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Section 5

Analysis of Alternatives

This section identifies each alternative course of action that may be taken by the Statewide Administrative Systems Replacement Project and the associated benefits, risks, costs, and timeframes.

5.1. Alternative Overview

Key topics in this section are:

- Identification of Alternatives
- Supporting Initiatives and Strategies
- Managing Risks
- Phasing Methodology
- Cost Estimating Methodology
- Summary of Recommended Approach, Cost Findings, and Implementation Timeframes
- Resources Used in Cost Estimates

5.1.1. Identification of Alternatives

Commercial-off-the-shelf (COTS) products are available today that meet the majority of the state's needs without significant software enhancements. These products are mature and are backed by the support of vendors who continue to invest in their future viability and market position. Moving to an ERP or best-fit solution provides the state implementation options of government best practices today and in the future through research and development efforts supported by the software vendor.

In addition, our research of similar government projects supports our recommendation to abandon in-house development of business software and purchase a COTS solution when a solution exists. MAXIMUS believes the alternatives that follow are the most practical and realistic options available to the state for its Statewide Administrative Systems Replacement Project. In making a

selection, the state will choose both a system alternative and a service delivery alternative.

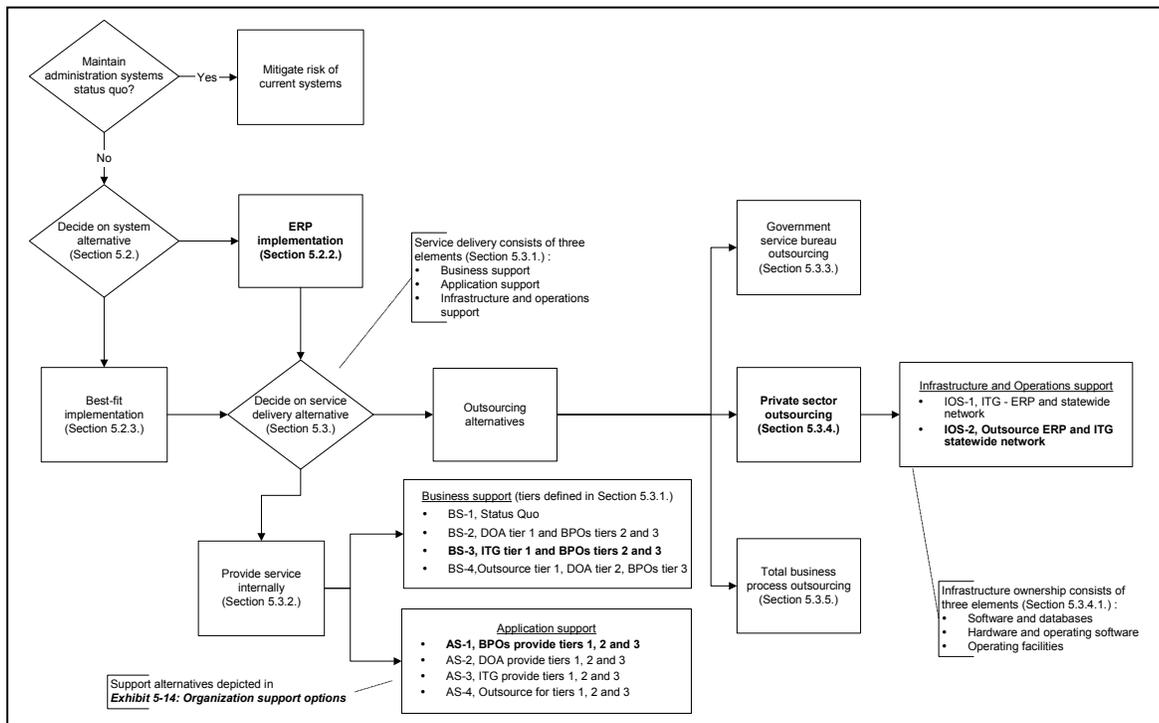
- System Alternatives (assume the use of software vendor certified integration support)
 - **Alternative 1 – ERP Implementation.** Acquire and implement a single, integrated statewide administrative system solution using a commercially available ERP package in a manner that addresses the common general ledger accounting, budgetary compliance, grant/project accounting, human resources, payroll, procurement, benefits administration, and banking needs for centrally administered systems. The system must provide the ability to acquire package software or develop custom written “bolt-on” modules to provide extended capabilities for areas in which the base system does not meet requirements.
 - **Alternative 2 – Best-Fit Implementation.** Acquire and implement statewide administrative system solutions that integrate functional segments of Alaska’s administrative systems needs using commercially available applications. Functional segments of administrative systems are: Financial – general ledger accounting, budgetary compliance, grant/project accounting, procurement, and banking; Human Resources/Payroll - human resources, payroll, and benefits administration. These systems must also provide the ability to acquire package software or develop custom written “bolt-on” modules to provide extended capabilities for areas in which the base system does not meet requirements.
- Service Delivery Alternatives
 - **Service Delivery Alternative 1 – Retain in Government Structure.** Provide ongoing support for statewide administrative systems through internal management and staffing within state organization structures.
 - **Service Delivery Alternative 2 – Government Service Bureau Outsourcing.** Provide ongoing support for statewide administrative systems through external application services supplied by an association of state and local government resources.
 - **Service Delivery Alternative 3 – Private Sector Outsourcing.** Provide ongoing support for statewide administrative systems through external application services supplied by commercially available outsourcing resources.

- Service Delivery Alternative 4 – Total Business Process Outsourcing.** Provide selected business function(s) (i.e., human resources, payroll, finance, procurement) services through private sector outsourcing. Assumes the service provider utilizes existing statewide systems or provides other systems to perform the business function.

The final portion of this section covers the alternative of maintaining the administrative systems in their present configuration, or **Status-Quo**. Although MAXIMUS is not presenting this as a long-term viable alternative for consideration, it does provide the state with a benchmark from which to analyze the cost of other alternatives.

Exhibit 5-1: Alternative Decision Flowchart shows the decision flow used to determine the statewide administrative systems replacement alternatives and how they are related. The bolded information represents the MAXIMUS recommendations for the state in moving forward with a procurement process. During the procurement process, steps will occur to validate or realign the recommendations presented in this Business Case.

Exhibit 5-1: Alternative Decision Flowchart



MAXIMUS recommends the following for replacing Alaska's statewide administrative systems:

- **System Alternatives**
 - Proceed with an integrated Enterprise Resource Planning (ERP) system approach for statewide administrative systems replacement; and
 - Stage the delivery of replacement systems in at least three phases and incorporate decision check-points before committing to the next phase to help manage the change of systems within the state and mitigate the risk associated with a project of this complexity.

- **Service Delivery Alternatives**
 - Issue an RFP with an option to evaluate ongoing support for statewide administrative systems through external application services supplied by commercially available outsourcing resources. This process provides the state an opportunity to complete an internal organization assessment for supporting the new systems, while the solicitation process provides data to evaluate costs, service level capabilities, and risks of both approaches. The outcome of the internal IT evaluation and solicitation of IT outsourcing of support services will determine whether outsourcing the technology service delivery is viable and merits the effort required to develop the relationship based upon principles provided in *Appendix G: Outsourcing IT Services Contracts*. If outsourcing is not viable, or the state determines through its internal IT organization assessment that investing in growing internal IT capabilities best meets the needs of the state, then Service Delivery Alternative 1 – Retain in Government Structure should be pursued.
 - Provide initial customer service call (tier 1) support with ITG assets while business process owners (BPOs) provide business process and technical systems (tier 2 and 3) support;
 - BPOs deliver business and technical support including application configuration, software development, and application and user administration (application support); and
 - At a minimum, retain ownership of the ERP system software and database licenses.

These alternatives and the rationale for their selection are elaborated in this section of the business case.

5.1.2. Supporting Initiatives and Strategies

MAXIMUS recommends the state adopt as part of the overall strategy for the Statewide Administrative Systems Replacement Project two supporting strategies regardless of which alternative is ultimately selected: initiation of an administrative information data cataloging project and the use of portal technologies to access the system(s).

5.1.2.1. Data Cataloging

Alaska should pursue a project to identify and define administrative data maintained in existing systems beginning with the financial and payroll systems. This initiative creates the business data foundation required for use in data conversion activities to new systems and creation of a data warehouse to provide access to historical information as replacement systems are implemented.

This effort, no matter what direction is ultimately decided for Alaska's administrative systems, provides business process owners value. If a system replacement initiative is scheduled, understanding the business data is necessary for conversion activities and retention and access of historical data. The data cataloging effort will reduce reliance on implementation vendor services, limiting additional consulting costs. If Alaska determines a system cannot be replaced, for example due to resource constraints, historical data from this non-replacement system can be added to a statewide data warehouse implemented through other initiatives.

A data warehouse is a cost effective approach for storing historical and current information, and providing research capabilities and management access to information through development of executive support systems. Deployment of a data warehouse evolves over time, beginning with understanding and defining existing data, recognizing business and management data access needs, and implementing a technology solution that provides flexibility in meeting changing organization data access needs.

It is important to establish an enterprise definition of data, and where feasible establish data repositories using existing tools, that will ultimately be accessed through desktop and Web portal implementations. Completing this project between July 1, 2003 and June 30, 2004 accomplishes several objectives:

- Establishes a base definition of data in the form of a meta data dictionary so a common understanding of data is available for state and contractor staff;
- Removes this activity from the critical project path during Phase I of the implementation of administrative systems, providing state resources an opportunity to document and understand business data prior to the start of

the project, then freeing them to participate in other implementation project activities, and

- Reduces reliance on services provided by the selected vendor saving the state contracting dollars.

5.1.2.2. Administrative Systems Portal Technologies

The method for accessing information is another critical success factor of an administrative system implementation. In the past, access to data was through application software accessed via the mainframe or distributed to desktops as client/server technologies became more prevalent. Today, the way of the future is the use of Web interfaces through portal implementations or access pathways to specified data presentations.

Portals are specialized Web sites that are dynamic in nature. Instead of presenting static, unchanging “pages” of information, portals use a database to present specific, tailored information to individual users. Project leadership has indicated a desire to integrate its new administrative systems with the state’s existing Web portal, known as myAlaska. Detailed requirements for the level of integration have not been determined at this time, but several scenarios have been explored. One scenario would have state employees log into the myAlaska site, and present them with links to the application components matched to their job duties. For example, a person responsible for accounts receivable would see a link to the portion of the financial application where invoices are created and managed, whereas a departmental manager might have a link for invoice approval processing and reporting of invoice processing status.

MAXIMUS has reviewed the current myAlaska implementation and plans for its near-term evolution. The current implementation will not support integration with the state’s new administrative systems, but the anticipated future direction for myAlaska will make this possible.

The existing myAlaska system is “outward facing;” it is designed to facilitate service transactions between the state and its citizens and for the dissemination of information specific to a citizen’s interests. State staff, using a mixture of commercial products and open source software, have developed the current system in-house. This has proven to be time consuming to maintain, with new features and capabilities slow to evolve. Additionally, the present myAlaska system stores user account information in a completely isolated system. Extending myAlaska, in its present form, to recognize a state employee profile would be a large undertaking, difficult and costly to maintain.

The state’s technical managers have outlined an informal migration plan that would make integration between myAlaska and the new administrative systems

an attractive and affordable option. Future implementations will be accomplished with commercial software, leaving the state's programmers to spend their time on feature implementation, rather than basic development. The new portal implementation (dubbed "Version 2" and tentatively scheduled for Fall 2003) will also be "inward-facing," capable of serving internal users.

There are two primary areas of concern that should be addressed in the near future by the steering committees of the Statewide Administrative Systems Replacement Project and myAlaska portal upgrade project. The first is identifying functionality to be incorporated into the portal. One of the features mentioned for inclusion in myAlaska Version 2 is a timesheet application. This is a common feature of the types of applications being considered for the Statewide Administrative Systems Replacement Project. There are both benefits and costs associated with duplicating functionality. One possible benefit would be getting a "head start" on change management, in getting workers accustomed to using computers for timekeeping purposes. One obvious cost would be the financial resources expended in providing the same functionality upon selection and implementation of an integrated administrative system.

The second area of discussion should involve security. Since the portal upgrade will likely occur before substantial work is done on the administrative systems, security for the portal should be approached with future integration needs at the forefront. While specific integration details may be impossible to obtain prior to selecting a solution(s) for the state's administrative systems, it will be possible to take measures that will ease integration at the appropriate time by insisting on open architecture standards like XML.

The specific areas mentioned here are only two examples of the many issues that should be discussed among the two project teams. Decisions regarding specific integration points need to be identified and incorporated into the requirements that the future administrative systems should support.

5.1.3. Managing Risks

Identification and mitigation of project risks is a critical success factor of Alaska's Statewide Administrative Systems Replacement Project. Overarching risks are associated with all of the various alternatives included in this analysis. A few examples of project risks include:

- Changing fiscal and economic conditions that directly impact the availability of state resources;
- Underestimating the need for or committing insufficient resources (i.e., dollars, people, technology, physical space, etc.) to the implementation effort;

- Current legacy systems not providing a suitable platform for evolving e-government trends; and
- Incorrectly assuming the state of the technology infrastructure is sufficient to support new administrative systems.

Regardless of the alternative selected, the state should adopt a rigorous and disciplined risk management process that results in the early identification and mitigation of risks before they negatively impact progress. A risk management plan should be developed that includes:

- Assignment of a state project team member to serve as the project risk manager;
- Deployment of mechanisms for identifying risks and quantifying their impact on the project;
- Creation of formalized processes for prioritizing and developing mitigation strategies for project risks;
- Application of methods and techniques for monitoring and detecting risk factors;
- Communication strategies for keeping state leaders apprised of project risks; and
- Periodic review and update of the risk management plan, including reassessment of each identified risk.

Formal development of a risk management plan should begin immediately and be updated after selection of an implementation vendor.

5.1.4. Phasing Methodology

Alternatives for the replacement of administrative systems provide flexible implementation phasing strategies. For example, best-fit implementations are, by their nature, constructed for flexibility to meet the needs of organizations. Their focus on specific business functions, including custom designed interfaces, make them flexible for phased implementations. With the advent of ERP II software product configurations and increasing statewide implementation experiences, ERP products have adapted a similar ability to support flexible phased implementations.

MAXIMUS placed high importance on the ability to provide a phased implementation of administrative systems. Our experience and research on similar engagements supports an approach of phasing business implementations

into production versus the “big bang” approach where everything is done at the same time. Phasing helps control the scope of effort and degree of change the organization must absorb at one given time.

Phasing also provides Alaska an opportunity to begin realization of benefits established by accomplishing the replacement project goals as described in *Section I. Executive Summary* and *Section II. Vision* during financial constraint years. This is accomplished by understanding the overall implementation costs for replacement of existing systems or implementation of non-existent systems and approving funding for the most critical systems during Phase I. As Phase I comes to closure, funding for Phase II business applications can be assessed based on attainment of Phase I project evaluation criteria and available funding.

Most often, a logical grouping of functional processes is used to segment phases of enterprise-wide administrative systems implementations. The most pressing business needs of the organization are the most significant driving forces in deciding how implementations are phased. Once the phases are identified, the functionality and required system databases are assessed to ensure the necessary functionality is grouped to support the implementation of the identified systems. Based upon the analysis of the state’s existing systems requirements, and a standard grouping of functionally related business applications, MAXIMUS recommends phasing the Statewide Administrative Systems Replacement Project as shown in ***Exhibit 5-2: Recommended Implementation Phasing***.

