to the transparency approach for any data that is deemed sensitive or legally protected. Reporting access should be limited to those with a business need for the access they receive. For example, a user in the Finance group, likely does not have a need for HR reporting and their access should be restricted accordingly. However, in keeping with the principle of transparency, the Finance user should not necessarily be restricted within the set of Finance reports or limited (e.g. by agency, division, etc.) in the data that is returned in the report. Users should use a filter to return the necessary data and not have it imposed by the system. A further benefit of these broader security roles within the transparent approach is that the system security roles are less costly to implement and more efficient to maintain.

## 2.9 Security Approach

### 2.9.1 Introduction

The purpose of this section is to define the strategy for the security approach of the One Washington program’s ERP implementation and the rationale behind it.

### 2.9.2 Assumptions

The table below outlines the major assumptions used in the development of the security approach.

Table 2.9.2: Assumptions Used in Development of Security Approach

| Assumptions   |
|---|
| 1. One Washington will implement a SaaS model.                      |
| 2. VPN tunnels will be used to connect to the SaaS provider.        |
| 3. The program will comply with Washington state security policies. |

### 2.9.3 Security Approach Model

Security is integral to protecting the critical Finance, Procurement, Budget, and HR/Payroll data in an ERP system. While a SaaS model can provide enhanced performance efficiency and collaboration, it also poses security challenges when the applications are hosted in the cloud and data interfaces with users and applications located elsewhere.

As shown in Figure 2.9.1 below, there are three primary tenets of security architecture accessibility, confidentiality, and integrity. Development of an effective security architecture requires these three tenets to be balanced. Access

to data needs to be sufficiently controlled to maintain compliance and confidentiality that remains accessible to authorized system users in a manner that facilitates productivity. The security approach for the overall One Washington program is a combination of delivered security functionality with well-defined security processes and existing state mechanisms to address these requirements.

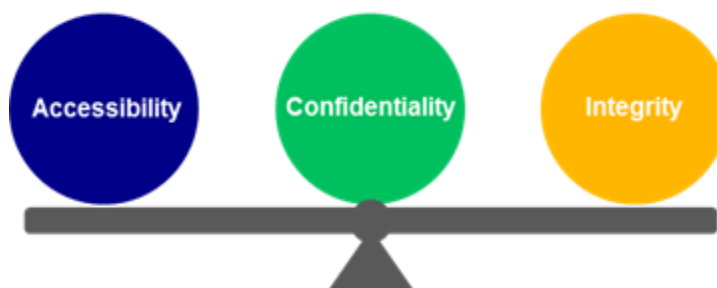


Figure 2.9.1: Focus on the proper balancing of the three tenets of security to provide high security and user productivity.

Embedding security design, configuration and testing in the project lifecycle greatly reduces risk for the delivery of a secure system. The security configuration for the One Washington implementation will focus on three areas:

1. Infrastructure Security – Configuring the infrastructure in such a way that users can easily access the data they need, but remain secure throughout the entire communication process.
2. Data Security – Securing data such that only appropriate users have access to the appropriate data required for their job roles.
3. Application Security – Configuring the system such that only the appropriate users can gain access through trusted authentication services. This is a critical first step towards protecting the perimeter of the applications. Extending that configuration to appropriate authorizations that restrict users to only the data and transactions that they need to do their day-to day jobs completes the application security model.

Securing individual areas will provide layers of protection. Each area will overlap, support and enhance each other.

#### 2.9.4 On premises vs SaaS Security

On premises systems and SaaS systems have different infrastructure and security requirements. Some security elements will apply to on premises systems but will not apply to SaaS systems and vice versa. A full discussion of the system types is provided in section 2.2 Technology Deployment Model.

##### 2.9.4.1 On premises security considerations

On premises systems are physically located within the organization's location or within the system owner's control. In an on premises systems, the organization must determine the security requirements for all areas like infrastructure, data and application security. The organization is also responsible for implementing those requirements. The One Washington program has a guiding principle of implementing a SaaS model. However, on premises systems should still be discussed, as supporting systems can be on premises, like software-oriented architectures (SOA) solutions and possibly BI solutions.

##### 2.9.4.2 SaaS security considerations

SaaS systems are hosted, managed and operated by the vendor of the software. In SaaS systems, the responsibility of maintaining the infrastructure and managing the data to a certain extent is done by the vendors.

This does not absolve the One Washington program of any of the responsibilities of securing infrastructure or data. Those tasks still need to be performed, but with different supporting infrastructure, such as VPN and single sign-on.

### 2.9.5 Infrastructure Security

The following sections provides the high-level methodologies and considerations for securing an enterprise system. Further analysis will be required to align these considerations to current state and agencies security policies (for example “Securing Information Technology Assets” Policy: 141) and standards.

#### 2.9.5.1 ERP Authentication

Basic authentication includes integrating the solution to the in-house identity and access management solution, active directory (AD), as specified by section 6.3.2.1 “Type 7 – Internal” authentication in “Securing Information Technology Assets” – Policy: 141. Integration with AD is a common solution among ERP systems. The application and infrastructure administrators simply configure the ERP system to direct authentication services to Microsoft active directory, which is a lightweight directory access protocol (LDAP) compliant directory.

By using a centralized authentication store like AD, One Washington can streamline security tasks such as deactivating users or resetting passwords. This also allows One Washington to centrally administer security policies like password complexity and user access expiration. The state’s user base gets further benefit by eliminating the need for separate credentials. Having a single credential across systems throughout an organization reduces an organization’s exposure to risk because it is easy for users to remember a single set of credentials. Users that are tasked with leveraging additional sets of credentials are more likely to use poor security practices such as writing down credentials. Detailed requirements aligning to WA policies will be developed during the security design implementation phase.

#### 2.9.5.2 File Transfer Security

Data files that are processed by, loaded into, or generated by the ERP applications, legacy or external systems are often sensitive in nature. Therefore, securing files and their transport are crucial steps in securing the overall ERP system architecture. Files are often transmitted to and from ERP applications and it is important to protect them from any unauthorized access.

There are various methods to transfer files, the most common is using an FTP (file transfer protocol) program where files can be downloaded or uploaded directly to an FTP server. The file transfer process can be configured in a way that secures these files. This involves the use of secure FTP programs and secure FTP servers.

SFTP (FTP over Secure Shell ‘SSH’) is the recommended file transfer mechanism. Some of the functions and features include, but are not limited to:

- SSH Encryption – Secures the connection.
- User ID/Password authentication – The standard authentication method for connecting via FTP.
- Public key authentication – Use of a generated Public key to access the FTP. This is particularly useful for automation compared to the User ID/Password method. When using the User ID/Password authentication in for automation, developers would have to hardcode the User ID/Password information into the automation process, which defeats the purpose of security. This method allows authentication based on the installation and configuration of a public key, making automation possible without sending across credentials. Any entity without the public key will be denied access.
- Single Port Easy firewall connection because it only requires one port for connection.

WaTech currently provides a SFTP solution that is fully compliant with the state’s security policies, called SFT (secure file transfer). The SFT solution is a web based file transfer solution. However, it needs further examination



as the development of the Program Blueprint continues to determine if it can connect with other transfer methods like third-party SFTP programs and if key authentication can be implemented.

#### 2.9.5.3 Logging and Monitoring

Logging in the context of systems refers to the act of recording events that happen in the system in a log. Events can include, but are not limited to:

- Authentication attempts
- System failures
- System reboots

Monitoring is the act of viewing and/or reviewing resources and performance. Some activities that may be subject to monitoring can include, but are not limited to:

- Reviewing logged events
- System resources
- Reviewing access logs
- Performance
- Resource utilization

Logging and monitoring are recommended services to maintaining a secure infrastructure. It is important for security purposes to know when users attempt to log into the system, when a system goes down, or if performance has been degraded. Possible intrusion attempts could be the cause of many of those problems and often, if performance is degraded, logs and monitors may reveal possible causes.

Logging and monitoring for on premises systems and SaaS systems differ slightly. Typically, SaaS solutions require a small subset of the logging and monitoring activities necessary for on premises systems.

- On premises systems require much more logging and monitoring resources than SaaS systems because there is more hardware and infrastructure in on premises system. The logging and monitoring process should monitor all hardware in the system, as well as the network connecting all the hardware and software components, including infrastructure.
- SaaS solutions require considerably less logging and monitoring. SaaS vendors monitor their own systems and provide very limited data related to log information for clients to view. However, the organizational side should monitor and log any integration events, performance issues with network and connectivity, and other systems necessary to connect to the SaaS provider like Active Directory and the VPN tunnels.

For the One Washington implementation, monitoring and logging is recommended to be set up for all on premises systems like Informatica, if it has not already been set up. Through input received in technology workgroups sessions, the State of Washington currently has challenges with performance, latency and throughput. Network and infrastructure monitoring should be implemented to validate the stability of the ERP SaaS system. WaTech currently has services in place that provides this services to other agencies. The One Washington program will leverage this service.

#### 2.9.5.4 Firewall

Unauthorized access to networks and systems contained within those networks is a major concern for many organizations. It is particularly of concern for many ERP systems that contain sensitive data. Therefore, it is necessary to secure data wherever and whenever possible.

Firewalls are among the most crucial elements of securing traffic in and out of a network. They protect networks from unauthorized access and malicious attacks. They also act as the gatekeeper for the flow of network traffic and what data travels through it.