Exhibit 5-2: Recommended Implementation Phasing

Phase I – Human Resources and Payroll Implementation

- Payroll
- Time and Labor Management and Reporting
- Personnel Administration
 - Employee data
 - Personnel actions
 - Promotions
 - Terminations
 - Job requisitions
 - Performance review
 - Grievances
- Health and Safety Administration
 - Employee injuries
 - First aid
 - Medical treatments
 - Medical claims
 - Compensation claims
- Employee Benefits Administration
- Reporting and Information Access
- Chart of Accounts Structure

Phase II – Financials, Procurement, and Extended Human Resources Implementation

- Accounts Payable and Expenditures
- Asset Management including GASB 34 Compliance
- Banking and Investment Management
- Budgetary Compliance
- Contract Management
- General Ledger Accounting
- Grants Management
- Inventory Management
- Project Accounting
- Purchasing
- Vendor Management
- Receipts Management
- Travel and Expense Reimbursement
- Reporting and Information Access
- Personnel Administration
 - Recruitment
 - Position management
 - Career and succession planning
 - Shift and workforce planning
 - Training management

Exhibit 5-2: Recommended Implementation Phasing (continued)

Phase III – Budget Development and Retirement Management Implementation

- Budget Development
- Retirement Administration
- Non-employee Benefits Administration
- Reporting and Information Access

Discussion of the timing and duration of each phase will be presented in the “*Timeframes*” sections of each alternative.

5.1.5. Cost Estimating Methodology

There are many factors that frame the costs of implementing and maintaining a system. Some of these factors are more easily quantifiable, while others are estimates based on experience applied to known Alaska factors. These estimates serve two primary goals:

- Comparison of short- and long-term costs of implementation alternatives; and
- Basis for requesting legislative support and project funding.

The alternative cost estimates for Alaska’s business case are based on a set of assumptions. These assumptions will be refined during the vendor RFP process and through validation activities conducted by the project team during the next several months. The project steering committee and MAXIMUS have made every effort to accurately determine the state’s position related to people, technology, and future outlook to project the costs of the Statewide Administrative Systems Replacement Project.

Cost estimates were developed based on marketplace product assessments, average resource costs based on state classifications and benefits costs, and average hourly consulting rates based on Alaska’s Task Order Agreements. The projected costs associated with Alaska’s project were then compared to costs on similar projects completed in other states and large government entities. Cost estimates include:

- Planning, management, and oversight;

- Quality assurance support;
- Software implementation costs, including installation, configuration, business workflow process refinement, minimal software customization, and deployment;
- Resource costs for:
 - Project management support including stakeholders, project manager, and administrative assistance;
 - Subject matter experts (SMEs);
 - Data conversion and migration;
 - Interface development and testing;
 - Training, communications, and agency support services;
 - Help desk;
 - IT operational support (e.g., database administrator, operations, etc.);
 - Organizational change management;
- Staff salary and consulting rate annual adjustments of 3% each year;
- Software licenses;
- Operations hardware and software; and
- Annual maintenance and support including software upgrades every two years and hardware replacement every three years.

Costs not incorporated in the estimates include:

- Call center / help desk hardware, software, and facilities;
- Technical and business supplemental training courses;
- Hardware and software to support a future data warehouse initiative;
- Infrastructure (LAN/WAN) improvement costs; and
- Facility and management costs.

In addition, the cost estimates are based on the recommended application rollout schedule discussed in *Section 5.1.4. Phasing Methodology*.

Cost estimates set forth in this section include an estimate for hardware costs. Costs are based on research from sources such as Gartner Group and potential product vendor research. Additionally, these costs were estimated based on state and local government benchmarking and client data. While these costs are representative of anticipated hardware costs, these cost estimates can vary depending upon the approach and timing of the implementation and the status of the state's IT infrastructure (e.g., desktop configurations, WAN connectivity, etc.).

Once the state has established a direction, selected the alternative, and developed an implementation schedule, a detailed assessment of the state's infrastructure and hardware configuration must be conducted. This information will be used to refine the project budget estimate.

Total Cost of Ownership (TCO) estimates are based on a functional segment or phased implementation approach as described in *Section 5.1.4. Phasing Methodology*. Costs for each phase are based on 1½ to 2½ year planning, configuration, and implementation timeframe spanning a four-year implementation approach of all administrative systems and maintenance support. The model supports a multi-year TCO.

To understand the alternative costs, it is important to understand the basis that forms the cost models. Deviations from these assumptions will have a direct impact on the overall alternative cost. The cost assumptions are categorized as follows:

- **Human Resources** – grouped by state resources, independent assistance, and implementation vendor;
- **Technology Resources** – grouped by business software and application software licensing and hardware requirements for running and maintaining the applications.

Exhibit 5-3: Cost Model Basis summarizes the state human resource commitment required to implement an ERP system based on outsourcing of IT support, as well as software and hardware assumptions if IT is maintained within Alaska. These commitments and assumptions provide a model for estimating costs of an ERP system implementation. The number of state human resources will increase if during the procurement process outsourcing is not a viable option or strategically it is in the best interest of the state to provide IT services internally to support Alaska's administrative systems.

Exhibit 5-3: Cost Model Basis

	Pre-Implementation Phase				Implementation Phases I through III							
	FY03		FY04		FY05		FY06		FY07		FY08	
	Workers	% Effort	Workers	% Effort	Workers	% Effort	Workers	% Effort	Workers	% Effort	Workers	% Effort
STATE RESOURCES												
Stakeholders	8	15%	8	20%	8	20%	8	20%	8	20%	8	20%
Project Management	1	40%	1	100%	1	100%	1	100%	1	100%	1	100%
Administration	-		1	25%	1	100%	1	100%	1	100%	1	75%
Subject Matter Experts *	141	2%	2	100%	6	100%	10	100%	10	100%	2	100%
Acceptance Testers	-		-		2	50%	3	100%	3	100%	1	100%
Communications	-		1	50%	1	70%	1	100%	1	100%	1	50%
Training	-		1	50%	2	70%	5	100%	5	100%	1	100%
Agency Change Management Agents	-		1	100%	5	100%	5	100%	5	100%	3	100%
Application Development / Configuration	-		2	100%	4	100%	8	100%	8	100%	-	
Infrastructure and DBA	-		1	100%	2	100%	2	100%	2	100%	-	
Operations	-		-		1	70%	1	100%	1	100%	-	
Help Desk / Call Center	-		-		1	70%	3	100%	3	100%	-	
Total State Resources	150		18		34		48		48		18	

* There are 141 subject matter experts (SMEs) presented in the pre-implementation phase. These individuals participated in development aspects of the business case and administrative systems requirements. Extensive part-time SME participation will continue, however, only the full-time participants are shown in subsequent phases.

Exhibit 5-3: Cost Model Basis (continued)

SOFTWARE AND HARDWARE PROJECTION ASSUMPTIONS		
Business Software Cost Assumptions	<p>Cost projections for business software licenses to support implementation of all ERP modules (e.g., human resources, payroll, financial, purchasing, budget, etc.) as follows:</p> <ul style="list-style-type: none"> ■ 300 full / any time user access; ■ 600 full / limited time user access; ■ 400 managerial access; and ■ 15,200 employee self-service users. 	Purchases for business software occur in FY05 and maintenance costs begin in FY06.
Hardware Cost Assumptions	<p>New equipment purchases including:</p> <ul style="list-style-type: none"> ■ Web servers; ■ Application servers; ■ Database servers; ■ High-speed online data storage; ■ Backup and batch servers; ■ Report server; and ■ Load balancing switch. 	Purchases for hardware occur in FY05 and maintenance costs begin in FY06.
Non-Business Software Cost Assumptions	<p>New software purchases including:</p> <ul style="list-style-type: none"> ■ Database; ■ Web server operating system; ■ Backup and fail-over software; ■ Performance monitoring; ■ Development tool suite; ■ Version control; and ■ Reporting developer and Web-based server. 	Purchases for software occur in FY05 and maintenance costs begin in FY06.

5.1.6. Summary of Recommended Approach, Cost Findings, and Implementation Timeframes

The remainder of this section is devoted to providing detailed information for the alternatives explored. Given the complexity of these alternatives, we begin by stating MAXIMUS' recommendations for the Alaska Statewide Administrative Systems Replacement Project, including projected costs and resource requirements.

MAXIMUS' recommends Alaska proceed with an integrated Enterprise Resource Planning system approach. This approach provides the state an opportunity to evaluate software solutions for all administrative systems with intent to select a single solution that best meets the needs of the state. During the evaluation process, flexibility exists to allow for a best-fit software selection, even retention of existing systems, if it is determined this is in the best business interest of the state.

With respect to retaining the operations of the systems internally within state government or outsourcing the functions, MAXIMUS recommends an RFP process that solicits an option to evaluate ongoing support for statewide administrative systems through external application services supplied by commercially available outsourcing resources. This provides the state time during FY04 to assess and determine what would be required to advance the ITG organization in supporting the new administrative systems and if such advancements and cost comparisons correspond with the state's long-term IT strategic vision.

While there are many factors forming the basis of these recommendations, highlights of these factors include:

- **Replacing all administrative systems with the possible exceptions of Budget Development and Retirement Management.** Assessing the existing administrative systems, there are only two potential systems not considered for replacement at this time: budget development and retirement management including non-employee benefit administration. These two systems currently provide the needed business functionality and are built on flexible databases providing greater options for system interfaces and data warehouse integration. However, given the potential benefits of integrating these functions in an ERP system, we recommend that these systems be considered for replacement in 2007, based on an updated evaluation of the ERP capabilities available in these functional areas at that time. Retirement systems have a higher risk associated with their COBOL source and should continue to be assessed annually to assure that timely initiatives are taken to mitigate this risk. All other

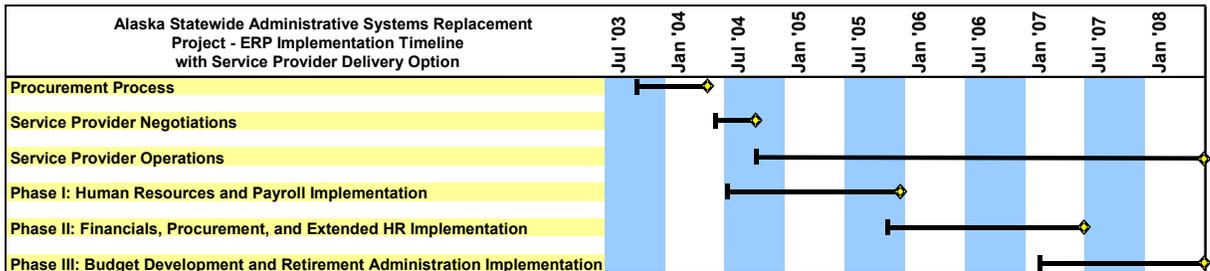
administrative systems should be considered for replacement.

Replacement of the remaining systems are based on two primary factors:

- **Outdated Architecture** – Two critical business applications, AKPAY and AKSAS, are built on a hierarchical database structure using COBOL programming to provide a character-based green screen user interface. While the user interface can be front-ended to have a graphical or Web point-and-click feel, the supporting architecture cannot be changed unless the application is re-written to support a relational database structure. Given the amount of custom code Alaska has developed over the past twenty years (approximately 40% of the payroll code is based on custom programming), upgrading the application to a modern architecture would be a major application development effort.
- **Custom Developed Business Applications** – Other applications such as WorkPAD, Workplace Alaska, and TrainAlaska are built on modern architectures. These applications may require additional development to meet the business needs of the organization. If a product solution existed that met the business needs, selection of an ERP solution would be the opportune time to migrate these applications from a custom developed solution to an integrated COTS solution. The advantages of selecting an integrated software solution include reducing duplicative manual entry of data and reducing the need to support multiple system interfaces which are weak links for ensuring data integrity.
- **Reducing impact on the ITG organization within a compressed timeframe during critical project implementation activities.** ITG is in the middle of implementing strategies from the Statewide Information Technology Plan study concluded in October 2002. These strategies involve focused attention of ITG management and staff leaving little time to participate and absorb changes that will occur beginning July 2004. Initially outsourcing the IT operations allows ITG management an opportunity to assess the organization, structure support services, and staff skills for assuming future support responsibilities.

Exhibit 5-4: Recommended Implementation Schedule shows the implementation timeframe proposed in *Section 5.1.4. Phasing Methodology*. This approach assumes the procurement process can begin immediately and can proceed with the exception of final contract authorization until the 2004 legislative session approves project funding.

Exhibit 5-4: Recommended Implementation Schedule



The projected budget for implementing the three phases is shown in *Exhibit 5-5: Outsource ERP Implementation Budget Summary* and is based on MAXIMUS' recommendations for seeking an integrated ERP system and initially outsourcing the operations and maintenance of the system. The budget presented does not assume the degree of ownership the state will choose under outsourcing and should be adjusted when this level is determined. The implementation budget presented considers outsourcing operations of the administrative systems and reflects costs associated with:

- State assigned project staff;
- Independent quality assurance assistance;
- Implementation vendor consulting services;
- ERP software costs for all three phases;
- Hardware and software to run and manage the business applications;
- Project facility, equipment, supplies, etc.;
- Training facility operations in three locations supporting a total of 125 training seats;
- Travel within Alaska;
- Outsourcing costs occurring during the implementation period; and
- Project contingency of 15% to account for additional possible project expenditures.

Refer to *Section 5.1.5. Cost Estimating Methodology* for costs not considered in preparing the projected budget.

**Exhibit 5-5: Outsource ERP Implementation
Budget Summary**

Category	FY05 - FY08
IMPLEMENTATION SERVICES	
State Resources	\$ 8,849,558
Independent PM/QA	\$ 2,690,284
Data Warehouse Consulting Services	\$ 467,175
Transporation Project Accounting	\$ 3,994,204
Implementation Vendor Services	\$ 41,260,377
TOTAL IMPLEMENTATION SERVICES	\$ 57,261,597
SYSTEM COSTS (ASP Implementation Software and Services)	\$ 4,707,480
OTHER PROJECT COSTS	
Project Facility Setup / Operations Costs	\$ 130,000
Project Workstation / Printers / Other Equipment	\$ 162,000
Project Supplies / Paper / Etc.	\$ 120,000
State Project Travel	\$ 172,800
Training Facilities Setup / Operations Costs	\$ 1,095,000
Project Contingency (15%)	\$ 9,547,332
TOTAL OTHER PROJECT COSTS	\$ 11,227,132
OPERATING COSTS DURING IMPLEMENTATION	\$ 11,069,865
TOTAL PROJECT BUDGET	\$ 84,266,074

For more specific cost information refer to *Section 5.3. Service Delivery Alternatives*, where **Exhibit 5-18: Outsource ERP Implementation Budget Projection** provides a breakout of projected project costs rolling up to these summary costs.

5.1.7. Summary of Resources Used in Cost Estimates

Exhibit 5-6: Outsource ERP Implementation Resource Summary summarizes the resource expectations used to develop the State of Alaska systems replacement project recommended outsourcing cost estimate. The detailed estimates of resource costs, supported by these assumptions, is presented in *Exhibit 5-19: Outsource ERP Multi-Year Budget Projection*. These numbers represent a look at anticipated staffing by the state and vendors.

**Exhibit 5-6: Outsource ERP Implementation
Resource Summary**

	FY05	FY06	FY07	FY08
STATE RESOURCES				
Stakeholders	8	8	8	8
Project Management	1	1	1	1
Administration	1	1	1	1
Subject Matter Experts and Business Testers	8	13	13	3
Communications	1	1	1	1
Training	2	5	5	1
Agency Change Management Agents	5	5	5	3
Application Development / Configuration	4	8	8	0
Infrastructure and DBA	2	2	2	0
Operations	1	1	1	0
Help Desk / Call Center	1	3	3	0
Total State Resources	34	48	48	18
INDEPENDENT CONSULTING RESOURCES				
Independent Quality Assurance Services	1.5	1.5	1.25	1
Data Warehouse Consulting Services	1	1	1	0
Total Independent Consulting Resources	2.5	2.5	2.25	1
IMPLEMENTATION VENDOR RESOURCES				
Project Management	1	1	1	1
Project Administration	1	1	1	1
Organization / Agency Change Management Advocacy	1	1	1	1
Training and Documentation	1	3	3	2
Subject Matter Experts and Testers	16	28	28	9
Technical - Configuration; Application, Report, Interfaces and Conversion Development; Operations Support	14.5	25.5	26.5	7
Total Implementation Vendor Resources	34.5	59.5	60.5	21
TOTAL PROJECT RESOURCES	71	110	110.75	40

5.2. System Alternatives

5.2.1. System Alternatives Background

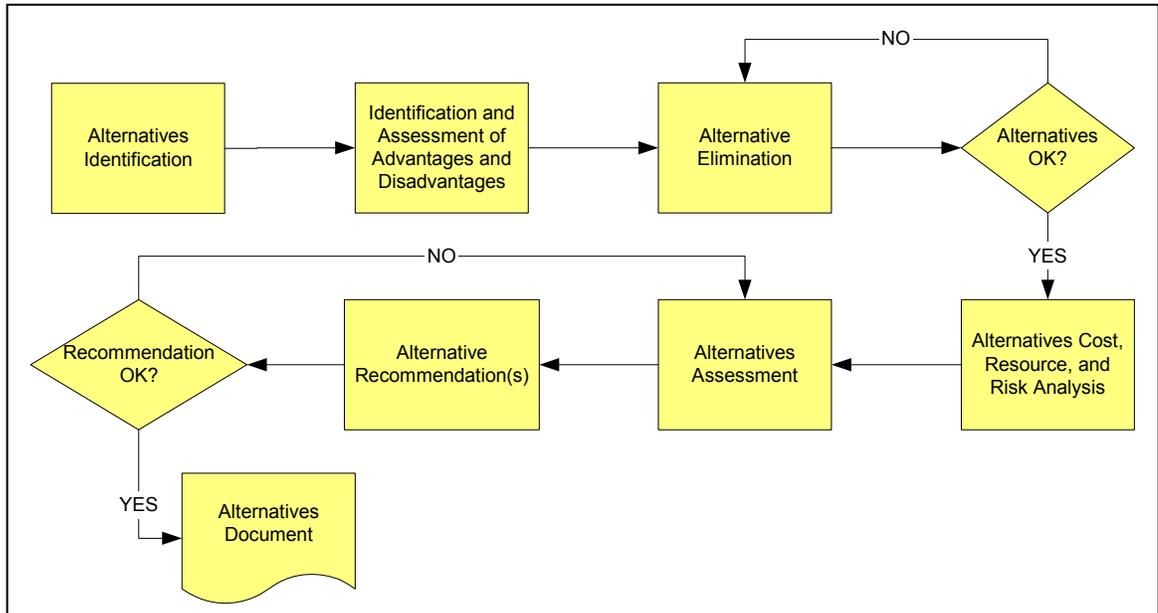
The three main sponsors of the Alaska Statewide Administrative Systems Replacement Project are: Department of Administration, Office of the Governor, and Department of Revenue. Divisions within these departments and offices, who are the owners or custodians of the business applications and data, comprise project stakeholders including:

- Finance;
- Personnel;
- General Services;
- Retirement and Benefits;
- Treasury; and
- Office of Management and Budget.

The Information Technology Group (ITG), a division within the Department of Administration, is also an active project participant given the information technology services they provide for the statewide financial management and payroll systems and other statewide applications.

In this section we identify alternatives for determining the technology, application, and business support solutions of Alaska's administrative systems. The process for identifying alternatives, narrowing the alternative focus, and assessing costs, resources, and risks that form a basis for recommendations is a continuous process of assessment and elimination. This process is shown in *Exhibit 5-7: Alternative Selection Process*. This process is applied in examining the State of Alaska enterprise software implementation alternatives to support the administrative needs of the state, as well as the business and technology support organizations required for supporting and managing the government business activities and systems.

Exhibit 5-7: Alternative Selection Process



In the next section we describe how we approach examining the alternatives for Alaska and the significance of this approach in forming a strategic business and technology vision.

Alternative Identification

In exploring the alternatives for providing technology, application, and business support, our analysis encompasses a two-tier approach examining enterprise alternatives that support software implementation options and organization boundary alternatives for supporting the future system(s). First, we begin by identifying the enterprise software options for Alaska.

Enterprise Software Alternatives

The State of Alaska’s administrative systems are currently supported by a variety of software solutions and technologies that range in age from 1 to 20 years in production. An important dynamic in looking at the future software solutions for Alaska is to maintain objectivity and not be predisposed to any one alternative. To accomplish a thorough review that serves as a basis for moving forward, we assess each business area system included in the Alaska Statewide Administrative Systems Replacement Project. Our assessment encompasses two software implementation alternatives including:

- **ERP Applications:** Multiple business applications that *share common application programs and databases*. These applications are or can be

used across the entire organization to perform the business functions. The applications are part of a suite of software applications that are integrated and maintained by a vendor.

- **Best-Fit Applications:** An application that can be used across the entire organization to perform a single business function. The application however *does not share common application programs or databases with other systems*. Interfaces to and from other systems are required to maintain common data elements or provide other data. The state carries the responsibility of integrating application data.

This evaluation is an important element of the overall analysis of Alaska's administrative systems. While most, if not all of the administrative applications used or desired by Alaska's leadership are available through commercial-off-the-shelf (COTS) solutions, they may not warrant replacement consideration at this time. This evaluation process considers aspects such as necessity of application integration, longevity, organization impact, and cost for recommending application implementation alternatives. Once identified, these implementation alternatives are then further analyzed and recommendations made for the rollout phases of business applications.

Exhibit 5-8: Current Application Implementations shows the current availability of statewide administrative business functions. Business functions marked as "not applicable" are paper-based processes, maintained through word processing, spreadsheet, and database applications.

Exhibit 5-8: Current Application Implementations

	Not Applicable*	Enterprise Application	Functionally Segmented Application
Finance Applications			
Payroll System (AKPAY)		✓	
Accounting System (AKSAS)		✓	
GENEVA (reporting system)		✓	
Personnel Applications			
Human Resource Management System	✓		
Time Management System	✓		
Workplace Alaska		✓	
WorkPAD		✓	
Grievance Tracking and Filing Systems			✓
TrainAlaska (training registration system)		✓	
ALRA (labor relations system)			✓
Position Classification	✓		
PEI System (performance evaluation)	✓		
Human Rights Database			✓
Career and Succession Planning	✓		
Shift and Workforce Planning	✓		
Retirement / Benefits Applications			
Deferred Compensation Plan			✓
Combined Retirement System			✓
Select/SBS Benefits System			✓
General Services Applications			
Purchasing	✓		
Lease Management and Projection			✓
State Property System		✓	
MAXIMO (facility preventative maintenance and work order processing system)			✓
SURDATA (surplus disposal)			✓
Management and Budget Applications			
ABS (operating and capital budget development)		✓	
Revenue Applications			
ResourceIQ2 (cash management system)			✓

* Business activities are primarily a paper-based process consisting of data managed through word processing, spreadsheet, or individual databases.

Finance Business Applications

The Division of Finance supports finance and payroll systems and has a well-established history of service orientation and application reliability. It is also recognized that these systems are built on the oldest technologies and cannot be modified quickly to meet changes in business demands or provide detailed management reporting. For example, a backlog of 20 staff-years exists for making over 240 documented changes to the payroll system to support various enhancements and changes such as those for union contracts. This backlog exists because there are not enough human resources to make the changes in addition to the normal maintenance and critical enhancements. Various manual efforts are made to overcome this enhancement deficit.

Personnel Business Applications

Personnel administration has primarily been a paper-based process that over the years has spawned standalone applications and applications accessible over the internet (for state job postings). While progress has been made to implement statewide personnel software solutions, additional opportunities exist to institutionalize practices in human resource administration and time accounting.

Retirement and Benefits Applications

Benefits administration is provided in three systems that offer deferred compensation benefits for state employees, insurance enrollment, annuity, and retirement benefits for state and other customer organizations. Interfaces to AKPAY and AKSAS are made to indicate employee deductions and benefit payments. Similar interfaces are made to the retirement payroll system for applicable benefits. Internet and paper based interfaces are required for non-state participant organizations. There are a wide range of enhancements to interfaces and additional access to historic data that are desired, but unlikely to occur due to limited human resource constraints.

General Services Applications

General Services is basically divided between purchasing or procurement activities and management and tracking of state assets. The purchasing process is the least developed in terms of automating business functions. It is predominantly a paper-based process relying on paper purchase orders and spreadsheets to track requisitions, purchases, and received orders. This information makes its way to the financial management system through manual data entry. Report generation consists of manual intensive processes that lead to data inaccuracies.

State asset tracking is a database system that requires manual input of capital assets based upon reports originating in agency units. Transfers between systems require manual formatting.

Management and Budget Applications

The state's budget system (ABS) is a newer application built on modern technologies. It is used to develop budget submissions and control the versions of budgets through the process to the final authorized budget. Although ABS interfaces to establish the final authorized budget in AKSAS, there is no interface back to ABS to report actuals. Year-end reporting of actuals to budget is a labor-intensive process because fund sources in ABS and revenue accounts in AKSAS are in different types of structures; reimbursable service agreements (RSAs) are difficult to reconcile; and multi-year allocations have increased in use, even though the budgetary and accounting systems are not designed to handle them easily. Interfaces to the legislative budget system and from AKPAY are manual.

Revenue Applications

Revenue systems are divided into cash management and investment management areas. Cash management is performed on a stand-alone software product that obtains varying degrees of support from the vendor. While some of the enhancements and fixes are identified by the state and provided by the vendor, others are implemented solely by the state due to a lack of support by the vendor. Scheduled polling is automated for bank transmissions, but manual verifications and interfaces are required to move data to AKSAS. Several enhancements and modifications are desired, but unlikely because of changes expected from modem to internet bank transmissions. Some features are not available since this product is not the vendor's top tier product.

Investment management is a manual process. The state issues and receives information about investment activity through external vendor systems. There are no electronic interfaces between the external vendor systems and the state. Verification of investment activity is difficult because of manual tracking. Manual summary activity transactions are posted to AKSAS on a monthly basis. Vendor systems have limited capabilities to capture portfolio detail transactions.

Summary

We now have an understanding of the implementation alternatives and have explored the overall condition of the existing administrative systems supporting Alaska business processes. The next step is to understand the advantages and disadvantages of the software implementation alternatives and then assess the alternatives against each business area. Once this is completed, the last process is to evaluate options based on cost, resource, and risk assessment.

5.2.2. System Alternative 1: ERP Implementation

Under this alternative, the state would acquire and implement a single, integrated statewide administrative system solution using components of a commercially available ERP package in a manner that addresses the common financial, personnel, and asset management needs of both operating agencies and central fiscal control organizations.

5.2.2.1. Description

The current industry trend is to implement an ERP package solution to obtain an integrated solution in less time than is necessary to implement a custom-built solution. Statewide administrative system implementations like the one envisioned by the state are being done on ERP products. Industry leaders in statewide government implementations are SAP, PeopleSoft, and Oracle. Lawson also provides an ERP solution that is marketed for smaller government organizations. However, their successes in Michigan, South Dakota, and large counties and school districts make them a viable candidate to consider in an open procurement process. AMS also provides a tailored solution that rivals these packages for state solutions and is used in a fully integrated fashion in a number of states. MAXIMUS' experience working on statewide ERP implementations indicates that Alaska's basic administrative needs could be met by one integrated package from one of these vendors.

This option contains the capability for meeting all the state's financial management, human resources, payroll, asset management, and procurement system requirements. The option assumes that all modules for an integrated solution are acquired from the same vendor. Statistics show that an ERP software implementation completed without major software modifications will produce faster and better user satisfaction compared to modified ERP solutions.

MAXIMUS is aware that a major effort may be required to provide Alaska's Department of Transportation and Public Facilities (DOT/PF) project accounting and billing functionality. Developing an extension to the ERP software product is an important aspect of the state's implementation strategy. The implementation strategy must maintain the project functionality DOT/PF requires, while minimizing the impact on the base ERP system to preserve the ability to efficiently perform software upgrades of the ERP software.

The implementation alternative assumes a single production version of the software with a single database and database server using multiple application servers being configured in an N-tier client/server environment.

The ERP option would replace AKSAS and AKPAY, while providing additional functionality not currently available for human resources, procurement, and various resource management requirements. Generally all agencies would share

common tables for items such as objects, accounts, funds, vendors, items, and projects. The tables would have a minimal number of designated fields, which would be under semi-autonomous agency-level control to satisfy specific agency requirements. The ERP software could replace agency specific operations software as appropriate thus reducing the number of supported administrative systems and system interfaces.

The implementation would be completed within four years, beginning July 1, 2004 and ending around April 2008. The implementation would occur in three major project phases as follows:

- Phase I – Human Resources and Payroll (July 2004 – February 2006);
- Phase II – Financials, Procurement, and Extended Human Resources (September 2005 – June 2007); and
- Phase III – Budget Development and Retirement Management (June 2007 – April 2008).

5.2.2.2. Benefits

Management access to consolidated enterprise information is significantly improved. ERP systems are designed to integrate information from various organization business functions and make that information globally accessible to monitor business processes. Additionally, information is controlled within the same database structures making the view of enterprise data consistent with business process events and eliminating the timing aspects of data integration through interfaces. Maintenance of system interfaces is reduced or eliminated, including data verification processes to ensure the integrity of data.

Manual processes and redundant data entry is reduced. The design of data collection and shared database structures makes duplicate data entry unnecessary. Data is captured at the source of initial collection and modified or corrected at the moment in the business process cycle when modification is required. Common data is shared thus reducing data inconsistencies, errors, and additional effort to keep data in sync. System information is also routed through workflow-enabled processes providing automatic alerts for next step actions across applications.

Employees have better information about their administrative information through self-service features of ERP systems. Based upon system rules, employees have immediate access to personal data to monitor and make personal changes. Employee self-service is a good example of capturing data at its source. For instance, employees are most aware of life changes that would affect benefit elections, such as address or other contact information, spouse employment status, dependency status, or marital standing. Having the ability to review personal data

and input changes as they occur allows for immediate recalculations of paycheck deductions, benefit coverage, and similar functions that impact employees.