During the One Washington implementation, additional firewalls may need to be implemented and configured for on premises systems. For example, if a new and separate SOA solution is implemented to support the new ERP applications, a firewall would be required to protect the system. Whether the firewall will be an existing firewall that can be applied to the SOA solution or a brand new one, a firewall will be necessary to protect the data and network for the SOA solution. Firewalls are also necessary to support connectivity to the state's data centers that connect to the vendor to prevent unauthorized access to the SaaS systems. WaTech currently provides managed firewall services that should be leveraged because configuration and setup of firewalls will be necessary to provide connectivity between the state's integration points, the SaaS vendor, and other systems like FTP.

#### 2.9.5.5 Digital Certificates

Web security is another important aspect of security. With internet connectivity, it is often necessary to secure the connection between the end user and data they are viewing online. This is achieved via the use of digital certificates. Digital certificates provide an encryption mechanism for the connection and acts as an electronic "key" to the data. This is standard security technology that enables encrypted communication between a web browser and a web server, and are utilized to decrease the risk of sensitive information (e.g. credit card numbers, usernames, passwords, emails, etc.) from being stolen or tampered with by unauthorized users.

To create a secure connection, a digital certificate is installed on a web server and serves two functions:

- It authenticates the identity of the website (this guarantees visitors are not on a malicious site)
- It encrypts the data that is being transmitted

For the One Washington implementation, it is highly recommended that all internet traffic be secured using digital certificates. For SaaS solutions, the vendor provides, obtains, and configures their systems with the necessary digital certificates. For on premises systems, any web server, such as those servers used to access some SOA solutions, is required to secure access. WaTech currently provides a certificate service that may be leveraged, depending on the ERP and supporting application needs.

#### 2.9.5.6 Remote Access

Remote access is the ability to access to a network or system without physically being near the network or system. Remote access capabilities must be secure for the security of the ERP applications.

##### VPN

For basic connection into the State of Washington's network, strong two-factor authentication is recommended. Two-factor authentication typically involves two forms of authentication to be able to access the system. The first factor is typically a user's credential. The second factor is typically something that is very specific to the user such as a secure key fob in combination with PIN. This helps reduce the risk that unauthorized users will access the network. Currently, the state employs a two-factor approach to access the network remotely. This solution should be leveraged to access the network connecting to the ERP applications.

##### Secure Access Washington (SAW)

SAW is a web portal that provides self-administered single sign-on access to multiple applications. Some benefits of SAW are that it shields online services and allows access to known users. The SAW system currently employs nonstandard multi-factor authentication and knowledge based authentication schemes and is single sign-on capable, making it a solution for accessing the ERP.

The initial authentication method is by user credential, which is the first level of protection. At this point, a user has access to the SAW portal from which to navigate. When a user attempts to access sites within SAW that

are classified as category 3 or 4 (confidential or confidential with special handling respectively), the other authentication factors come into play.

The multi-factor authentication schemes should be leveraged for the One Washington program's ERP implementation. It should be used to access the ERP applications and used for its single sign-on capabilities. For other portals, like a vendor portal, multi-factor authentication may not be needed but is still recommended for use in SAW to control basic authentication.

## 2.9.6 Data Security

### 2.9.6.1 File Data Encryption

ERP systems can store or process data in many media types and formats. Stored data can take many forms, and in most cases, are file-based. This data is stored and used by the ERP applications or transmitted to other systems. Often, these files contain data that is considered sensitive in nature and thus needs to be secured.

Operating systems typically provide the first layer of security for data files, whether they are reports or interface files. If files are at rest in an FTP server, the FTP server provides another layer of security. Despite the security that restricts access, people who normally should not have access to the data in the file may still be able to view that data. For example, a technical user who is responsible for uploading interface files to external servers, but should not have access to information like benefits data for HR, would have access to that file and data prior to upload. This may not have been the intent of the technical user's role and security processes, but that security weakness exists.

File encryption addresses the security weakness above. Encrypting the interface file before having the technical user upload it to the external server prevents the unauthorized user from viewing the data in the file. Essentially the technical user would be sending an unreadable file if the user were to open it. File encryption provides an additional security measure protecting files resting in servers. The interface architecture solution would require robust encryption of interface files on FTP servers to guard against data exposure.

It is recommended that One Washington use file encryption for sensitive data for ERP data. As development of the Program Blueprint continues, the One Washington program will need to identify encryption software currently owned by the State of Washington, and possibly to select appropriate software if needed to address system requirements.

### 2.9.6.2 On Premises Data

Data in storage is protected by multiple layers of security throughout the technology architecture, including:

- Application security (first level of data protection): users authenticate to the application. Their authorizations only allow them to see appropriate functionality and data based on their role. This type of security is typically delivered in ERP software. Other than security configuration tasks, no other action is necessary for the One Washington program before, during, or after the ERP implementation to ensure application security.
- Database security (second level of data protection): databases provide their own level of authentication. Typical users will not have direct database access. Only the ERP application itself and authorized administrators would have direct access to data at the database level. Auditing of direct database access (through logging and monitoring) can be performed. In a SaaS solution, the database administrative tasks and access are maintained only by the vendor, but databases still maintained by the State of Washington (such as the data warehouses) would need to be governed by the state and follow all applicable rules and policies.
- System security (third level of data protection): to access raw database files, for example, it would be necessary to gain access to the operating system. Typical ERP application users would only access the

system through their web browser, so they would not have access to log in to any actual hardware. Without this access, it would not be possible to access raw files. Permission to log into a server is maintained either centrally or on each server with tight process controls to prevent unauthorized access. Furthermore, the database files themselves are protected by file-level permissions, limiting data file access to the database system itself and the database administrators. The system administrators in the State of Washington would be responsible for setting this security for each system in the ERP implementation to allow access to those who require it.

- Network security (fourth level of data protection): is present throughout the technology architecture. Each tier would be physically placed within the datacenter according to its function. Typically, only a web server will be exposed to traffic from the outside. Any communication with the application server or database would need to come through the web server. This requirement reduces the possibility of unauthorized data access. For the SaaS solution, the State of Washington would only need to maintain network security in regards to the connection between the SaaS vendor and the network infrastructure. For on premises systems that support the ERP applications, the network security should be configured by the State of Washington to be able to integrate with the SaaS ERP and other supporting applications.

## 2.9.7 Application Security

### 2.9.7.1 Authorization

Access to the ERP is critical to the functionality of the ERP application. The approach to grant access uses delivered ERP security features in conjunction with the State of Washington's enterprise offerings, including:

- Identity Management: One Washington will leverage the state's enterprise standard for identity management, which is currently Active Directory. One Washington will need to define any new access roles, rules, approvals, and workflows that may be required for the ERP system. Additionally, One Washington would integrate the ERP with the Active Directory to enhance end user experience with a single sign-on solution.
- Delivered ERP Authorization: Security Administrator functionality within the application allows administrators to grant access to specific areas, data records, and data element values. By tying these granular permissions to the information provided by the identity management solution, One Washington would be able to centralize security authorizations via one solution, Active Directory.

One Washington can leverage existing investments and continue in the direction of centralization, while taking advantage of the ERP's extensive authorization solutions. The approach would leverage the state's central identity management system, Active Directory, for tasks such as user provisioning, approval workflow, auditing, etc. The ERP's security configuration will then provide the actual authorization into the system.

### 2.9.7.2 User Administration

Securing the system from the end user perspective is another important consideration. If a user has access to more data and functions than is required, it is a potential security issue. Likewise, if a user does not have enough access, the utility of the system for that user will be inhibited.

User administration is the combination of authorization and authentication. Authentication is the process by which a user gains access to the ERP. Authorization is the process of validating what a user has access to. By allowing a user into a system and then giving them the rights to execute transactions, control can be exercised over the entire system. ERPs authorize user access to stored data in the system through two basic controls:

- User Profile: A user profile is a definition that signifies one user. Each user is unique and the user profile specifies user attributes, data, and access rights.

- **Access Rights:** Configuration that assigns access privileges and rights to access a certain functions or locations within the ERP. These rights are then assigned to users.

Utilizing the security capabilities of the ERP application, the One Washington program will be able to design during the implementation phase robust security schemes to control access into the ERP. By combining these security components in a thoughtful and well-designed manner, One Washington is provided with a flexible yet protective security solution.

### 2.9.8 *Maintaining Security*

Security maintenance is another important aspect of ERP application security. If an employee is terminated, the former employee will need their access revoked from the system, otherwise they will continue to be able to access the data contained in the ERP. The security maintenance approach includes implementing and following effective Data Protection Standards, holistic security Risk Management approaches and established state policies. Maintenance of security focuses on managing the users and system interaction rather than updating configuration settings.

To effectively maintain the security of any system, appropriate policies (new or established) and processes should be implemented and regularly monitored for adherence. The One Washington program will be required to set those policies and processes. The team will be required to develop a security policy that includes, but is not limited to:

- New hires
- Terminations
- Job change
- Functional role to ERP mapping

When those policies have been set, a process by which those security policies can be enforced and adhered to, needs to be developed, such as how to request or revoke access.