The need for agency feeder/shadow systems is reduced. Implementing a solution to meet agency as well as statewide business requirements reduces the need for maintaining internal agency administrative systems. In the case of time and attendance, most of the administrative requirements are fulfilled in existing ERP systems. Although there will always be a need for some level of specialization in business rules, such as those that meet the DOT/PF's project accounting needs, the majority of enterprise business process support for administrative services are met in ERP systems. For those business needs not met by the ERP software, ERP systems allow for specialization through open interfacing architecture.

Open systems architectures provide the foundation for greater access to enterprise information. Direct access to data within the ERP databases provides the ability to extract and present information to a wide range of audiences like executive agencies, the legislature, and the public, in a manner most efficient for the state. Information is consistent, requiring minimal data manipulation because data resides in one system, processes are integrated, and data stores are accessible through open architectures. The state can, therefore, make the best use of current technologies to present an enterprise view of data to selected audiences.

ERP systems have sustained viability through vendor research and development (R&D) investments. Vendors in the ERP marketplace are continuing to invest in new features and technologies to keep their product competitive. Organizing their products for ERP II, and enhanced features like employee self-service, workflow, and portal interfaces are examples of how ERP vendors are making investments in their products to meet the demands of complex customers. These investments are likely to continue in the foreseeable future.

5.2.2.3. Risks

Acquiring and maintaining executive and legislative support to fund the project is a critical success factor. ERP projects are costly and the benefits of the project are not readily translated into cost savings. Therefore, justifying the real project need and accurately estimating project costs is important for obtaining legislative support and funding. Thoroughness and timeliness in assessing the need and developing a cost model are drivers in establishing and maintaining credibility with project sponsors, executive leadership, and legislative support.

Obtaining formal buy-in and commitment from all agencies and branches of government. An ERP system affects all administrative processes of the state. As a result, every agency and branch of government is impacted. Change processes need to be identified and communicated to all constituencies, actively engaging

those constituencies in the change process. This level of participation is essential for project success. Functionality trade-offs in application areas may be required to meet the best practices deployed by the software solution. Business decisions need to be made in concert with one another. Autonomous organizational thinking must be replaced with cooperative multi-faceted cross-agency thinking.

Sufficient levels of human resources must be applied to ensure existing continuity of service, while new systems are implemented. There is a tendency for vendors to downplay resource requirements for an ERP implementation and for government organizations to not address the required resource requirements for a project of this magnitude. The quickest way to increase project costs and lengthen timelines is to be unprepared to dedicate adequate project resources. A core level of state resources are essential to manage the project, identify and manage business process changes within the organization, provide configuration expertise, and stabilize the new environment as systems are implemented. Additionally, agencies must allocate resources to properly support the project in a proactive manner according to the project work plan.

Development of, and stakeholder agreement on, chart of accounts and cost tracking mechanisms are difficult. The chart of accounts is central to the tracking and reporting of financial information for the state. There is considerable flexibility engineered into ERP software treatment in this area. Therefore, appropriate levels of effort and agreement need to be achieved to ensure all stakeholders perceive success in the state's new financials. Changes in this area are not necessarily welcomed, and require changes to business processes and probable change to internal agency administrative systems.

5.2.2.4. Costs

The following exhibits provide breakouts of implementation and maintenance costs beginning FY05 through FY13. The three-phased implementation begins in FY05 and is completed in FY08.

Exhibit 5-9: Internal ERP Implementation Budget Projection considers factors such as state and contractor resources, hardware purchases, software licenses, and maintenance costs. Maintenance costs for hardware and software begin FY06, with state resources transferred from project to maintenance costs beginning FY08.

Exhibit 5-10: Internal ERP Multi-Year Budget Projection summarizes the implementation and ongoing maintenance costs through FY13. Maintenance costs include:

- ERP annual software maintenance fee;
- Supporting software maintenance fees and every second year upgrade costs (database, utility, etc.);
- Hardware maintenance fee and every third year replacement costs;
- State resource positions allotted to supporting the administrative systems including:
 - Six operations staff;
 - Twelve application support and subject matter experts;
 - Four infrastructure and database administrator staff;
 - Two trainers; and
 - Three call center staff.

Exhibit 5-9: Internal ERP Implementation
Budget Projection

	FY05	FY06	FY07	FY08	TOTAL
STATE RESOURCES					
Stakeholders	\$ 173,040	\$ 178,231	\$ 183,578	\$ 193,988	\$ 728,838
Project Management	\$ 116,390	\$ 119,882	\$ 123,478	\$ 130,480	\$ 490,230
Administration	\$ 49,131	\$ 50,605	\$ 52,123	\$ 41,309	\$ 193,168
Subject Matter Experts	\$ 420,240	\$ 721,412	\$ 743,054	\$ 157,038	\$ 2,041,744
Acceptance Testers	\$ 70,040	\$ 216,424	\$ 222,916	\$ 78,519	\$ 587,899
Communications	\$ 38,574	\$ 56,758	\$ 29,230	\$ 30,888	\$ 155,450
Training	\$ 86,953	\$ 319,861	\$ 329,457	\$ 69,628	\$ 805,899
Agency Change Management Agents	\$ 292,520	\$ 301,296	\$ 310,334	\$ 196,760	\$ 1,100,910
Application Development / Configuration	\$ 327,540	\$ 674,732	\$ 694,974	\$ -	\$ 1,697,247
Infrastructure and DBA	\$ 177,778	\$ 274,667	\$ 282,907	\$ -	\$ 735,352
Operations	\$ 130,429	\$ 255,889	\$ 329,457	\$ -	\$ 715,775
Help Desk / Call Center	\$ 32,661	\$ 240,294	\$ 247,503	\$ -	\$ 520,458
Total	\$ 1,915,295	\$ 3,410,051	\$ 3,549,013	\$ 898,610	\$ 9,772,970
CONSULTING					
Independent Quality Assurance	\$ 734,864	\$ 756,910	\$ 647,113	\$ 551,397	\$ 2,690,284
Data Warehouse Consulting Services	\$ 151,351	\$ 155,891	\$ 159,933	\$ -	\$ 467,175
Total	\$ 886,214	\$ 912,801	\$ 807,046	\$ 551,397	\$ 3,157,459
IMPLEMENTATION VENDOR					
Project Management	\$ 562,874	\$ 579,761	\$ 594,793	\$ 633,520	\$ 2,370,948
Project Administration	\$ 271,014	\$ 279,144	\$ 286,382	\$ 305,028	\$ 1,141,568
Infrastructure / Operations Readiness	\$ 750,499	\$ 1,159,521	\$ 396,529	\$ 422,347	\$ 2,728,896
Organization / Agency Change Management Advocacy	\$ 354,402	\$ 365,034	\$ 374,499	\$ -	\$ 1,093,936
Training and Documentation	\$ 312,708	\$ 966,268	\$ 991,322	\$ 703,911	\$ 2,974,209
Total	\$ 2,251,498	\$ 3,349,728	\$ 2,643,525	\$ 2,064,806	\$ 10,309,557
FINANCIALS / CASH MANAGEMENT	\$ 240,785	\$ 2,855,858	\$ 5,661,550	\$ -	\$ 8,758,193
PAYROLL	\$ 2,840,431	\$ 2,009,837	\$ -	\$ -	\$ 4,850,268
HUMAN RESOURCES	\$ 2,532,935	\$ 4,015,379	\$ 2,246,996	\$ -	\$ 8,795,310
PURCHASING / LEASE AND PROPERTY MGT	\$ -	\$ 1,773,638	\$ 2,599,466	\$ -	\$ 4,373,104
BUDGET MANAGEMENT / RETIREMENT	\$ -	\$ -	\$ 2,749,266	\$ 3,379,442	\$ 6,128,708
DEPARTMENT OF TRANSPORTATION PROJECT ACCOUNTING	\$ 562,874	\$ 1,646,950	\$ 1,784,379	\$ -	\$ 3,994,204
STARTUP HARDWARE / SOFTWARE COSTS					
<i>Application Software</i>					
Business User License Cost (Mgrs, Business Analysts)	\$ 479,327	\$ 479,327	\$ 479,327	\$ -	\$ 1,437,981
Employee Self Service License Cost	\$ 1,865,313	\$ 1,865,313	\$ 1,865,313	\$ -	\$ 5,595,940
Total	\$ 2,344,641	\$ 2,344,641	\$ 2,344,641	\$ -	\$ 7,033,922
<i>Other</i>					
Database Software	\$ 960,000	\$ -	\$ -	\$ -	\$ 960,000
Hardware	\$ 2,273,250	\$ 757,750	\$ -	\$ -	\$ 3,031,000
Operating System	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000
Reporting Software	\$ 7,500	\$ -	\$ -	\$ -	\$ 7,500
Performance Monitoring Tools	\$ 30,000	\$ -	\$ -	\$ -	\$ 30,000
Operations/Development Tools (tape, backup, recovery, etc.)	\$ 116,000	\$ -	\$ -	\$ -	\$ 116,000
Total	\$ 3,411,750	\$ 757,750	\$ -	\$ -	\$ 4,169,500
MAINTENANCE					
Application Software Maintenance	\$ -	\$ 422,035	\$ 844,071	\$ 1,266,106	\$ 2,532,212
Hardware / Software / Tools Maintenance	\$ -	\$ 409,410	\$ 500,340	\$ 500,340	\$ 1,410,090
Hardware Every 3 Year Replacement Factor	\$ -	\$ -	\$ -	\$ 1,793,500	\$ 1,793,500
Software Every 2 Year Upgrade Factor	\$ -	\$ -	\$ 58,905	\$ -	\$ 58,905
Facility	\$ -	\$ -	\$ -	\$ 375,000	\$ 375,000
Operations	\$ -	\$ -	\$ -	\$ 407,209	\$ 407,209
Application Support / SME	\$ -	\$ -	\$ -	\$ 715,824	\$ 715,824
Infrastructure / DBA	\$ -	\$ -	\$ -	\$ 388,526	\$ 388,526
Training	\$ -	\$ -	\$ -	\$ 135,736	\$ 135,736
Call Center	\$ -	\$ -	\$ -	\$ 254,928	\$ 254,928
Management	\$ -	\$ -	\$ -	\$ 562,754	\$ 562,754
Total	\$ -	\$ 831,445	\$ 1,403,316	\$ 6,399,923	\$ 8,634,684

**Exhibit 5-9: Internal ERP Implementation
Budget Projection (continued)**

	FY05	FY06	FY07	FY08	TOTAL
OTHER PROJECT COSTS					
Project Facility Setup / Operations Costs	\$ 100,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 130,000
Project Workstation / Printers / Other Equipment	\$ 90,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 162,000
Project Supplies / Paper / Etc.	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 120,000
State Project Travel	\$ 43,200	\$ 43,200	\$ 43,200	\$ 43,200	\$ 172,800
Training Facilities Setup / Operations Costs	\$ 555,000	\$ 180,000	\$ 180,000	\$ 180,000	\$ 1,095,000
Project Contingency (15%)	\$ 2,670,693	\$ 3,504,575	\$ 3,700,963	\$ 1,077,218	\$ 10,953,449
Total	\$ 3,488,893	\$ 3,791,775	\$ 3,988,163	\$ 1,364,418	\$ 12,633,249
GRAND TOTALS					
State Resources	\$ 1,915,295	\$ 3,410,051	\$ 3,549,013	\$ 898,610	\$ 9,772,970
Independent QA/Data Warehouse Services	\$ 886,214	\$ 912,801	\$ 807,046	\$ 551,397	\$ 3,157,459
Implementation Vendor Services	\$ 7,865,649	\$ 14,004,440	\$ 15,900,804	\$ 5,444,248	\$ 43,215,140
Transportation Project Accounting	\$ 562,874	\$ 1,646,950	\$ 1,784,379	\$ -	\$ 3,994,204
Application Software	\$ 2,344,641	\$ 2,344,641	\$ 2,344,641	\$ -	\$ 7,033,922
Other Hardware and Software	\$ 3,411,750	\$ 757,750	\$ -	\$ -	\$ 4,169,500
Maintenance	\$ -	\$ 831,445	\$ 1,403,316	\$ 6,399,923	\$ 8,634,684
Other Project Costs	\$ 3,488,893	\$ 3,791,775	\$ 3,988,163	\$ 1,364,418	\$ 12,633,249
Grand Total	\$ 20,475,317	\$ 27,699,852	\$ 29,777,362	\$ 14,658,596	\$ 92,611,127

Exhibit 5-10: Internal ERP Multi-Year Budget Projection

Category	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	TOTAL
IMPLEMENTATION SERVICES										
State Resources	\$ 1,915,295	\$ 3,410,051	\$ 3,549,013	\$ 898,610	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,772,970
Independent PM/QA	\$ 734,864	\$ 756,910	\$ 647,113	\$ 551,397	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,690,284
Data Warehouse Consulting Services	\$ 151,351	\$ 155,891	\$ 159,933	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 467,175
Transportation Project Accounting	\$ 562,874	\$ 1,646,950	\$ 1,784,379	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,994,204
Implementation Vendor Services	\$ 7,865,649	\$ 14,004,440	\$ 15,900,804	\$ 5,444,248	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,215,140
IMPLEMENTATION SERVICES TOTAL	\$ 11,230,033	\$ 19,974,242	\$ 22,041,243	\$ 6,894,255	\$ -	\$ 60,139,772				
Hardware / Software	\$ 5,756,391	\$ 3,102,391	\$ 2,344,641	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,203,422
Project Facility Setup / Operations Costs	\$ 100,000	\$ 10,000	\$ 10,000	\$ 10,000						\$ 130,000
Project Workstation / Printers / Other Equipment	\$ 90,000	\$ 24,000	\$ 24,000	\$ 24,000						\$ 162,000
Project Supplies / Paper / Etc.	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000						\$ 120,000
State Project Travel	\$ 43,200	\$ 43,200	\$ 43,200	\$ 43,200						\$ 172,800
Training Facilities Setup / Operations Costs	\$ 555,000	\$ 180,000	\$ 180,000	\$ 180,000						\$ 1,095,000
Project Contingency (15%)	\$ 2,670,693	\$ 3,504,575	\$ 3,700,963	\$ 1,077,218						\$ 10,953,449
Maintenance Costs	\$ -	\$ 831,445	\$ 1,403,316	\$ 6,399,923	\$ 4,090,781	\$ 5,918,661	\$ 4,280,150	\$ 6,113,711	\$ 4,481,051	\$ 33,519,037
FY Total	\$ 20,475,317	\$ 27,699,852	\$ 29,777,362	\$ 14,658,596	\$ 4,090,781	\$ 5,918,661	\$ 4,280,150	\$ 6,113,711	\$ 4,481,051	\$ 117,495,480

5.2.2.5. Timeframes

Full implementation of ERP projects spans multiple years. Factors impacting the length of time include:

- Phased or non-phased implementation of software modules and agency participation requirements;
- The extent business processes require modifying existing practices;
- Statewide training considerations;
- Required software modifications; and
- Fiscal and other environmental considerations.

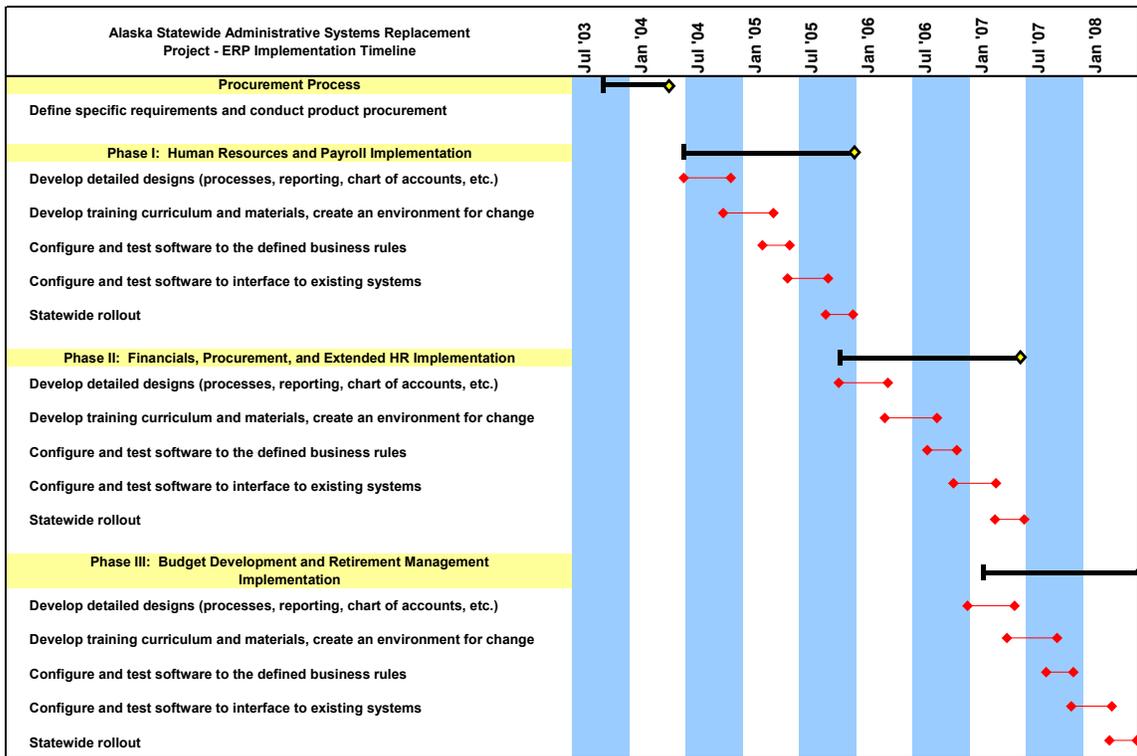
The following anticipated timeframes identify major project milestones in the Alaska Statewide Administrative Systems Replacement Project requirements for implementing a single statewide integrated ERP solution:

- Define specific requirements, conduct product procurement: 6 - 9 months
- Phase I – Human Resources and Payroll Implementation
 - Develop detailed designs (processes, reporting, chart of accounts, etc.): 4 - 6 months
 - Develop training curriculum and materials, create an environment for change: 3 - 6 months
 - Configure and test software to defined business rules: 3 - 6 months
 - Configure and test software to interfaces with existing systems: 3 - 6 months
 - Statewide rollout: 3 - 6 months
- Phase II – Financials, Procurement, and Extended Human Resources Implementation
 - Develop detailed designs (processes, reporting, chart of accounts, etc.): 4 - 6 months
 - Develop training curriculum and materials, create an environment for change: 3 - 6 months

- Configure and test software to defined business rules: 3 - 6 months
- Configure and test software to interfaces with existing systems: 3 - 6 months
- Statewide rollout: 3 - 6 months
- Phase III – Budget Development and Retirement Management Implementation
 - Develop detailed designs (processes, reporting, chart of accounts, etc.): 4 - 6 months
 - Develop training curriculum and materials, create an environment for change: 3 - 6 months
 - Configure and test software to defined business rules: 3 - 6 months
 - Configure and test software to interfaces with existing systems: 3 - 6 months
 - Statewide rollout: 3 - 6 months

With September 1, 2003 as a start date for the procurement process, the schedule supports completion of payroll processing by December 2005. It is anticipated human resource management capability would be completed prior to this date. The financial and procurement systems phase would be completed at the beginning of FY08 with budget development and retirement management immediately following during the remainder of FY08. ***Exhibit 5-11: Alternative 1 - Timeframes for ERP Implementation*** depicts the high level timeframes for Alternative 1.

Exhibit 5-11: Alternative 1 - Timeframes for ERP Implementation



5.2.2.6. Strategies

The following describe strategies essential for successful completion of an ERP implementation:

- **Strong and Continuous Executive Sponsorship** – State leaders must unite and support the project. Ideally a partnership would be formed between the executive and legislative branches to secure a long-term funding commitment.
- **Continued Agency Commitment and Support** – Agencies must support the project by assigning resources for implementation and ongoing support.
- **No Modification to Baseline Software** – Business processes must be modified to adapt to ERP best practices. Minimizing the modification of base source code within ERP systems cannot be stressed enough. Changes to the base coding of ERP systems create a one-of-a-kind system that the

state will be alone in maintaining and will negatively impact software upgrade capability.

- **Organizational Change Management** – ERP best practices can only be implemented through strong sponsorship support and an effective change management and training program.
- **Training and Support for Agency Administrative Personnel** – “Just in time” training and operational support is required to achieve success.

5.2.3. System Alternative 2: Best-Fit Implementation

The best-fit alternative entails replacing administrative systems with commercially available systems that best fit the state’s business needs and any additional application components as either purchased packages or custom-developed applications. Best-fit implies selecting the software solution that best meets the business needs even if that means implementing multiple software packages. These systems would provide central services for all state agencies.

5.2.3.1. Description

The state acquires commercially available systems that best-fit the state’s system needs for Phase I - Human Resources and Payroll, Phase II – Financials, Procurement, and Extended Human Resources Implementation, and Phase III – Budget Development and Retirement Management requirements. The systems would be based upon current technologies with state-of-the-art software tools to develop robust interfaces with other best-fit packaged software or development of customized modules to address business requirements.

The implementation would be completed within six years, beginning August 2004 and ending around June 2009. The implementation would occur in three major project phases as follows:

- Phase I – Human Resources and Payroll (August 2004 – December 2006);
- Phase II – Financials, Procurement, and Extended Human Resources (June 2005 – November 2007); and
- Phase III – Budget Development and Retirement Management (April 2007 – June 2008).

These administrative systems would integrate basic functionality, be easily upgraded and supported, but not necessarily include all the best practice features and functions of a fully deployed ERP solution. Providers of this type of product would include:

- Human Resources and Payroll Systems:
 - PeopleSoft
 - Oracle
 - SAP
 - Meta4
 - Lawson
 - Cyborg
 - Ultimate Software
 - J.D. Edwards
 - ADP
 - Ceridian
- Financials and Procurement Systems:
 - PeopleSoft
 - Oracle
 - SAP
 - Lawson
 - American Management Systems
 - GEAC
 - Great Plains
 - J.D. Edwards
 - BiTech

Top tier ERP providers are included in this list. Other states have chosen to utilize modules of these products for best-fit solutions to meet their business needs. The procurement process will determine the “best value, best-fit” solution to meet the state’s business needs. With this approach, the state is capable of building a best-fit solution by integrating the products or custom solutions that meet business needs.

Tools such as Ultimus (<http://www.ultimus.com>), a leader in custom workflow development applications, are one method of developing custom workflow integration between disparate systems. An agency workflow development team would be trained in the development and implementation of custom workflows using the workflow development component. The workflow integration tool would be used by the state to integrate the best-fit components to provide the desired functionality for an integrated solution.

5.2.3.2. Benefits

Provides simpler criteria and scope for commercial product selection based on module functionality. Business process owner agencies can focus on a solution that meets their business needs. Because multiple procurement actions are used for this alternative, the scope of each effort is focused on the specific systems being sought. The first phase deals with human resources/payroll; the second phase with financials and procurement; and the final phase involves budget development and retirement administration.

The data for each business process is stored in a common location, providing access for decision-making. Each system has an encapsulated data store to support the business process. Because of open technologies, the data is accessible for correlation with other enterprise data.

Improved efficiencies through workflow and taking advantage of current technologies. The state creates the workflows of business processes with the workflow tools selected. State staff develops workflows based upon their common priorities and at their own pace. The workflows establish just-in-time solutions to business requirements.

Workflows and “bolt-ons” are selected or customized to meet the state’s specific needs. Bolt-ons represent a specific customization characteristic of selecting a best-fit solution that meets the state’s needs. For example, system designers will need to integrate self-service data collection for position advertisement, recruitment, selection, and benefit election processes with data stores for payroll, benefits, and personnel administration.

Number of “bolt-ons” could be prioritized and staged to control costs. Part of the procurement process will involve evaluating the mix of products offered to meet the state’s requirements for each phase. The basic functionality can be scheduled for implementation with additional functionality provided through “bolt-on” applications scheduled in a more flexible manner. Although it would be ideal to have complete functionality available when users cut over to the new systems, it may be more desirable to stage additional functionality over time to minimize budget and change management challenges. This is an option that will be explored should the state choose this option.

5.2.3.3. Risks

The state must integrate technology products from different vendors. The state becomes the “systems integrator.” This alternative can be very complex because of the nature of selecting multiple products individually, and then combining them for an “integrated solution.” There are multiple products to select, install, and configure; multiple configurations which could conflict with other systems; multiple vendor relationships to maintain; multiple upgrade paths

to coordinate; and custom integration solutions to bridge various systems. There may also be the need to maintain and operate multiple technical environments and database structures. If the state insists on a common technology infrastructure that is not provided by the vendor, the state runs the additional risk of working through unique development problems as the vendors redesign their products to that standard.

The ability to share common data is lost, requiring development and maintenance of system interfaces and data validation processes between systems. Creation of additional data repositories is required to collect data from multiple source systems into a single source for analysis and comparison of data. This adds complexity, costs, and the possibility of data inaccuracies.

As an integration of best-fit products, there are no economies of scale achieved during the procurement process. In the ERP alternative, the procurement action satisfies a majority of the state's needs in a single effort. When best-fit products are sought, separate procurement actions may be required to meet the requirements. As an option, the state could elect to have vendors offer solutions for additional phases during the procurement of Phase I systems. However, there is uncertainty associated with the agreement on future systems and products that will not be delivered for many months.

There is no single point of accountability for product performance other than the state's technical support team. In this alternative, the state assumes the roll of systems integrator in the development of multiple workflows, interfaces, and technical architectures contained within the best-fit alternative. ERP solutions have proven engineered components because of the integrated nature and the base of user organizations supported. A best-fit alternative is a one-of-a-kind configuration of products. Although the state can contract with a systems integrator to be responsible for the configuration through implementation, there is potential for multiple points of failure within the system. Over time, the management of these points of failure grows as the system is modified to meet current requirements. In an ERP implementation, there is a best-practice principle to limit customization; in a best-fit alternative, this principle will not be applicable.

While standard workflows could be developed, differences in agency organization and approval processes may make it difficult to standardize practices across agencies. Extensive resource and dollar investments are required in customizing workflows. These are built from scratch or based upon templates that could be modified.

Product upgrades will be difficult and costly because of customization inherent to a best-fit approach. The complex and unique interrelationship of communications, interfaces, and infrastructures will cause the state to bear

additional cost in upgrading individual components of the resulting systems. Upgrades to any system component can be difficult and require specialized skills. The state will be required to obtain these skills as needed to support these upgrades and coordinate these configuration changes closely with related subsystems and workflows.

The state will incur additional implementation and operational costs due to added complexity. The state can expect to see additional costs related to implementation and operations of a multiple product solution. While the exact additional costs are difficult to predict, it is certain that there will be higher implementation and operations costs over time, and that this trend will go up as the complexity of systems, interfaces, technologies, and interdependencies increases over time.

5.2.3.4. Costs

Recent statewide examples of using a best-fit approach for statewide administrative systems replacement utilize ERP software products. Therefore, the costs to implement will have similar characteristics with the following exceptions:

- Additional implementation costs will occur to train state staff and educate multiple vendors on Alaska business processes for integration of disparate systems;
- Possible additional hardware and software costs will be incurred to support multiple solutions;
- The state may not receive the level of licensing discounts that could be obtained by a single vendor; and
- Ongoing operations costs will exist to support interfacing and verification of data among multiple systems, maintenance and configuration support, and staff training.

5.2.3.5. Timeframes

Full implementations of best-fit projects are subject to more complexity and risks. MAXIMUS believes that this alternative will take from four to six or more years, depending on a number of factors including the:

- Phase-in of software systems and/or agencies;
- Multiple procurement cycles;
- Number of business processes to be reengineered;

- Statewide training considerations;
- Software modifications to be made; and
- Fiscal and political considerations.

The following anticipated timeframes are estimated to meet the Alaska Statewide Administrative Systems Replacement Project environment for implementation of integrating a best-fit solution:

Phase I – Human Resources and Payroll Implementation

- Define specific requirements, conduct product procurement: 6 - 9 months
- Develop detailed designs (processes, reporting, chart of accounts, etc.): 4 - 6 months
- Develop training curriculum and materials, create an environment for change: 3 - 6 months
- Configure and test software to defined business rules: 3 - 6 months
- Configure and test software to interface with existing systems: 4 - 7 months
- Statewide rollout: 3 - 6 months

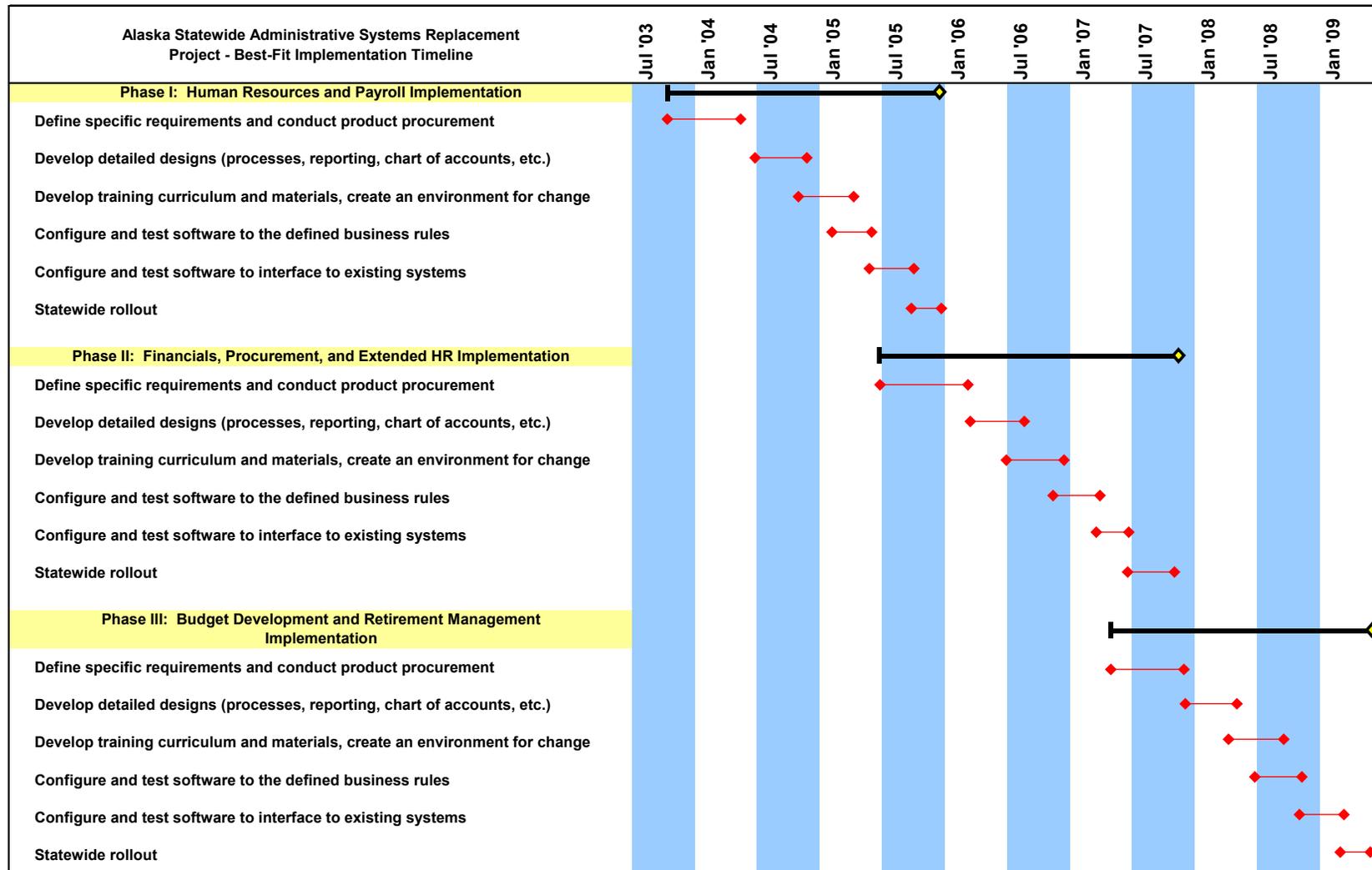
Phase II – Financials, Procurement, and Extended Human Resources Implementation