### 2.9.9 *Security Design Review*

The overall health of the security design is best determined by an objective review. Security reviews should routinely be performed to ensure that the ERP, supporting systems and infrastructure are compliant with the State of Washington's policies and standards. The state's Office of CyberSecurity currently requires mandatory security reviews, as specified in sections 1.2.1 "Design Review" and 1.3 "IT Security Assessment" in Policy 141.10 (Securing Information Technology Assets Standards). The One Washington program will coordinate these reviews during planning, implementation and post implementation, and WaTech will be the agency to conduct the reviews. Having a security review before the implementation allows the One Washington to identify and address any security weaknesses. It may be necessary to add products or services, so periodic reviews of the security, during the implementation, would be helpful in securing the applications early on. Finally, a full security review after the implementation is needed to confirm adherence.



### 3.0 Initiatives and Phasing

The Initiatives and Phasing section provides summaries for the 17 initiatives identified and prioritized as offering business value to the State of Washington in the form of incremental and complementary projects. Section 3.1 covers six technology dependent initiatives that include the procurement and implementation of application software in the areas of Finance, Procurement, HR/Payroll, and Budget. Section 3.2 discusses three non-technology dependent initiatives for FY19 that consist of foundational activities and executive program management that will complement the implementation of new systems, while Section 3.3 discusses eight non-technology dependent initiatives to be considered at a future date following the deployment of an integrated Finance/Procurement ERP system. A Gantt chart depicting phasing can be found in Section 3.4.

#### 3.1 Technology Dependent Initiatives

This section discusses the six technology dependent initiatives for the One Washington program, including an overview of major sub-activities. The section also describes the outcomes and benefits of an integrated ERP system, important factors for successful implementation, and rationale for why these activities are the best choice for the State of Washington. These initiatives consist of the software procurement efforts for each of the major functional areas (Finance, Procurement, HR/Payroll, and Budget) and the implementation of the software. Section 2.4 contains a more detailed overview of the steps and considerations involved in implementing an integrated ERP system. The technology dependent initiatives for One Washington are:

- Finance/Procurement and Business Intelligence Software Procurement Activity
- Finance/Procurement and Business Intelligence System Implementation
- HR/Payroll Software Procurement Activity
- HR/Payroll and Business Intelligence System Implementation
- Budget Software Procurement Activity
- Budget System and Business Intelligence Implementation

By implementing these initiatives, One Washington will enable unified business processes across programs and agencies, applications that work together and exchange data across systems, and operational efficiencies from standardized data, improved workflows, increased productivity, decreased cycle time, and reduced errors. Tables 3.1.1 – 3.1.6 explain the detailed components, implementation considerations, and rationale for each initiative.

Table 3.1.1: Finance/Procurement and Business Intelligence Software Procurement Activity Detail

| Initiative              | Finance/Procurement and Business Intelligence Software Procurement Activity  |
|-------------------------|--|
| Overview and Components | Procure Finance/Procurement and Business Intelligence software. There are several major vendors who should be encouraged to compete in this area including Oracle, SAP, CGI, Workday and Infor. Consistent with the guiding principle by One Washington for a unified software deployment approach One Washington will conduct procurement and contracting of the Business Intelligence software during FY 2019 along with the procurement of initial and expanded functionality of Finance and Procurement ERP application software. (Note: the distinction between initial and expanded is described in Section 2.1 of the Program Blueprint). Conducting this procurement and the ensuing software vendor selection and contracting process will be major activities during FY19. |
|                         | Procure Finance/Procurement expanded application software. Consistent with guiding principle by One Washington for a unified software deployment approach, it is possible the state may want to acquire certain expanded ERP application software from vendors other than the main ERP software vendor. In this case, an additional procurement for such   |

|                                      |  |   |
|--------------------------------------|--|---|
|                                      | expanded functionality will be needed. As circumstances dictate, One Washington will use the state's normal sourcing process to obtain expanded ERP application software.  |   |
|                                      | Procure technical infrastructure and hardware. The planning assumption for a SaaS deployment model is that the state will need to enhance its current technical architecture. This might include network connectivity, middleware like an enterprise service bus, or new end-user access devices. As needed, One Washington will use the WaTech sourcing process to obtain additional technical infrastructure and hardware.   |   |
|                                      | Procure quality assurance (QA) professional services. To acquire QA, One Washington will use OFM's convenience contract or other state procurement processes.  |   |
| <b>Implementation Considerations</b> | People   | The people who will be considered when selecting and procuring an enterprise software package include business owners (i.e. OFM and DES), agency leadership, state technical experts (i.e. OCIO and WaTech), business customers, and functional SMEs. One Washington will also consider the impact on other stakeholders including employees, beneficiaries, suppliers, and citizens.   |
|                                      | Process  | Procuring software conforms to current state procurement business processes. Since the state has already engaged the services of a strategic partner for the implementation, the procurement will be focused on selecting initial and possibly expanded software, technical infrastructure, and any additional professional services.   |
|                                      | Technology   | The successful procurement of application and Business Intelligence software, expanded application software, technical infrastructure, and quality assurance professional services is not constrained by the state's existing technology.   |
|                                      | Policy   | The alignment of policy guidance and technical solutions is essential, and will be the subject of a work stream within both the Finance and Procurement organizational strategy assessment initiatives, ensuring that policy is consistent with the full use of an integrated ERP system. This includes coordination of the One Washington Business Intelligence strategy with the future requirements for Budget and HR/Payroll. |
| <b>Summary Rationale</b>             | The State of Washington is currently supporting a 35 year-old statewide Finance system and does not have a statewide Procurement system, and seeks improvement for statewide Business Intelligence capabilities. The procurement and implementation of an integrated procure-to-pay system, with the improved overall functionality provided by a modern ERP for Finance, Procurement and Business Intelligence, will bring immense benefits to state operations, data quality, and decision-making. |   |

Table 3.1.2: Finance/Procurement and Business Intelligence Implementation Detail

| Initiative                     | Finance/Procurement and Business Intelligence Implementation   |
|--------------------------------|--|
| <b>Overview and Components</b> | Design, build, test, and deploy initial release functionality to wave 1 agencies. In Finance, this functionality includes general ledger accounting, specialized accounting, budgetary control, asset management, accounts payable, accounts receivable, travel and expense, cash management, master data, and reporting. In Procurement, this includes requisitions and |

|                                      |  |   |
|--------------------------------------|--|---|
|                                      | purchase orders, contract management, receiving, sourcing, supplier relationship management, category management, catalog purchasing, master data, and reporting. This also includes design, build, test and deployment of the initial release of the enterprise wide Business Intelligence solution.  |   |
|                                      | Design, build, test, and deploy initial release functionality to wave 2 agencies. This includes the same Finance/Procurement/Business Intelligence functionality listed above.   |   |
|                                      | Design, build, test, and deploy initial release functionality to wave 3 agencies. This includes the same Finance/Procurement/Business Intelligence functionality listed above.   |   |
|                                      | Design, build, test, and deploy expanded release functionality to all relevant agencies. In Finance, this consists of grantor management, and in Procurement, it includes inventory management.  |   |
| <b>Implementation Considerations</b> | People   | Changes in enterprise technology, as well as integration and retirement of agency-specific systems, can entail a significant disruption to agency operations if not paired with sufficient organizational change management and training initiatives.   |
|                                      | Process  | To effectively transition to the use of a new enterprise-wide Finance and Procurement system, many current business processes and manual workarounds will require study and redesign to ensure alignment between business needs and technology.   |
|                                      | Technology   | Beyond the many technology considerations when implementing the ERP, the impact of the new system on all supporting external systems, software, and hardware must also be considered.   |
|                                      | Policy   | The alignment of policy guidance and technical solutions is essential, and will be the subject of a work stream within both the Finance and Procurement organizational strategy assessment initiatives, ensuring that policy is consistent with the full use of an integrated ERP system. This includes coordination of the One Washington Business Intelligence strategy with the future requirements for Budget and HR/Payroll. |
| <b>Summary Rationale</b>             | The State of Washington is currently supporting a 35 year-old statewide Finance system and does not have a statewide Procurement system, and seeks improvement for statewide Business Intelligence capabilities. The procurement and implementation of an integrated procure-to-pay system, with the improved overall functionality provided by a modern ERP for Finance, Procurement and Business Intelligence, will bring immense benefits to state operations, data quality, and decision-making. |   |