- Define specific requirements, conduct product procurement: 6 - 9 months
- Develop detailed designs (processes, reporting, chart of accounts, etc.): 4 - 6 months
- Develop training curriculum and materials, create an environment for change: 3 - 6 months
- Configure and test software to defined business rules: 3 - 6 months
- Configure and test software to interface with existing systems: 4 - 7 months
- Statewide rollout: 3 - 6 months

**Phase III – Budget Development and Retirement Management
Implementation**

- Define specific requirements, conduct product procurement: 6 - 9 months
 - Develop detailed designs (processes, reporting, chart of accounts, etc.): 4 - 6 months
 - Develop training curriculum and materials, create an environment for change: 3 - 6 months
 - Configure and test software to defined business rules: 3 - 6 months
 - Configure and test software to interface with existing systems: 4 - 7 months
 - Statewide rollout: 3 - 6 months
- With a start date of September 1, 2003 and an implementation without significant disruption, the estimated earliest a statewide best-fit implementation would be operational would be January 1, 2009 and with minimal disruption, the anticipated ceiling is July 2009. ***Exhibit 5-12: Alternative 2 - Timeframes for Best-fit Implementation*** depicts the high level timeframes for Alternative 2.

Exhibit 5-12: Alternative 2 - Timeframes for Best-Fit Implementation



5.2.3.6. Strategies

A best-fit implementation offers the state value, however at higher levels of risk. Therefore, MAXIMUS does not recommend initiating a procurement approach supporting this alternative, but instead remain flexible in determining the best solution(s) during the RFP selection process. There are a number of strategies essential to supporting this alternative including:

- **Strong and Continuous Executive Sponsorship** – State leaders must unite and support the project. Ideally a partnership would be formed between the executive and legislative branches to secure a long-term funding commitment.
- **Continued Agency Commitment and Support** – Agencies must support the project by assigning resources for implementation and ongoing support.
- **State technical skills must remain “current”** – Reliance on developing and retaining state personnel is significantly important given system interfacing complexities. State technical skills need to be developed, as well as an on-going training program to maintain skills required for the selected technologies. Also, vendor support for installed products is critical for complex integration projects, as well as assistance in developing and maintaining “bolt-on” functionality.
- **Organizational Change Management** – Newer systems and complex relationships can only be implemented through strong sponsorship support and an effective change management and training program.
- **Training and Support for Agency Administrative Personnel** – “Just in time” training and operational support is required to achieve success.

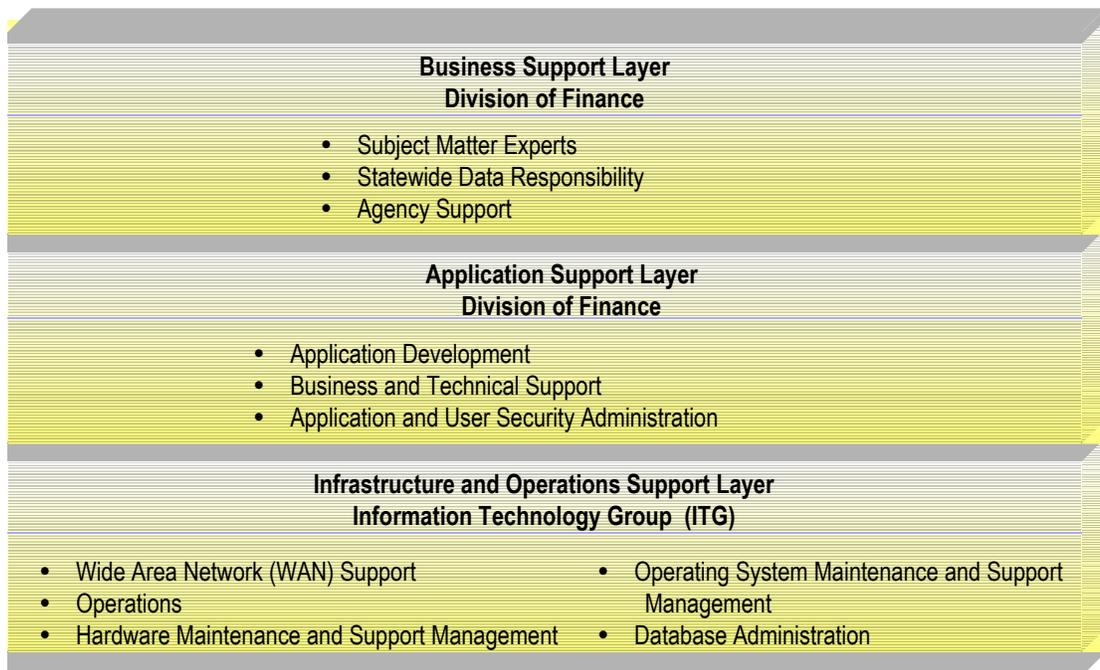
5.3. Service Delivery Alternatives

5.3.1. Service Delivery Alternatives Background

In exploring the alternatives for providing technology, application, and business support, our analysis encompasses a two-tier approach for software implementation and for supporting the future system(s). We begin by exploring the alternatives for supporting the administrative systems.

Exhibit 5-13: Current Financial Administrative Systems Organization Support Structure shows how Alaska currently supports its statewide accounting (AKSAS) and payroll (AKPAY) systems.

Exhibit 5-13: Current Financial Administrative Systems Organization Support Structure



Other business process owners maintain other application systems. Some of these applications are available for statewide access (e.g., WorkPAD, Workplace Alaska, and ABS), while others are standalone systems (e.g., leasing, grievance tracking/filing) specifically maintained and operated by the division responsible for the business activity and management of resulting data. Technologists support these other administrative systems (e.g., architects, programmers, systems staff, etc.) within each division responsible for the business activity.

In examining options to support Alaska's business needs, we must define roles of the following State of Alaska support organizations:

- Department of Administration – Finance, Personnel, General Services, and Retirement and Benefits
- Department of Administration – Information Technology Group (ITG)
- Office of the Governor – Office of Management and Budget
- Department of Revenue – Treasury Division

The roles of Alaska's departments are currently characterized as follows:

- Department of Administration, Division of Finance. Provides business and application support (e.g., subject matter experts, application developers, application administration, etc.) for the following applications:
 - AKSAS and GENEVA
 - AKPAY
- Office of the Governor, Office of Management and Budget. Provides business and application support for the following application:
 - ABS (State Budget System)
- Department of Administration, Division of Personnel. Provides business and application support for the following applications:
 - Workplace Alaska
 - WorkPAD
 - Grievance Tracking and Filing
 - Registrar
 - ALRA
- Department of Revenue, Treasury Division. Provides business and application support for the following application:
 - ResourceIQ² (State Cash Management System)

- Department of Administration, Division of General Services. Provides business and application support for the following applications:
 - MAXIMO
 - Lease Management System
 - Lease Projection
 - State Property System
 - SURDATA
- Information Technology Group. Provides LAN, WAN, data center, and operations support for the following department applications:
 - AKSAS and GENEVA
 - AKPAY
 - ABS
 - Workplace Alaska
 - WorkPAD
 - Combined Retirement System
 - Other applications

Planning for the business support roles of these organizations, in combination with the additional option of outsourcing, is critical in determining the service delivery alternatives that most appropriately meet the needs of the state. Outsourcing in this model is defined as the state contracting with a vendor to provide defined services. Contracted vendor(s) provide these services with state employees managing the contracts and service level agreements. As part of the contract, the vendor may have an option to hire state employees currently performing the services under contract.

Exhibit 5-14: Organization Support Options, identifies the organization support options considered in the development of Alaska’s business case.

Exhibit 5-14: Organization Support Options

	ITG	DOA	Office of Governor	Dept of Revenue	Outsourcing	
Business Support						
<i>Provides business subject matter experts to maintain statewide data and support agency questions.</i>						
Option 1 (BS-1): Status quo - each agency / division within an agency provides Tier 1-3 support services.		✓	✓	✓		
Option 2 (BS-2): DOA provides Tier 1-3 support for finance, personnel, retirement/benefits, and general services, and Tier 1 support for Office of Governor and Department of Revenue applications.		✓				
Office of Governor and Department of Revenue provide Tier 2 and 3 support for business applications.			✓	✓		
Option 3 (BS-3): ITG provides Tier 1 support for all business applications.	✓					MAXIMUS Recommended Option
DOA provides Tier 2 and 3 support for DOA applications.		✓				
Office of Governor and Department of Revenue provide Tier 2 and 3 support for business applications.			✓	✓		
Option 4 (BS-4): Outsource Tier 1 support for all business applications.					✓	
DOA provides Tier 2 support for all business applications and Tier 3 support for DOA applications.		✓				
Office of Governor and Department of Revenue provide Tier 3 support for business applications.			✓	✓		

Exhibit 5-14: Organization Support Options (continued)

	ITG	DOA	Office of Governor	Dept of Revenue	Outsourcing	
Application Support						
<i>Provides business and technical support; application configuration and development; and application and user administration.</i>						
Option 1 (AS-1): Each business area provides application support resources to administer, manage, support, and develop their business systems.		✓	✓	✓		MAXIMUS Recommended Option
Option 2 (AS-2): DOA administers, manages, supports and develops ERP or best-fit applications.		✓				
Option 3 (AS-3): ITG administers, manages, supports and develops ERP or best-fit applications.	✓					
Option 4 (AS-4): Establish outsourcing agreement to administer, manage, support, and develop ERP or best-fit applications.				✓		
Infrastructure and Operations Support						
<i>Provides wide area network (WAN) architecture support, night operations (e.g., data backup, processing, disaster recovery, etc.), hardware maintenance and support, operating system maintenance and support, and database administration.</i>						
Option 1 (IOS-1): ITG supports statewide infrastructure and operations support for State of Alaska ERP or best-fit application.	✓					MAXIMUS Recommended Option
Option 2 (IOS-2): ITG supports statewide infrastructure support. Establish outsourcing agreement to support statewide operations support for State of Alaska ERP or best-fit applications.	✓			✓		

The support options are divided into three areas:

- Business Support – provides subject matter experts to support agency questions and maintain statewide data.
- Application Support – provides business and technical support including application configuration, software development, and application and user administration.
- Infrastructure and Operations Support – provides network support, data center operations support (e.g., night operations, disaster recovery, backup and recovery, nightly processing, etc.), database administration, and system administration.

Additionally, the business and application support areas are further defined in three tiers:

- **Tier 1** – receives call for assistance; logs call; routes call to appropriate technical or business unit; and follows up on open calls to ensure timely response. As a knowledge base of answers is developed, resolution of issues can be performed at this level. Examples of call resolution questions are: user timeout reset, how to run reports, where to find specific information, or how to tell where a document is within the approval process.
- **Tier 2** – responds to user technical or business question and logs response in call ticket. Examples of business call resolution questions include: how to process documents, what the business rules are related to a process, how to create a new funding source, or how to modify the agency workflow process. Examples of technical call resolution questions include: how to log on, how to access the network, slow response time, or how to print.
- **Tier 3** – responds to questions the business and technical subject matter experts cannot resolve. This may also involve determining how to configure a new application feature.

5.3.2. Service Delivery Alternative 1: Provide Services Internally

Under this alternative, the state continues to provide all business, application, and infrastructure support for either an ERP or best-fit systems alternative selected for the Statewide Administrative Systems Replacement Project.

5.3.2.1. Description

This alternative is characterized by the state retaining service delivery of the final systems / service mix for the systems replacement project. It is assumed that the

total level of business, applications, and infrastructure support services continue to be provided with state employees.

There are a number of support options the state should consider as it approaches a systems alternative. *Exhibit 5-14: Organization Support Options* shows four business support options, four application support options, and two infrastructure and operations support options. Of these options, three business support options (BS-1, BS-2, and BS-3), three application support options (AS-1, AS-2, and AS-3), and one infrastructure and operations support option (IOS-1) provide services internally.

To decide among these options, the state must answer the question, “Where should accountability for systems support reside?” A primary state goal is to improve service delivery efficiencies associated with the new administrative systems.

Service delivery options BS-1, AS-1, and IOS-1 represent the way the state currently organizes service delivery. Each functional division within the Department of Administration, the Department of Revenue and the Office of the Governor provide tier 1-3 business and application support for their respective enterprise applications. ITG provides infrastructure and operations support for these applications. This organization of support ties primary accountability to the divisions providing the service. This principle should be maintained under this service delivery alternative.

However, as the state starts to bring up new systems, problems and their analysis will challenge the user community and service providers. Problems will be different from those presently encountered and will demand formal tracking to ensure they are properly addressed, systematically solved, and corporate knowledge is enhanced to improve service delivery. Initially, new systems go through a stage of stabilization once they are implemented. This stabilization period is critical to the user community confidence in the new system, and avoidance of long-term dissatisfaction with untimely problem resolution.

Business Support Services

Therefore, if the state chooses *Service Delivery Alternative 1: Provide Services Internally*, MAXIMUS recommends the state slightly modify its service delivery to consolidate some resources to capture problem identification and track resolution. **Business support should be modified to the BS-3 option.** ITG should become the single official source of tier 1 support for administrative systems. As stated above in the discussion of tier 1 services, ITG resources will be provided to receive and log calls; route the calls to the appropriate technical or business unit for assistance; and follow up on open calls to ensure timely response. Respective business divisions will continue to provide tier 2-3 support.

Although the state could outsource tier 1 support, this adds external costs the state does not presently incur and it is doubtful the cost could be recovered by increased efficiencies or reduction of staff.

Application Support Services

Likewise, if the state chooses *Service Delivery Alternative 1: Provide Services Internally*, MAXIMUS recommends the state maintain its present service delivery for tier 2 application support. **AS-1 is the best option to tie primary accountability for application support to the divisions providing the service.** Some level of consolidation may be desired for tier 3 support because of the specialized skills required for systems configuration. This is particularly true for database and interface changes. The project team for the Statewide Administrative Systems Replacement Project will be the best source to analyze this as the project develops and implementations occur. This cross-functional team will be able to make highly effective recommendations for long-term tier 3 application support services as applications are implemented.