Table 3.1.3: HR/Payroll Software Procurement Activity Detail

| <b>Initiative</b>              | <b>HR/Payroll Software Procurement Activity</b>   |
|--------------------------------|---|
| <b>Overview and Components</b> | Procure HR/Payroll application software. There are several major vendors who should be encouraged to compete in this area, for example Oracle, SAP, CGI, Workday and Infor. Conducting this procurement and the ensuing software vendor selection and contracting process will be major activities during future years when HR/Payroll functionality is required. |

|                                      |  |   |
|--------------------------------------|--|---|
|                                      | Procure technical infrastructure and hardware. The planning assumption for a SaaS deployment model is that the state will need to enhance its current technical architecture. This might include network connectivity, middleware like an enterprise service bus, or new end-user access devices. As needed, One Washington will use the WaTech sourcing process to obtain additional technical infrastructure and hardware.   |   |
|                                      | Procure quality assurance (QA) professional services. To acquire QA, One Washington will use OFM's convenience contract or other state procurement processes.  |   |
| <b>Implementation Considerations</b> | People   | The people who will be considered when selecting and procuring an enterprise software package include business owners (i.e. OFM and DES), agency leadership, business customers, state technical experts (i.e. OCIO and WaTech), and functional SMEs. One Washington will also consider the impact on other stakeholders including employees, beneficiaries, suppliers, and citizens. |
|                                      | Process  | Procuring software conforms to current state procurement business processes. Since the state has already engaged the services of a strategic partner for the implementation, the procurement will be focused on selecting initial and possibly expanded software, technical infrastructure, and any additional professional services.   |
|                                      | Technology   | The successful procurement of application software, expanded application software, technical infrastructure, and quality assurance professional services is not constrained by the state's existing technology.   |
|                                      | Policy   | The alignment of policy guidance and technical solutions is essential, and will be the subject of a work stream within an HR/Payroll organizational strategy initiative, ensuring that policy is consistent with the full use of an integrated ERP system.  |
| <b>Summary Rationale</b>             | By the time the state has completed implementation of an integrated Finance and Procurement system and enterprise wide Business Intelligence capabilities, the current statewide HR system will need review of its continued viability. Whether through a unified ERP or a separate offering, the procurement and implementation of an integrated HR/Payroll system could bring immense benefits, including process efficiencies and more accurate, timely, and complete information for planning and decision-making. |   |

Table 3.1.4: HR/Payroll and Business Intelligence Implementation Detail

| <b>Initiative</b>              | <b>HR/Payroll and Business Intelligence Implementation</b>   |
|--------------------------------|--|
| <b>Overview and Components</b> | Design, build, test, and deploy the HR/Payroll system. This implementation will consist of one wave that includes payroll, general HR functions, benefits administration, position classification, time and attendance, compensation planning, recruitment, development, labor relations, performance evaluation, health and safety, master data (e.g. positions, job descriptions), and reporting. This also includes design, build, test and deployment leveraging the enterprise wide Business Intelligence solution. |

|                                      |  |  |
|--------------------------------------|--|--|
| <b>Implementation Considerations</b> | People   | Changes in enterprise technology, as well as integration and retirement of agency-specific systems, can entail a significant disruption to agency operations if not paired with sufficient organizational change management and training initiatives.      |
|                                      | Process  | To effectively transition to the use of a new enterprise-wide HR/Payroll system, many current business processes and manual workarounds will require study and redesign to ensure alignment between business needs and technology.                         |
|                                      | Technology   | Beyond the many technology considerations when implementing the ERP, the impact of the new system on all supporting external systems, software, and hardware must also be considered.  |
|                                      | Policy   | The alignment of policy guidance and technical solutions is essential, and will be the subject of a work stream within an HR/Payroll organizational strategy initiative, ensuring that policy is consistent with the full use of an integrated ERP system. |
| <b>Summary Rationale</b>             | By the time the state has completed implementation of an integrated Finance and Procurement system and enterprise wide Business Intelligence capabilities, the current statewide HR system will need review of its continued viability. Whether through a unified ERP or a separate offering, the procurement and implementation of an integrated HR/Payroll system could bring immense benefits, including process efficiencies and more accurate, timely, and complete information for planning and decision-making. |  |

Table 3.1.5: Budget Software Procurement Activity Detail

| <b>Initiative</b>                    | <b>Budget Software Procurement Activity</b>   |   |
|--------------------------------------|---|---|
| <b>Overview and Components</b>       | Procure Budget application software. There are several major vendors who should be encouraged to compete in this area, for example Oracle (e.g. Hyperion), SAP, CGI, Workday and Infor. Conducting this procurement and the ensuing software vendor selection and contracting process will be major activities during the future years when Budget functionality is required.   |   |
|                                      | Procure technical infrastructure and hardware. The planning assumption for a SaaS deployment model is that the state will need to enhance its current technical architecture. This might include network connectivity, middleware like an enterprise service bus, and new end-user access devices. As needed, One Washington will use the WaTech sourcing process to obtain additional technical infrastructure and hardware. |   |
|                                      | Procure quality assurance (QA) professional services. To acquire QA, One Washington will use OFM's convenience contract or other state procurement processes.   |   |
| <b>Implementation Considerations</b> | People  | The people who will be considered when selecting and procuring an enterprise software package include business owners (i.e. OFM and DES), agency leadership, business customers, state technical experts (i.e. OCIO and WaTech), and functional SMEs. One Washington will also consider the impact on other stakeholders including employees, beneficiaries, suppliers, and citizens. |



|                                      |   |   |
|--------------------------------------|---|---|
|                                      | Process   | Procuring software conforms to current state procurement business processes. Since the state has already engaged the services of a strategic partner for the implementation, the procurement will be focused on selecting initial and possibly expanded software, technical infrastructure, and any additional professional services. |
|                                      | Technology  | The successful procurement of ERP application software, expanded application software, technical infrastructure, and quality assurance professional services is not constrained by the state's existing technology.   |
|                                      | Policy  | The alignment of policy guidance and technical solutions is essential, and will be the subject of an eventual non-technology dependent work stream within Budget, ensuring that policy is studied and updated to enable the full use of an integrated ERP system.   |
| <b>Summary Rationale</b>             | The state infrastructure supporting the Budget function (both capital and operating) is complex and requires duplicate and manual data entry to multiple sub-systems. The procurement and implementation of a modern and integrated Budget system and enterprise wide Business Intelligence capabilities will reduce the risk of error, and enable staff to spend time on data analysis instead of data aggregation.  |   |
|                                      | Table 3.1.6: Budget and Business Intelligence Implementation Detail   |   |
| <b>Initiative</b>                    | <b>Budget and Business Intelligence Implementation</b>  |   |
| <b>Overview and Components</b>       | Design, build, test, and deploy the Budget system. This implementation will consist of one wave that includes all of Washington's budgets, including operating, supplemental, special revenue (e.g. Transportation), and capital budgets. Each form of budget includes revenues and expenses, scenario planning and forecasting, publishing the budget book, master data, and reporting. This also includes design, build, test and deployment leveraging the enterprise wide Business Intelligence solution. |   |
| <b>Implementation Considerations</b> | People  | Changes in enterprise technology, as well as integration and retirement of agency-specific systems, can entail a significant disruption to agency operations if not paired with sufficient organizational change management and training initiatives.   |
|                                      | Process   | To effectively transition to the use of a new enterprise-wide Budget system, many current business processes and manual workarounds will require study and redesign to ensure alignment between business needs and technology.  |
|                                      | Technology  | Beyond the many technology considerations when implementing the ERP, the impact of the new system on all supporting external systems, software, and hardware must also be considered.   |
|                                      | Policy  | The alignment of policy guidance and technical solutions is essential, and will be the subject of an eventual non-technology dependent work stream within Budget, ensuring that policy is studied and updated to enable the full use of an integrated ERP system.   |

## Summary Rationale

The state infrastructure supporting the Budget function (both capital and operating) is complex and requires duplicate and manual data entry to multiple sub-systems. The procurement and implementation of a modern and integrated Budget system and enterprise wide Business Intelligence capabilities will reduce the risk of error, and enable staff to spend time on data analysis instead of data aggregation.

## 3.2 Non-Technology Dependent Initiatives

This section discusses business transformation initiatives that will complement the implementation of new systems. These initiatives were refined and prioritized over the course of a series of interviews and working sessions with Finance and procurement experts from 15 agencies. These three initiatives consist of foundational activities that offer organizational alignment and business process efficiencies that provide a valuable basis to support changes to technology in the functional areas of Finance and Procurement, namely:

- Assess Procurement Organizational Strategy
- Assess Finance Organizational Strategy and Readiness Activities
- Program Management and Communications with Authorizing Environment

Tables 3.2.1 – 3.2.3 describe the detailed components, outcomes and benefits, implementation considerations, and rationale of each of the initiatives mentioned above. Initiatives planned for FY19 will help prepare for the ensuing implementation of Finance and Procurement system functionality.

Table 3.2.1: Assess Procurement Organizational Strategy

| Initiative              | Assess Procurement Organizational Strategy   |
|-------------------------|--|
| Overview and Components | Assess alignment of current business processes with Procurement organizational strategy. This initiative would leverage an integrated operating model approach to statewide procurement strategy, and would include identifying DES and agency leaders to develop the vision and objectives, conducting surveys and interviews to assess alignment, collecting data to assess areas of opportunity for improvement, and building the vision and strategy for a future-state operating model. |
|                         | Conduct a comprehensive review of laws, regulations, and policies in readiness for a new enterprise-wide procurement system. This activity would consist of both identifying outdated and irrelevant guidance in the area of procurement, as well as considering any guidance which must be created to support changes to the procurement operating model and the implementation of new systems.   |
|                         | Launch strategic sourcing assessment for a select group of enterprise-wide categories to enhance current strategic sourcing efforts through continuous evaluation of program effectiveness, new and emerging best practices, ongoing policy reviews, coordination with supplier diversity initiatives, and continuous investment in professional development.  |
| Outcomes and Benefits   | <b>Process efficiencies</b> resulting from streamlined policy guidance and expansion of strategic sourcing principles  |
|                         | <b>Increased customer satisfaction</b> due to a more efficient, timely, and responsive operating model that places the customer at the center  |
|                         | <b>Improved clarity of purpose</b> from a re-aligned organizational strategy   |

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Implementation Considerations</b> |   | <p><b>Risk mitigation</b> from ensuring the state is adhering to all rules and regulations that govern procurement across the enterprise, and that all rules and regulations are up to date to reflect current realities across the state</p> <p><b>Hard dollar benefit</b> from improvements in the sourcing of goods and services through vendor rationalization, spend aggregation, and total cost of ownership analysis</p> |
|                                      | People  | An undertaking to assess the organizational strategy and operating model will involve many individuals across the procurement function in both management and personnel roles. Their input and willingness to contribute is crucial to the successful completion of the initiative.   |
|                                      | Process   | Processes used to undertake this initiative will reflect best practices in assessments of organizational design and strategic sourcing.   |
|                                      | Technology  | These activities are not dependent upon new technology or systems.  |
|                                      | Policy  | Current policy will be a primary focus of the engagement, and therefore will not be a constraint on the initiative, beyond ensuring that all state procurement laws and regulations are adhered to.   |
| <b>Summary Rationale</b>             | This initiative could be wide-ranging and high effort, but would offer an opportunity to reshape statewide procurement strategy in a way that would form the basis for effectively implementing a new system. |   |

Table 3.2.2: Assess Finance Organizational Strategy and Readiness

| <b>Initiative</b>              | <b>Assess Finance Organizational Strategy and Readiness</b>   |
|--------------------------------|---|
| <b>Overview and Components</b> | Assess alignment of current business processes with Finance organizational strategy. This initiative would leverage an integrated operating model approach to statewide Finance strategy, and would include identifying OFM and agency leaders to develop the vision and objectives, conducting surveys and interviews to assess alignment, collecting data to assess areas of opportunity, and building the vision and strategy into a future-state operating model. |
|                                | Consolidate and clean up statewide master payee and customer files. This activity would consist of identifying the universe of statewide and agency-specific databases maintaining payee and customer profiles, confirming the process for adding and updating enterprise versus line-of-business data, performing updates to ensure consistency with the centralized files, and finalizing a governance model and management structure.                              |
|                                | Conduct a review of laws, regulations, and policies in readiness for a new enterprise-wide Finance system. This activity would consist of both identifying outdated guidance, as well as considering any guidance which could be created to support changes to the Finance operating model and the implementation of new systems.   |
|                                | Review selected business processes and assess people, process, and policy changes that could be implemented with existing technology in the areas of data entry and manual workflows, possibly in coordination with the state's Lean team. Processes for analysis would likely include the procure-to-pay, record to report, and revenue to cash cycles.  |

|                                      |   |   |
|--------------------------------------|---|---|
|                                      | Create a project to standardize and improve accounting practices and associated data enterprise-wide in preparation for a new system. This initiative would be led by the Statewide Accounting Office, and would include an assessment to identify specific areas of improvement and employee development efforts.  |   |
| <b>Outcomes and Benefits</b>         | <p><b>Process efficiencies</b> from improved accounting practices and policy review that aims to simplify and streamline Finance operations</p> <p><b>Reduced error rates</b> in the procure-to-pay, record to report, and revenue to cash cycles</p> <p><b>Increased customer satisfaction</b> requiring fewer redundant communications to internal and external stakeholders from more accurate master data</p> <ul style="list-style-type: none"> <li><b>Improved clarity of purpose</b> from a re-aligned organizational strategy and greater focus on accounting principles</li> </ul> <p><b>Improved information for decision making</b> with more accurately classified spend transactions and a focus on reporting that advances business value</p> |   |
| <b>Implementation Considerations</b> | People  | An undertaking to assess the organizational strategy and operating model will involve many individuals across the Finance function in both management and personnel roles. Their input and willingness to contribute is crucial to the successful completion of the initiative.   |
|                                      | Process   | Across the many activities composing this greater initiative to promote Finance readiness, there will be a significant focus on current business processes and ways that they can be adjusted to a future state for increased performance. As a result, process will be a major consideration and will likely require change management efforts to fully implement recommendations. |
|                                      | Technology  | These activities are not dependent upon new technology or systems.  |
|                                      | Policy  | This initiative will ensure greater alignment between state Finance functions and relevant laws and policies. Activities such as pursuing greater centralization of master data elements (e.g. payee and customer files) must be consistent with state policies around sensitive data.  |
| <b>Summary Rationale</b>             | Similar to the Procurement organizational strategy assessment, this initiative would require the successful coordination of Finance stakeholders in OFM and agencies to align their strategy and business model with concurrent technology-focused initiatives, forming the basis for effectively implementing a new statewide Finance system.  |   |

Table 3.2.3: Program Management and Communications with Authorizing Environment

| <b>Initiative</b>              | <b>Program Management and Communications with Authorizing Environment</b>   |
|--------------------------------|---|
| <b>Overview and Components</b> | Perform activities to achieve authorization and funding for the continuation of the One Washington program. These ongoing activities include communicating a compelling business case and delivering successful incremental projects to earn the support of the Governor and Legislature. |

## Summary Rationale

The continued engagement of One Washington leadership, resources to support program management, and creation of supporting material will allow for coordination and oversight of concurrent initiatives throughout all phases of non-tech and tech work streams.

### 3.3 Non-Technology Dependent Initiatives for Future Consideration

This section discusses business transformation initiatives that will complement the implementation of new systems. These initiatives were refined and prioritized over the course of a series of interviews and working sessions with Finance and Procurement experts from 15 agencies. These eight initiatives offer business value that will require, or would be greatly supported by, the improved access to data and technical functionality resulting from the implementation of new systems, namely:

- Assess the Ability to Intercept/Offset Delinquent Debt
- Define and Implement Procurement Key Performance Indicators
- Launch Finance Community of Practice
- Launch Grants Management Community of Practice
- Launch Solicitation Processes Community of Practice
- Launch Supplier Relationship Management Community of Practice
- Launch Non-Tax Revenue Community of Practice
- Launch Indirect Cost Allocation Community of Practice

Initiatives planned in future fiscal years are intended to optimize the business benefits associated with Finance and Procurement functionality, and will be reconsidered at the appropriate time. Tables 3.3.1 – 3.3.8 describe the detailed components, outcomes and benefits, implementation considerations, and rationale of each of the initiatives mentioned above.

Table 3.3.1: Assess the Ability to Intercept/Offset Delinquent Debt

| Initiative                    | Assess the Ability to Intercept/Offset Delinquent Debt   |   |
|-------------------------------|--|---|
| Overview and Components       | Study and assess dependencies to expand intercept/offset practices to enhance the collection of delinquent receivables and reduce the amount of uncollected accounts. This initiative would be enabled by the cleanup and greater standardization of the master payee and customer files, which would allow for a full-scope view of receivables and payments by vendor, and the implementation of a new Finance system. A legal review of relevant laws and policies is also necessary, as current state laws prevent the full implementation of this initiative. |   |
| Outcomes and Benefits         | <p><b>Process efficiencies</b> from payments which are automatically intercepted, as opposed to current process which requires manual searching through disparate agency systems</p> <p><b>Enhanced accountability/transparency</b> from a full-scope picture of payments to vendors with delinquent debts and improved compliance by payees</p> <p><b>Hard dollar benefit</b> as a result of improved collection efforts, leading to an increase in revenues collected by state agencies</p>  |   |
| Implementation Considerations | People   | Agency Finance personnel in both payables and receivables would be most impacted by an initiative of this nature. It will also have an impact on payees |



|  |  |  |
|--|--|--|
|  |  | with delinquent debt who will now be subject to a formal program of payment interception.  |
|  | Process  | A detailed State Auditor's Office report indicated that as of 2014, Washington is one of 10 states that do not have an intercept/offset program in place. Participation in the US Treasury Offset program is a well-standardized process that would allow the state to expand collections to include payments from other state governments. Implementing the state's own internal intercept/offset program will require a greater degree of planning, but will largely consist of automating an incomplete manual process. |
|  | Technology   | Implementing an intercept/offset program would be supported by a new statewide Finance system, but may also require additional functionality or configurations to intercept and offset payments.   |
|  | Policy   | Current state law does not enable an intercept/offset program, and will require review before moving forward with implementation of the program.   |
| Summary Rationale  | Employing an intercept/offset program will allow the state to achieve increased collection in delinquent receivables, but it would be best supported by the implementation of a new statewide Finance system.  |  |
| Table 3.3.2: Define and Implement Procurement Key Performance Indicators |  |  |
| Initiative   | Define and Implement Procurement Key Performance Indicators  |  |
| Overview and Components  | Define key performance indicators in order to continuously measure important qualitative and quantitative metrics to support continuous improvement of the procurement organization. After identifying the most important metrics based on procurement best practices and state-specific requirements, this initiative would identify the sources of relevant information and confirm the process for collection and collation of data. Once these steps have been completed, the ongoing process for review and validation of reports needs to be defined and established.  |  |
| Outcomes and Benefits  | <p><b>Process efficiencies</b> from ensuring metrics are aligned with key business processes that provide a basis for continual improvement</p> <p><b>Increased customer satisfaction</b> by directly measuring aspects of the procurement process which are essential to stakeholders</p> <p><b>Improved clarity of purpose</b> as a result of tying performance objectives with the metrics that are tracked</p> <p><b>Improved information for decision making</b> due to improved data quality and ensuring that agency and statewide leadership are provided with an accurate picture of state Procurement operations</p> |  |
| Implementation Considerations  | People   | The procurement organization includes many specialists across DES and individual agencies, and by extension, customers throughout state government and political subdivisions. An initiative to prioritize and apply key performance   |