Infrastructure and Operations Support Services

Finally, if the state chooses *Service Delivery Alternative 1: Provide Services Internally*, MAXIMUS recommends the state maintain its present service delivery for infrastructure and operation support. **ISO-1 is the best option to maintain technical support for the infrastructure and operation support of the new administrative systems.** The state should avoid diluting the effectiveness and availability of specialized technical support for these administrative applications by assigning resources directly to functional divisions.

5.3.2.2. Benefits

The state retains the ability to adapt the systems and services to changing business requirements. The state's administrative services are driven by the political processes of the state as codified in the laws and regulations it adopts. These are controlled on an as-needed basis and subject to change annually. By retaining the business, application, and infrastructure support aspects of its administrative systems, the state retains the maximum flexibility in adapting its systems to legislative or regulatory changes.

Related to the benefit of adapting its systems as needed, the state would also have the flexibility to increase or postpone investments in administrative systems as events drive its capacity for change or budgetary limitations arise. The state can continue to maintain its COTS systems at vendor recommended upgrade schedules, or postpone upgrades based upon its capacity for change or budget limitations.

5.3.2.3. Risks

Although administrative systems are critical to the state, they are not a core business function for the state. Therefore, reinvestment into support and maintenance must continually compete with core business functions like health, safety, transportation, and resource development.

The state will continue to experience difficulties in acquiring and retaining the workforce with specialized skills to support its administrative systems. The age of its workforce with COBOL skills needed to maintain AKSAS and AKPAY systems is a critical factor in the state's requirement to change systems. The state's present employees with these skills are rapidly approaching retirement age. The supply of newer workforce to replace them is limited by the choice of technical workers not to become trained in COBOL because it is seen as a niche skill with limited growth and marketability. However, this is just an example of a driver to move to other technologies. A basic fact remains that the market for technical skills is limited for Alaska because of its geography and population base. This affects the management, development, operations, and maintenance aspects of any automation technologies the state selects.

The state will not be able to take advantage of additional economies of scale associated with sharing systems support or infrastructure costs with other organizations. The state will maintain all support and infrastructure costs internally for the new systems.

5.3.2.4. Costs

Our internal services structure costs center on technical and business support staff to manage and maintain Alaska's administrative systems and are presented in ***Exhibit 5-15: Internal Service Structure Costs.***

Exhibit 5-15: Internal Service Structure Costs

Category	Workers	FY08	FY09	FY10	FY11	FY12	FY13	TOTAL
Application Software Maintenance		\$ 1,266,106	\$ 422,035	\$ 422,035	\$ 422,035	\$ 422,035	\$ 422,035	\$ 3,376,282
Hardware / Software / Tools Maintenance		\$ 500,340	\$ 500,340	\$ 500,340	\$ 500,340	\$ 500,340	\$ 500,340	\$ 3,002,040
Hardware Every 3 Year Replacement Factor		\$ 1,793,500	\$ -	\$ 1,793,500	\$ -	\$ 1,793,500	\$ -	\$ 5,380,500
Software Every 2 Year Upgrade Factor		\$ -	\$ 58,905	\$ -	\$ 58,905	\$ -	\$ 58,905	\$ 176,715
Facility		\$ 375,000	\$ 386,250	\$ 397,838	\$ 409,773	\$ 422,066	\$ 434,728	\$ 2,425,654
Operations	6	\$ 407,209	\$ 419,425	\$ 432,008	\$ 444,968	\$ 458,317	\$ 472,067	\$ 2,633,995
Application Support / SME	8	\$ 715,824	\$ 921,623	\$ 949,272	\$ 977,750	\$ 1,007,082	\$ 1,037,295	\$ 5,608,845
Infrastructure / DBA	4	\$ 388,526	\$ 400,181	\$ 412,187	\$ 424,552	\$ 437,289	\$ 450,408	\$ 2,513,143
Training	2	\$ 135,736	\$ 139,808	\$ 144,003	\$ 148,323	\$ 152,772	\$ 157,356	\$ 877,998
Call Center	5	\$ 254,928	\$ 262,576	\$ 270,453	\$ 278,566	\$ 286,923	\$ 295,531	\$ 1,648,977
Management	5	\$ 562,754	\$ 579,637	\$ 597,026	\$ 614,937	\$ 633,385	\$ 652,387	\$ 3,640,126
Total	30	\$ 6,399,923	\$ 4,090,781	\$ 5,918,661	\$ 4,280,150	\$ 6,113,711	\$ 4,481,051	\$ 31,284,276

5.3.2.5. Timeframes

There are minimal timeframe inhibitors associated with this alternative. Installation of hardware and software, process and staff development, and service delivery definition is built into the implementation work plan and integrated into the change management process of the Statewide Administrative Systems Replacement Project.

5.3.2.6. Strategies

The following strategies are essential for successful completion of this alternative:

- **Technical Staff Development** – Developing a rigorous technical training program and continuing to invest in skill development is required to achieve success.
- **Planning for Technical Assistance** – Additional consulting resources are required until state staff is appropriately trained and ready to assume full responsibility for managing the systems.
- **Organizational Change Management** – Changes associated with service delivery must be managed within the overall change management strategy of the project.

5.3.3. Service Delivery Alternative 2: Government Service Bureau Outsourcing

Under this alternative, the state continues to provide some business support services, but obtains application and infrastructure support for the selected systems alternative from a government service bureau.

5.3.3.1. Description

A government service bureau outsourcing alternative is characterized by the state creating and managing a bureau to provide technology and application support services for the state and other Alaska government entities. This alternative requires cooperative management among all the government entities involved. This alternative has similar characteristics of private sector outsourcing, except a state funded and managed bureau provides the services. Through the bureau the state provides administrative system (ERP) support services for Alaska cities and municipalities that desire the capabilities of an ERP system, but cannot afford the long-term commitment of technical and business support staff, as well as infrastructure costs. Charging for services generates revenue and covers costs of operating the bureau. A requirement of the alternative is the use of the state selected administrative systems solution (i.e., all the customers would use the same software).

The service bureau is established to provide the administrative systems service and support for selected administrative and data warehouse systems. Aspects of this service bureau concept are:

- **Define the service bureau’s purpose and strategic objectives.** Define the specific products and services the bureau provides. The products provided are identified as the result of the state’s RFP process for the State of Alaska Statewide Administrative Systems Replacement Project. The creation of the bureau and service definition need to be accomplished prior to the implementation to support project activities. Defining the bureau’s structure includes creating a vision and charter that establishes the goals, objectives, reporting structure, and governing operations of the bureau.
- **Establish the organization and management structures of the service bureau.** The state and its service bureau partners establish a governing body or council by appointed representation. This council is responsible for establishing the goals, objectives, and policy governing the bureau. The board is also responsible for hiring a bureau director who leads and directs the bureau’s business practices and services.
- **Create a statement of service, service levels, and charge structure.** The service bureau must establish specific statements of services, the service level offerings associated with those services (e.g., problem resolution response time, system availability, disaster recovery, etc.), and the structure for charging members.
- **Define a services measurement charter.** Participating government entities must be able to monitor and measure the service level agreements with the service bureau. The charter defines the measurement

mechanisms, reporting structure, and escalation process for managing results.

During a recent visit to the Municipality of Anchorage, a framework similar to this option was discussed. The Municipality of Anchorage established administrative systems in late 1998 similar to those being assessed as part of the Statewide Administrative Systems Replacement Project. Members of the municipality's finance, personnel, procurement, and information systems areas expressed interest in the concept of a joint state – Anchorage effort to provide administrative system services. The thought is that both organizations, plus other city and government agencies, could reduce costs and benefit by having personnel, hardware, software, network, and facility resources established under a single organization.

This alternative deserves consideration by the state. While the alternative presents additional complexities in creating, managing, and funding a government bureau to provide such services, it may provide opportunities to Alaska municipalities, cities, and agencies to obtain integrated administrative services that could not otherwise be afforded. Forming a service bureau takes time and could be accomplished by a July 1, 2004 implementation start with focused effort.

Business Support Services

Therefore, if the state chooses ***Service Delivery Alternative 2: Government Service Bureau Outsourcing***, MAXIMUS recommends the state slightly modify its service delivery to consolidate some resources to capture problem identification and track resolution. **Business support should be modified to the BS-3 option.** ITG should become the single official source of tier 1 support for administrative systems. As stated above in the discussion of tier 1 services, ITG resources will receive and log calls; route the calls to the appropriate technical or business unit for assistance; and follow up on open calls to ensure timely response. Respective business divisions will continue to provide tier 2-3 support. Although the state could outsource tier 1 support as is indicated in the BS-4 option, this adds external costs the state does not presently have and it is doubtful the costs could be recovered by increased efficiencies or reduction of staff.

Application Support Services

Likewise, if the state chooses ***Service Delivery Alternative 2: Government Service Bureau Outsourcing***, MAXIMUS recommends the state maintain its present service delivery for tier 2 application support. **AS-4 is the best option to tie primary accountability for application support to the service bureau providing the service.** Tier 3 support for the administrative systems must be consolidated because of the specialized skills required for systems configuration. This is particularly true for database and interface changes.

Infrastructure and Operations Support Services

Finally, if the state chooses ***Service Delivery Alternative 2: Government Service Bureau Outsourcing***, MAXIMUS recommends the state maintain its present service delivery for infrastructure and operations support through ITG, but allow the service bureau to provide infrastructure and operations support for the applications that are part of its service offering. **ISO-2 is the best option to maintain technical support for the infrastructure and operations support of the new administrative systems.** The state should avoid diluting the effectiveness and availability of specialized technical support for these administrative applications by assigning resources directly to functional divisions.

5.3.3.2. Benefits

Resources can be consolidated to focus on skills and technologies necessary to meet the administrative systems requirements. The product mix of administrative systems goods and services can be concentrated and defined to meet the needs of service bureau members. Systems and personnel resources can be placed in the best location to achieve the service bureau's objectives. Facilities for hardware and software can be located where they can best be maintained. Fault tolerance and disaster recovery can be engineered into the service delivery because of the economies of scale associated with the importance, size, and scope of the services.

The state can maximize retaining Alaska's government expenditure within the state. New systems and infrastructure continue to be acquired from traditional sources; however, expenditure for personnel costs can be maintained within Alaska.

The service bureau maintains flexibility to commercially outsource any aspect of services offered. Service bureau staff and members could continuously evaluate the possibility of commercially outsourcing aspects of the bureau's support and service as market and economic conditions evolve.

A broad range of Alaska's state and local agencies have access to state-of-the-art technologies for administrative system needs. Other Alaska government entities have the opportunity to derive benefit from administrative system applications and technologies that they might not otherwise have. Examples of these technologies include: enterprise application, enterprise data, self-service features, workflows, portals, data warehouse, fault tolerance, and disaster recovery.

The service bureau has the ability to adapt systems and services to changing business requirements. As the needs of member organizations change, the bureau has the capability to adapt to these changing needs.

Service bureau members have the flexibility to increase or postpone investments in administrative systems as events drive their capacity for change or budgetary limitations arise. The service bureau continues to maintain its COTS systems at vendor recommended upgrade schedules, or postpone upgrades based upon the capacity for change or budget limitations of members.

5.3.3.3. Risks

Acquiring and maintaining executive, legislative, and entity support for ongoing funding is challenging. This service delivery option is as time consuming as commercial outsourcing because the expectations and relationships between diverse organizations must be defined and negotiated. The service bureau is responsible for managing a significant investment for the state and other member organizations. The costs, length of implementation time, and member expectations require political processes and commitment.

Obtaining buy-in and commitment from state agencies and other government entities. Administrative systems affect business processes of the state and other government organizations. As a result, every participating member acquiring bureau services is impacted by decisions each organization makes. For example, if customized code is developed for a government entity this may impact the ability of the bureau to provide software upgrades.

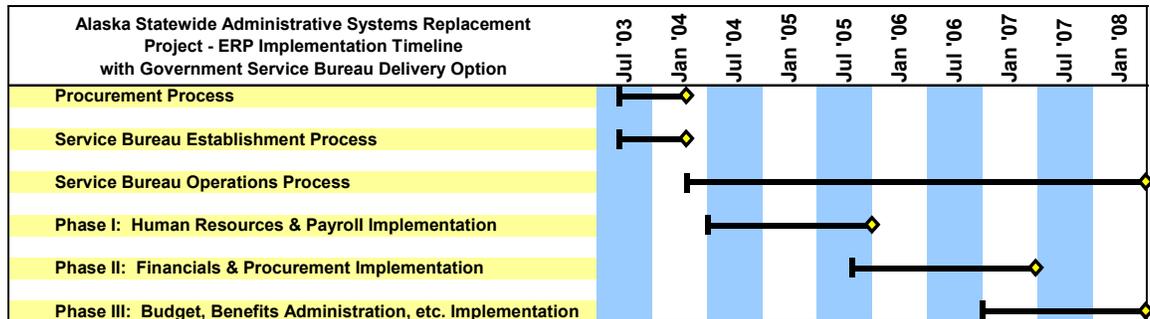
5.3.3.4. Costs

The cost of establishing a state operated service bureau is similar to that of internally supporting the statewide administrative systems. Additionally, an effort to establish the organization and the relationships to its service recipients is similar to the effort to negotiate the relationship with an external service provider. The real benefit to incurring this additional cost is the opportunity to share hardware and overhead costs with a broader user base. The state would also be able to provide a service to other municipalities and government entities they might not be able to afford were it not for the state's initial investment in a system implementation.

5.3.3.5. Timeframes

Additional detailed project tasks will be defined to establish the service bureau and allocate resources for its development and operations. However, it is anticipated this effort will occur while the procurement process is ongoing. By the time systems are purchased and begin to be configured, the service bureau should have been established with sufficient site preparations completed to house the initial system development. ***Exhibit 5-16: Timeframes for Government Service Bureau*** shows the expected timeline for this option.

Exhibit 5-16: Timeframes for Government Service Bureau



5.3.3.6. Strategies

The following strategies are essential to successful completion of this alternative:

- **Agreement Facilitation** – An individual should be identified to facilitate the consensus-building activities that need to occur in establishing the service bureau. Assuming the state and Municipality of Anchorage are the first government organizations to participate, the facilitator must be trusted by both organizations to work through issues fairly in establishing the service bureau. This individual must also work closely with the Statewide Administrative Systems Replacement Project to understand the scope and strategies of the project, and the capabilities of the administrative systems being procured.
- **Continued Agency Commitment and Support** – Agencies must support the concept of a service bureau and commit to transitioning internal administrative systems to the system(s) maintained by the bureau for the state to realize potential cost savings.
- **Organizational Change Management** – Changes associated with service delivery must be managed within the overall change management strategy of the project.

5.3.4. Service Delivery Alternative 3: Private Sector Outsourcing

Under this alternative, the state continues to provide some business support services, but obtains application and infrastructure support for the selected systems alternative from a commercial application service provider.

5.3.4.1. Description

This alternative is characterized by the state obtaining service delivery of the final systems / service mix for the systems replacement project through a commercial

application service provider. It is assumed that some level of business support is retained within the various state agencies; however, a contracted vendor whose service is especially designed to deliver administrative systems services provides application and infrastructure and operations support services.