|                               |  |   |
|-------------------------------|--|---|
|                               |  | indicators would rely on the input of stakeholders ranging from agency leadership and procurement professionals to critical customers.  |
|                               | Process  | Many frameworks provide procurement key performance indicators relevant to the public sector, such as a balanced scorecard approach, but the metrics chosen must reflect the guiding principles of the state, extending beyond what is statutorily required.  |
|                               | Technology   | In the absence of a statewide Procurement system to provide consistent data, this initiative would be very difficult to successfully implement without significant time and effort required of constituent agency personnel.  |
|                               | Policy   | Defining, tracking, and sharing important data elements is contingent upon compliance with all policies related to data sharing between state agencies.   |
| Summary Rationale             | Defining key performance indicators will be enabled by the technical functionality that allows for the collection of standardized procurement data in a statewide enterprise system, and must incorporate both objectives of the organization and the ability of the system to provide complete, accurate metrics.   |   |
|                               | Table 3.3.3: Launch Finance Community of Practice  |   |
| Initiative                    | Launch Finance Community of Practice   |   |
| Overview and Components       | Create a community of practice (CoP) that offers resources, knowledge sharing, and technical assistance in project accounting, cost accounting, asset management, statutory reporting, and analytics, especially as they relate to new systems that are implemented. Key elements of launching and sustaining a community of practice include identifying a leadership sponsor, defining the vision and scope, collating relevant materials into a centrally-managed location, and providing valuable content in the form of e-mail communications, guest speakers, and discussions. |   |
| Outcomes and Benefits         | <p><b>Process efficiencies</b> resulting from shared practices and collaboration on challenging scenarios encountered by community members</p> <p><b>Reduced error rates</b> through centralized access to job materials and other resources</p> <p><b>Increased customer satisfaction</b> by extension of improved accuracy and speed of finance transaction processing</p> <p><b>Improved information for decision making</b> from more accurately classified transactions and improved analytics</p>  |   |
| Implementation Considerations | People   | The success of a community of practice is dependent upon the value that it provides to its members. Communication and content must evolve to reflect the needs of members and the organization, but as evidenced by its prioritization by Finance stakeholders, a community of practice of this nature has their initial support. |
|                               | Process  | The process for establishing a community of practice is generally agreed upon and will not require any changes to current operating procedures.   |

|                          |   |  |
|--------------------------|---|--|
|                          | Technology  | Existing technology can support the implementation of a community of practice, and will support its launch in the form of a website and other finance-specific applications. |
|                          | Policy  | Current policy does not present an obstacle to the creation of a Finance community of practice.  |
| <b>Summary Rationale</b> | A Finance community of practice provides a means to continue the progress of the Finance organizational strategy and readiness activities by keeping a group of interested Finance professionals across agencies engaged with each other, and will provide another element of internal support as the state transitions to a new statewide enterprise system. |  |

Table 3.3.4: Launch Grants Management Community of Practice

| <b>Initiative</b>                    | <b>Launch Grants Management Community of Practice</b>   |   |
|--------------------------------------|---|---|
| <b>Overview and Components</b>       | Create a community of practice (CoP) that offers resources, knowledge sharing, and technical assistance in grant eligibility/application, cost-benefit analysis and decision-making, reporting and tracking the implications of new and changing requirements. Key elements of launching and sustaining a community of practice include identifying a leadership sponsor, defining the vision and scope, collating relevant materials into a centrally-managed location, and providing valuable content in the form of e-mail communications, guest speakers, and discussions.                  |   |
| <b>Outcomes and Benefits</b>         | <p><b>Process efficiencies</b> resulting from shared practices and collaboration on common scenarios related to grant application and management</p> <p><b>Reduced error rates</b> through centralized access to materials related to state and federal assistance processes</p> <p><b>Increased customer satisfaction</b> by focusing more time during the grants process on program objectives as opposed to administrative requirements</p> <p><b>Hard dollar benefit</b> from opportunities to increase federal funding for programs that fit the mission of one or more state agencies</p> |   |
| <b>Implementation Considerations</b> | People  | The success of a community of practice is dependent upon the value that it provides to its members. Communication and content must evolve to reflect the needs of members and the organization, but as evidenced by its prioritization by Finance stakeholders, a community of practice of this nature has their initial support. |
|                                      | Process   | The process for establishing a community of practice is generally agreed upon and will not require any changes to current operating procedures.   |
|                                      | Technology  | Existing technology can support the implementation of a community of practice, and will support its launch in the form of a website and other finance-specific applications.  |
|                                      | Policy  | Current policy does not present an obstacle to the creation of a grants management community of practice.   |

**Summary  
Rationale**

A grants management community of practice will formalize collaboration between agency experts in the areas of grant administration, staying up to date with changes in grants policy, and ensuring that the state's grant-focused technology module will provide full value.

Table 3.3.5: Launch Solicitation Processes Community of Practice

| Initiative                    | Launch Solicitation Processes Community of Practice  |   |
|-------------------------------|--|---|
| Overview and Components       | Create a community of practice (CoP) that offers resources, knowledge sharing, and technical assistance in solicitation & PO processes and relevant enabling systems to help procurement professional and agencies choose the most advantageous solicitation method. Key elements of launching and sustaining a community of practice include identifying a leadership sponsor, defining the vision and scope, collating relevant materials into a centrally-managed location, and providing valuable content in the form of e-mail communications, guest speakers, and discussions. |   |
| Outcomes and Benefits         | <p><b>Process efficiencies</b> resulting from shared practices and collaboration on challenging scenarios encountered by community members</p> <p><b>Increased customer satisfaction</b> by ensuring that an appropriate solicitation method is used, leading to more efficient procurements with less rework</p> <p><b>Enhanced accountability/transparency</b> by providing central resources and the opportunity for standardization across the state, while respecting the procurement delegation and needs of individual agencies</p>   |   |
| Implementation Considerations | People   | The success of a community of practice is dependent upon the value that it provides to its members. Communication and content must evolve to reflect the needs of members and the organization, but as evidenced by its prioritization by procurement stakeholders, a community of practice of this nature has their initial support. |
|                               | Process  | The process for establishing a community of practice is generally agreed upon and will not require any changes to current operating procedures.   |
|                               | Technology   | Existing technology can support the implementation of a community of practice, and will support its launch in the form of a website and other procurement-specific applications.  |
|                               | Policy   | Current policy does not present an obstacle to the creation of a solicitation processes community of practice.  |
| Summary Rationale             | A community of practice for solicitation processes will allow agency procurement professionals to assist each other with complicated solicitation scenarios, while providing DES business owners with the ability to provide up-to-date content on changes in the solicitation landscape.  |   |

Table 3.3.6: Launch Supplier Relationship Management Community of Practice

| Initiative                    | Launch Supplier Relationship Management Community of Practice  |   |
|-------------------------------|--|---|
| Overview and Components       | Create a community of practice (CoP) that offers resources, knowledge sharing, and technical assistance in supplier relationship management, including procurement preferences, educational/mentoring programs, and capacity building efforts. Key elements of launching and sustaining a community of practice include identifying a leadership sponsor, defining the vision and scope, collating relevant materials into a centrally-managed location, and providing valuable content in the form of e-mail communications, guest speakers, and discussions. |   |
| Outcomes and Benefits         | <p><b>Process efficiencies</b> resulting from shared practices and collaboration on elements of supplier relationship management</p> <p><b>Increased customer satisfaction</b> by ensuring specifications that meet their needs through constant engagement with the marketplace</p>   |   |
| Implementation Considerations | People   | The success of a community of practice is dependent upon the value that it provides to its members. Communication and content must evolve to reflect the needs of members and the organization, but as evidenced by its prioritization by procurement stakeholders, a community of practice of this nature has their initial support. |
|                               | Process  | The process for establishing a community of practice is generally agreed upon and will not require any changes to current operating procedures.   |
|                               | Technology   | Existing technology can support the implementation of a community of practice, and will support its launch in the form of a website and other procurement-specific applications.  |
|                               | Policy   | Current policy does not present an obstacle to the creation of a supplier relationship management community of practice.  |
| Summary Rationale             | A community of practice for supplier relationship management will allow agency procurement professionals to remain on top of successful practices from their peers, as well as accomplishing targets for key statewide initiatives in the areas of business diversity, green procurement, and technology that supports engagement with the supplier community.   |   |

Table 3.3.7: Launch Non-Tax Revenue Community of Practice

| Initiative              | Launch Non-Tax Revenue Community of Practice  |
|-------------------------|---|
| Overview and Components | Create a community of practice (CoP) that offers resources, knowledge sharing, and technical assistance for agencies and employees that work with non-tax revenue (e.g. fees, fines, licenses, rents, permits), including business processes, and pricing to support the objective of fair pricing for cost recovery. Key elements of launching and sustaining a community of practice include identifying a leadership sponsor, defining the vision and scope, collating relevant materials into a centrally-managed location, and providing valuable content in the form of e-mail communications, guest speakers, and discussions. |



|                                      |  |   |
|--------------------------------------|--|---|
| <b>Outcomes and Benefits</b>         | <b>Process efficiencies</b> resulting from shared practices and collaboration on challenging scenarios encountered by community members  |   |
|                                      | <b>Improved information for decision making</b> from centralized information on pricing and business processes across agencies   |   |
|                                      | <b>Hard dollar benefits</b> through the periodic review and optimization of non-tax revenue pricing  |   |
|                                      |  |   |
| <b>Implementation Considerations</b> | People   | The success of a community of practice is dependent upon the value that it provides to its members. Communication and content must evolve to reflect the needs of members and the organization, but as evidenced by its prioritization by Finance stakeholders, a community of practice of this nature has their initial support. |
|                                      | Process  | The process for establishing a community of practice is generally agreed upon and will not require any changes to current operating procedures.   |
|                                      | Technology   | Existing technology can support the implementation of a community of practice, and will support its launch in the form of a website and other finance-specific applications.  |
|                                      | Policy   | Current policy does not present an obstacle to the creation of a non-tax revenue community of practice.   |
| <b>Summary Rationale</b>             | A community of practice provides a vehicle to advance collaboration related to non-tax revenue management, an area which by its nature is decentralized and line-of-business-centric, yet nonetheless contains various common elements across revenue-generating agencies. |   |

Table 3.3.8: Launch Indirect Cost Allocation Community of Practice

| Initiative                     | Launch Indirect Cost Allocation Community of Practice  |
|--------------------------------|--|
| <b>Overview and Components</b> | Create a community of practice (CoP) that offers resources, knowledge sharing, and technical assistance in indirect cost allocation, including assessments of opportunities to standardize and ensure that indirect costs have been fully allocated at programs funded by special revenue and federal grant funds. Key elements of launching and sustaining a community of practice include identifying a leadership sponsor, defining the vision and scope, collating relevant materials into a centrally-managed location, and providing valuable content in the form of e-mail communications, guest speakers, and discussions. |
| <b>Outcomes and Benefits</b>   | <p><b>Process efficiencies</b> resulting from shared practices and collaboration on challenging scenarios encountered by community members</p> <p><b>Enhanced accountability/transparency</b> from program costs which accurately reflect the indirect costs of personnel, fringe benefits, and general-fund activities that support non-general fund programs</p> <p><b>Hard dollar benefits</b> through decreased general fund subsidy of activities supported by federal and special revenue funds, as well as through greater awareness when negotiating federal indirect cost plans</p>                                       |

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Implementation Considerations</b> | People  | The success of a community of practice is dependent upon the value that it provides to its members. Communication and content must evolve to reflect the needs of members and the organization, but as evidenced by its prioritization by Finance stakeholders, a community of practice of this nature has their initial support. |
|                                      | Process   | The process for establishing a community of practice is generally agreed upon and will not require any changes to current operating procedures.   |
|                                      | Technology  | Existing technology can support the implementation of a community of practice, and will support its launch in the form of a website and other finance-specific applications.  |
|                                      | Policy  | Current policy does not present an obstacle to the creation of an indirect cost allocation community of practice.   |
| <b>Summary Rationale</b>             | By forming a community of practice on indirect cost allocation, agency experts will be able to share knowledge and achieve greater standardization on indirect cost allocation, leading to improvement in the form of rates which reflect the true costs of administering all programs. |   |

### 3.4 Gantt Chart

The Gantt charts below provides an overview of the timeline for the technology dependent and non-technology dependent initiatives for One Washington program.

The technology dependent timelines are split into different phases (as shown in the table below) to show monthly progress on the ERP Procurement activities followed by the implementation activities for Finance, Procurement, Budget and HR/Payroll.

| LEGENDS                                      |  |
|--|--|
| ERP Procurement Activity                     |  |
| Go-Live Month                                |  |
| ERP Implementation overall timelines         |  |
| Implementation - waves/ Non-tech initiatives |  |

The detailed non-technology dependent timelines are in a different section beneath the tech-initiatives timelines. Please refer to the embedded master Gantt chart document for details.



Gantt Chart

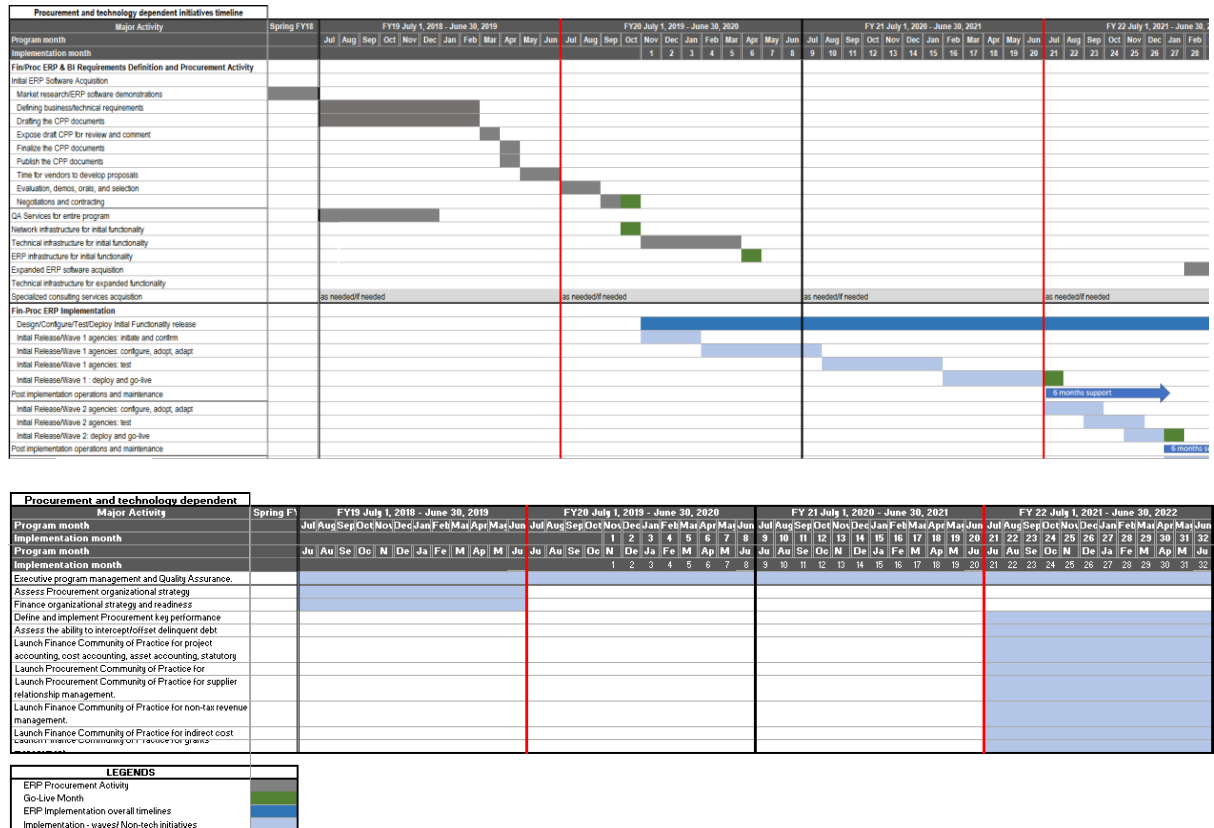


Figure 3.4.1 above is a snapshot of the overall timeline for technical and non-technical initiatives

Note: Please refer to the embedded document above for details.

## 4.0 Recommended Staffing & Supporting Resources

### 4.1 Introduction

This staffing and supporting resources plan includes state employees and contractors, and accounts for all initiatives, i.e. non-technology and technology dependent, as set forth in the Blueprint Version 1. The program staffing plan will be reconciled to the program budget. It will start in July 2019 and conclude in June 2026. Adjustments to this plan are possible, as the Program Blueprint is refined in versions 2 and 3, with additional input from ongoing stakeholder meetings.

### 4.2 Overview

The staffing plan by year is shown below in Table 4.1, designated as state and contractor employees. A best practice in planning the respective initiatives is to have an integrated team, with Washington employees and contractor employees working in a cohesive manner. The staffing plan aligns to this best practice.

Table 4.1: State vs. vendor resources by fiscal year

|            | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25 | FY26 |
|------------|------|------|------|------|------|------|------|------|
| State      | 62%  | 53%  | 53%  | 59%  | 61%  | 69%  | 58%  | 57%  |
| Contractor | 38%  | 47%  | 47%  | 41%  | 39%  | 31%  | 42%  | 43%  |

The staffing plan by year, detailed by technology and non-technology initiatives, is shown below in Table 4.2. Beginning in FY 19, One Washington will focus on planning, procurement, and preparation. As the technology project deploys in FY 20, resources shift to the technology implementation. FY24 is a year when the Finance, Procurement and Business Intelligence functionality has been deployed, and resources shifts to procurement of Budget and HR/Payroll. In FY25-26 the Budget and HR/Payroll functionality is deployed and the staffing plan reflects the technology implementation for these areas.

Table 4.2: Staffing on technology vs. non-technology initiatives

|                | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25 | FY26 |
|----------------|------|------|------|------|------|------|------|------|
| Technology     | 0%   | 61%  | 78%  | 76%  | 40%  | 18%  | 70%  | 75%  |
| Non-Technology | 100% | 39%  | 22%  | 24%  | 60%  | 82%  | 30%  | 25%  |

### 4.3 Methodology

The staffing plan was developed by initiative. There are three technology dependent initiatives; the implementation of Finance and Procurement functionality, Budget functionality, and HR/Payroll functionality. Business Intelligence capabilities will be deployed throughout the initiative implementations. These three initiatives account for the majority of the staffing.

There are three procurement initiatives consisting of Finance and Procurement software, HR/Payroll software and Budget software. Requirements definition and procurement activities for the Business Intelligence software will occur concurrent with requirements definition and procurement activities for the Finance and Procurement ERP software.

There are ten non-technology dependent initiatives, two planned for FY19 and the rest in later fiscal years. There is one additional initiative for program management for the duration of the program.

## 5.0 Program Blueprint Budget Estimates for Program Costs

### 5.1 Introduction

The purpose of the budget estimates for program costs is to display all costs for the One Washington program and each of its composite technology and non-technology dependent initiatives. The costs presented here are estimated values for the One Washington program only, and does not reflect agency costs for implementation.

The program budget starts on July 1, 2018 and continues through June 30, 2026. This 96-month (8 year) timeframe includes:

- Program planning
- Software procurement
- Business transformation activities,
- Implementation of Finance and Procurement software
- Implementation of Budget software
- Implementation of HR/Payroll software
- Implementation of Business Intelligence
- Post implementation support

Costs are displayed with summaries by object of expense and fiscal year, and with supporting detail for each initiative.

### 5.2 Overview

The Blueprint version 1 has a total estimated budget of \$303.9m. The annual estimated costs are summarized below in Table 5.1:

Table 5.1: Estimated Annual Program Costs

| Cost Summary        | FY19         | FY20          | FY21          | FY22           | FY23           | FY24           | FY25           | FY26           |
|---------------------|--------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|
| Total Annual Costs  | \$ 5,256,406 | \$ 26,440,966 | \$ 51,857,228 | \$ 57,869,862  | \$ 33,786,748  | \$ 24,745,057  | \$ 54,027,555  | \$ 49,977,291  |
| Total Program Costs | \$ 5,256,406 | \$ 31,697,372 | \$ 83,554,600 | \$ 141,424,462 | \$ 175,211,210 | \$ 199,956,267 | \$ 253,983,822 | \$ 303,961,114 |

The program budget includes estimates for the following:

- One Washington state employee salaries and benefits
- Professional services costs
- ERP and Business Intelligence software costs
- Facilities and training costs
- State staff turnover and replacement costs
- Change orders, amendments and adjustments

For comparisons purposes, the 2014 Business Case cost estimates ranged (depending on scenarios) from \$242m to \$284m and included the implementation of Finance and Procurement only. One Washington also looked at other recent implementation costs for other states. Wisconsin recently implemented an ERP solution for Finance, Procurement, HR/Payroll and Business Intelligence for a total cost of \$280m.

### 5.3 Methodology

The One Washington program budget was an iterative process based on Accenture estimating tools and staffing plans reviewed and adjusted according to stakeholder feedback and previous experience. Other inputs from programs of



similar scope and size were considered, including different cost factors like length of the deployment schedule, appropriate staffing number and duration on project, and the estimate of change orders and state turnover costs. Cost factors were weighed against the risks to the program.

The program budget spreadsheet provides tabs with summarized views of estimated costs and staffing, detailed views by year by Washington object code, and detailed views by initiative. Please see the embedded spreadsheet below for the details of the budget.



Budget Estimates  
for Program Costs

## 5.4 Key Assumptions

Table 5.2 below lists the assumptions used to derive the costs.

| Assumption  |
|---|
| 1. Estimates for ERP software are based on the One Washington phasing strategy, ERP software modules in scope, and user counts. The amount of application software cost was derived from information provided by major ERP software providers. This includes a 3% inflation factor.                   |
| 2. Estimates for integration and business intelligence software are based on One Washington's understanding of typical pricing in the marketplace.  |
| 3. Accenture's Cloud ERP estimator model was used to develop SaaS implementation estimates. This includes implementation of initial SaaS software. This also includes implementation of interim updates (which consist of 2 major updates per year, plus quarterly minor updates, and monthly fixes). |
| 4. State labor rates are assumed to increase at a 2% rate per year.   |
| 5. Contractor labor rates are assumed to increase at a 4% rate per year.  |
| 6. Offshore resources are included for development and system test. This accounts for approximately 5% of the total implementation effort.  |
| 7. Estimates for reports are based on the labor to create 50 custom reports for finance, 50 custom reports for procurement, 50 custom reports for HR/Payroll, and 50 custom reports for budget/planning.  |
| 8. Estimates for implementation of business intelligence are based on Accenture's and North Highland's understanding of resources used for programs of similar scope and size.  |
| 9. Project team training is based on \$300k for finance/procurement, \$300k for HR/Payroll, and \$150k for budget/planning.   |
| 10. In addition to executive program management, an additional roles for a Project Management (PM) and Project Management Office (PMO) are included across all deployments. These teams appear in the "Program Management" tab within the cost and staffing spreadsheets.                             |
| 11. Estimate assumes labor to assess current-state interfaces for Finance/Procurement, Budget, and HR/Payroll.  |
| 12. Additional development/integration resources were added to account for potential Platform as a Service (PaaS) development.  |
| 13. The implementation estimates assume that WSDOT will utilize the One Washington solution.  |
| 14. State resource benefits are based on annual estimates provided by WA State HR.  |
| 15. Labor rates for state staff are based on estimates from WA State HR.  |
| 16. Each FTE incurs a \$1000 per month cost to account for facilities.  |

| Assumption  |
|---|
| 17. This estimate includes the WA budget assumption that state FTEs incur a \$1000 per month cost to account for “Goods and Services” (i.e. state-issued cell phone, WATECH subscriptions, etc.).   |
| 18. This estimate includes an amount of \$100,000 to cover the start-up cost of hiring 25 net-new, external state employees.  |
| 19. Contractor resources for the implementation of BI/Analytics software are assumed to have their responsibilities transitioned to state resources by the implementation of Budget/HR/Payroll  |
| 20. Estimate for organizational change management, communications and training consists of 18% of Accenture and state labor cost for system implementation. This will be revisited and replaced in V2.  |
| 21. Every wave/deployment includes 6 months of post-production support with 2 Accenture and 2 State resources. Accenture will support for 18 months after the last initial functionality finance/procurement go-live (wave 3) to help produce the first CAFR in the new system. |
| 22. Estimate does not include labor costs for post-implementation maintenance and operations team. These costs are assumed to be already funded.  |
| 23. The cost of expanded identity and access management (IAM) is not included in the estimate.  |
| 24. The cost of expanded master data management (MDM) is not included in the estimate.  |
| 25. Costs for expanded connectivity infrastructure are not included in the estimate.  |
| 26. Costs for the implementation of an FTP Server are not included in the estimate.   |
| 27. Costs for additional encryption protocols are not included in the estimate.   |
| 28. All end users are assumed to have proper devices to use the new system and costs for additional devices are not included in the estimate.   |
| 29. Costs associated with decommissioning/remediating agency systems are not included in the estimate.  |
| 30. Costs for WA agency resources contributed “in-kind” are not included in the estimate.   |
| 31. Costs for WATECH resources contributed “in-kind” are not included in the estimate.  |
| 32. Estimate does not include agency backfills (i.e. subject matter experts working on One Washington).   |
| 33. All Onshore resources will be co-located in Olympia, WA.  |
| 34. Estimate includes allocation for state staff turnover and replacement, and change orders, amendments and adjustments to contractor resources.   |

## 6.0 Activities Planned for Future Blueprint Versions

The next step is to develop version 2 of the Program Blueprint, to be completed in January 2018. Version 2 will be a refinement and elaboration of version 1 for communication purposes during the 2018 Legislative session.

Areas of focus for future blueprint versions:

- A Budget workshop will be conducted for stakeholders to define the scope of Budget business processes. This will be followed by interviews with the stakeholders to gain insights into current challenge and opportunities. Another workshop will be conducted to confirm business process improvement priorities and prioritized initiatives.
- A HR/Payroll workshop will be conducted for stakeholders to define the scope of HR/Payroll business processes. This will be followed by interviews with the stakeholders to gain insights into current challenges and opportunities. Another workshop will be conducted to confirm business process improvement priorities and prioritized initiatives.
- A workshop will be conducted with stakeholders to gather input and finalize the criteria for how and when to make strategic deployment decisions for Budget and HR/Payroll.
- An agency matrix will be created and followed by a series of interviews with the stakeholders to collect data points for the matrix which will be analyzed to align agencies to specific deployment waves.
- Refinements will be made to the 2014 Change Management Strategy and Communication Plan. Interviews of stakeholder agencies will be held to gather input. The change management and communication plan will be published in version 2 of the Program Blueprint.
- Additional ongoing activities include implementation phasing, assessment of cloud connectivity, integrations, master data management, data conversion, and security.

## 7.0 Appendices

### 7.1 Data Conversion



Data Conversion

### 7.2 WSDOT Integration with One Washington



Appendix WSDOT  
Integration with On

### 7.3 Business Process Models



BPM\_PublicAdmin\_v  
0.19 procurement fii



BPM\_PublicAdmin\_v  
Final\_FINANCE final

### 7.4 Implementation Phasing Criteria Matrix



agency matrix  
v1.xlsx

### 7.5 Workgroups Participant List



Appendix  
workgroups particip