There are several reasons the state might choose to outsource portions of its statewide administrative systems. These reasons include the ability to:

- Enable a skilled and experienced government workforce to focus on mission critical tasks and activities, while relying on a contractor whose core business is providing administrative systems services;
- Acquire new skills necessary to operate the systems without having to define, classify, hire, compensate, and manage those human resources;
- Limit the risks associated with establishing new technologies within the organization;
- Explore the opportunity to achieve cost saving; and
- Deliver greater valued services.

The level to which the state can achieve these objectives is dependent upon the relationship it negotiates with a commercial service provider. The service provider could do as little as operate and manage the administrative system's infrastructure, or as much as provide the state complete outsourced services where system users simply log onto the service provider's systems. The degree to which the state outsources the service is dependent upon what assets the state wishes to retain during and after the contract. The state must decide what portions of the service delivery infrastructure it retains. This is important because it determines available options should the state seek to change its relationship with the service provider. In each alternative, the state owns the data, data structures, and processes. Listed below are the infrastructure ownership options available to the state:

- **Software ownership** deals with who owns software licenses for the administrative systems. For ERP software products, the state is required to license the software directly. For best-fit software that is not ERP in nature, the state may be able to utilize software licensed by the service provider. This can only be determined through negotiations between the state, its commercial service provider, and the vendor of the administrative systems software solution. However, MAXIMUS believes that the state's risk management would be best served by this ownership alternative, and therefore recommends that the state own the license(s) to use the software products for its administrative systems solutions. The vendor provides

hardware, operating software, and operating facilities services as part of the outsourcing agreement.

- **System ownership** deals with who owns hardware and operating system licenses for the administrative systems. In this option, the state chooses to own the complete system. Ownership at this level reduces the risk when the state changes its relationship with the service provider. However, if this risk is not significant to the state, allowing the vendor to provide this as a part of the overall service could provide an opportunity to reduce the state's cost through resource sharing. In this option, the state owns the hardware and operating software. The vendor provides operating facilities services as part of the outsourcing agreement.

- **Infrastructure ownership** deals with who owns facilities housing the administrative systems. In this option the state chooses to own the complete infrastructure. Ownership at this level offers the least risk when the state changes its relationship with the service provider. However, this option provides the vendor the least degree of freedom to provide reduced costs to the state through resource sharing. In this option, the state owns hardware, operating software, and operating facilities. The vendor provides human resources as part of the outsourcing agreement.

Exhibit 5-17: Outsourcing Ownership Models shows a matrix of the state’s ownership options associated with the statewide administrative systems solution:

Exhibit 5-17: Outsourcing Ownership Models

	Alaska	Service Provider
Software Ownership		
Software & Databases	✓	
Hardware & Operating Software		✓
Operating Facilities		✓
System Ownership		
Software & Databases	✓	
Hardware & Operating Software	✓	
Operating Facilities		✓
Infrastructure Ownership		
Software & Databases	✓	
Hardware & Operating Software	✓	
Operating Facilities	✓	

Business Support Services

Therefore, if the state chooses *Service Delivery Alternative 3: Private Sector Outsourcing*, MAXIMUS recommends the state slightly modify its service delivery to consolidate some resources to capture problem identification and track their resolution. **Business support should be modified to the BS-3 option.** ITG should become the single official source of tier 1 support for administrative systems. As stated above in the discussion of tier 1 services, ITG resources will receive and log calls; route the calls to the appropriate technical or business unit for assistance; and follow up on open calls to ensure timely response. Respective business divisions would provide tier 2-3 support. The state could explore outsourcing tier 1 support as indicated in the BS-4 option of the outsourcing effort, and decide to elect or reject this service based upon contract negotiations.

Application Support Services

Likewise, if the state chooses *Service Delivery Alternative 3: Private Sector Outsourcing*, MAXIMUS recommends the state retain tier 2–3 application support. This provides the state with the internal corporate skills necessary to

support the user community. Without these skills, the state does not have the capability for effectively supporting its administrative systems and no option to internally operate these systems in the future.

Infrastructure and Operations Support Services

Finally, if the state chooses ***Service Delivery Alternative 3: Private Sector Outsourcing***, MAXIMUS recommends the state explore the possibility of providing infrastructure and operations support through the service provider. The service provider should be able to provide acceptable levels of support to maintain technical support for the infrastructure and operations support of the new administrative systems.

(The RFP should be issued with an option to evaluate ongoing support for statewide administrative systems through external application services supplied by commercially available outsourcing resources. During the procurement process, the state has an opportunity to complete an internal assessment for supporting the new systems, while the solicitation process provides data to evaluate costs, service level capabilities, and risks of both alternatives. The outcome of the internal evaluation and solicitation of IT outsourcing of support services will determine whether outsourcing the technology service delivery is viable and merits the effort required to develop the relationship based upon principles provided in *Appendix G: Outsourcing IT Services Contracts*. If outsourcing is not viable, then MAXIMUS recommends Service Delivery Alternative 1 – Retain in Government Structure.)

5.3.4.2. Benefits

The state can obtain effective services from companies whose “Core Business” is providing administrative systems services. The state can focus on its core service functions, while obtaining administrative systems services from a commercial provider focused on this service delivery.

The state can minimize its risk of bringing up and maintaining the new systems by contracting for the level of service it deems necessary for effectiveness. New systems and technologies are risky propositions for any organization. By contracting for services from a provider with established service delivery, the state minimizes the skills acquisition and systems configuration risks associated with new system implementations.

Administrative system services can potentially be provided at lower costs and/or with a higher quality of service to the state. Service providers with the maximum degree of freedom at configuring resources for service delivery can potentially provide those services at a lower cost. Also, the service providers can provide greater access to specialized skills that can improve the quality of service on a timely and consistent basis. For example, specialized skills required to extend database and portal services can be provided as an option of the contract

and initiated through a statement of work, definition of deliverables, and an agreement on schedule of costs.

The service provider contract can be modified to changing business requirements. As administrative systems needs of the state change, the contract with the service provider can be modified to adapt to these changing needs.

5.3.4.3. Risks

Establishing a contract providing oversight and management for outsourcing can be extensive. Outsourcing contracts with this alternative can take several months to negotiate. This timeframe is necessary to ensure that the outsourcing relationship and all its provisions are properly documented and understood. *Appendix G: Outsourcing IT Services Contracts* contains detailed information necessary to define and manage an outsourcing relationship.

An outsourcing relationship makes the state vulnerable to the commercial interests of the outsourcing vendor. Because the state is dependent on an external organization for a critical service, it must carefully evaluate various aspects of the service provider. These aspects include: its core business and how it relates to the service being provided; its track record of performance and resource configuration of similar services; its financial capability to perform the service; and the stability and experience of its management team. Changes in the vendor's resource availability, market direction, and ownership can affect the vendor's ability to provide the quality of service the state requires.

There is limited flexibility in funding for essential services. The state has no flexibility in funding the cost of core services in the contract. Funding for transactional costs or monthly services fees based upon usage will be required for payment. Flexibility is only available for extended or optional services. Extended services might be for system and software upgrades or systems tuning, while optional services could be for enhancements or value added services.

The state runs political risks in the perception of outsourcing and in its implementation. To state government employees, outsourcing is seen as an attack on current jobs. Also, MAXIMUS has found recent research that there is a strong movement for outsourcers to attempt to decrease costs by providing technical labor from cheaper, non-U.S. labor markets. Outsourcers are obtaining technical resources in India and eastern European countries. We believe that the state must be aware of this potential when considering outsourcing. This practice in implementation presents a political risk of the perception of having state dollars supporting a foreign workforce.

5.3.4.4. Costs

The following exhibits provide breakouts of implementation and maintenance costs beginning FY05 through FY13. The three-phased implementation begins in FY05 and is completed in FY08.

Exhibit 5-18: Outsource ERP Implementation Budget Projection considers factors such as state and contractor resources, software licenses, maintenance, and service provider costs. Maintenance costs for software begins FY06, with state resources transferred from project to maintenance costs beginning FY08.

Exhibit 5-19: Outsource ERP Multi-Year Budget Projection summarizes the implementation and ongoing maintenance costs through FY13. Maintenance and application service provider costs includes:

- ERP annual software maintenance fee;
- Supporting software maintenance fees and every second year upgrade costs (database, utilities, etc.);
- Application service provider fees including:
 - Management and hosting fees to support applications including: financials application management and support (general ledger, accounts payable, accounts receivable, fixed assets, inventory, and cash management), human resources (human resources, benefits administration, payroll, time and labor), budgets, and business planning software support;
 - Application management – batch process management, problem troubleshooting, patch and fix maintenance, management status reporting;
 - Infrastructure support – database, application, Web server support including 24 x 7 monitoring, security management, backup and offsite storage;
 - Configuration support for the application software; and
 - Database administration support – capacity planning, database and application tuning, database refreshes, and patch support.
- State resource positions allotted to supporting the administrative systems include:
 - Two trainers; and
 - Five call center staff.

**Exhibit 5-18: Outsource ERP Implementation
Budget Projection**

	FY05	FY06	FY07	FY08	TOTAL
STATE RESOURCES					
Stakeholders	\$ 173,040	\$ 178,231	\$ 183,578	\$ 193,988	\$ 728,838
Project Management	\$ 116,390	\$ 119,882	\$ 123,478	\$ 130,480	\$ 490,230
Administration	\$ 49,131	\$ 50,605	\$ 52,123	\$ 41,309	\$ 193,168
Subject Matter Experts	\$ 420,240	\$ 721,412	\$ 743,054	\$ 157,038	\$ 2,041,744
Acceptance Testers	\$ 70,040	\$ 216,424	\$ 222,916	\$ 78,519	\$ 587,899
Communications	\$ 38,574	\$ 56,758	\$ 29,230	\$ 30,888	\$ 155,450
Training	\$ 86,953	\$ 319,861	\$ 329,457	\$ 69,628	\$ 805,899
Agency Change Management Agents	\$ 292,520	\$ 301,296	\$ 310,334	\$ 196,760	\$ 1,100,910
Application Development / Configuration	\$ 327,540	\$ 674,732	\$ 694,974	\$ -	\$ 1,697,247
Infrastructure and DBA	\$ 177,778	\$ 183,111	\$ 188,605	\$ -	\$ 549,494
Operations	\$ 43,476	\$ 63,972	\$ 65,891	\$ -	\$ 173,340
Help Desk / Call Center	\$ 32,661	\$ 144,176	\$ 148,502	\$ -	\$ 325,339
Total	\$ 1,828,343	\$ 3,030,461	\$ 3,092,144	\$ 898,610	\$ 8,849,558
CONSULTING					
Independent Quality Assurance	\$ 734,864	\$ 756,910	\$ 647,113	\$ 551,397	\$ 2,690,284
Data Warehouse Consulting Services	\$ 151,351	\$ 155,891	\$ 159,933	\$ -	\$ 467,175
Total	\$ 886,214	\$ 912,801	\$ 807,046	\$ 551,397	\$ 3,157,459
IMPLEMENTATION VENDOR					
Project Management	\$ 562,874	\$ 579,761	\$ 594,793	\$ 633,520	\$ 2,370,948
Project Administration	\$ 271,014	\$ 279,144	\$ 286,382	\$ 305,028	\$ 1,141,568
Infrastructure / Operations Readiness	\$ 375,250	\$ -	\$ -	\$ -	\$ 375,250
Organization / Agency Change Management Advocacy	\$ 354,402	\$ 365,034	\$ 374,499	\$ 398,883	\$ 1,492,819
Training and Documentation	\$ 312,708	\$ 966,268	\$ 991,322	\$ 703,911	\$ 2,974,209
Total	\$ 1,876,248	\$ 2,190,207	\$ 2,246,996	\$ 2,041,343	\$ 8,354,794
FINANCIALS / CASH MANAGEMENT					
Total	\$ 240,785	\$ 2,855,858	\$ 5,661,550	\$ -	\$ 8,758,193
PAYROLL					
Total	\$ 2,840,431	\$ 2,009,837	\$ -	\$ -	\$ 4,850,268
HUMAN RESOURCES					
Total	\$ 2,532,935	\$ 4,015,379	\$ 2,246,996	\$ -	\$ 8,795,310
PURCHASING / LEASE AND PROPERTY MGT					
Total	\$ -	\$ 1,773,638	\$ 2,599,466	\$ -	\$ 4,373,104
BUDGET MANAGEMENT / RETIREMENT					
Total	\$ -	\$ -	\$ 2,749,266	\$ 3,379,442	\$ 6,128,708
DEPARTMENT OF TRANSPORTATION PROJECT ACCOUNTING					
Design	\$ 562,874	\$ 579,761	\$ 594,793	\$ -	\$ 1,737,428
Development and Testing	\$ -	\$ 811,665	\$ 1,189,586	\$ -	\$ 2,001,251
Integration / Implementation Support	\$ -	\$ 255,524	\$ -	\$ -	\$ 255,524
Total	\$ 562,874	\$ 1,646,950	\$ 1,784,379	\$ -	\$ 3,994,204
Application Service Provider Costs					
Application Software					
ERP Software Licence Fees	\$ 2,610,000	\$ 1,697,980	\$ 399,500	\$ -	\$ 4,707,480
Total	\$ 2,610,000	\$ 1,697,980	\$ 399,500	\$ -	\$ 4,707,480
Other					
Database Software	\$ 960,000	\$ -	\$ -	\$ -	\$ 960,000
Internet Server	\$ -	\$ -	\$ -	\$ -	\$ -
S/W Maintenance Fee	\$ -	\$ 785,400	\$ 1,158,956	\$ 1,246,846	\$ 3,191,201
Administrative and Computer Services Fee	\$ 816,000	\$ 1,632,000	\$ 2,040,000	\$ 2,040,000	\$ 6,528,000
Total	\$ 1,776,000	\$ 2,417,400	\$ 3,198,956	\$ 3,286,846	\$ 10,679,201
MAINTENANCE					
Training	\$ -	\$ -	\$ -	\$ 135,736	\$ 135,736
Call Center	\$ -	\$ -	\$ -	\$ 254,928	\$ 254,928
Total	\$ -	\$ -	\$ -	\$ 390,664	\$ 390,664
OTHER PROJECT COSTS					
Project Facility Setup / Operations Costs	\$ 100,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 130,000
Project Workstation / Printers / Other Equipment	\$ 90,000	\$ 24,000	\$ 24,000	\$ 24,000	\$ 162,000
Project Supplies / Paper / Etc.	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 120,000
State Project Travel	\$ 43,200	\$ 43,200	\$ 43,200	\$ 43,200	\$ 172,800
Training Facilities Setup / Operations Costs	\$ 555,000	\$ 180,000	\$ 180,000	\$ 180,000	\$ 1,095,000
Project Contingency (15%)	\$ 2,129,405	\$ 3,063,047	\$ 3,281,182	\$ 1,073,699	\$ 9,547,332
Total	\$ 2,947,605	\$ 3,350,247	\$ 3,568,382	\$ 1,360,899	\$ 11,227,132

**Exhibit 5-18: Outsource ERP Implementation
Budget Projection (continued)**

	FY05	FY06	FY07	FY08	TOTAL
GRAND TOTALS					
State Resources	\$ 1,828,343	\$ 3,030,461	\$ 3,092,144	\$ 898,610	\$ 8,849,558
Independent QA/Data Warehouse Services	\$ 886,214	\$ 912,801	\$ 807,046	\$ 551,397	\$ 3,157,459
Implementation Vendor Services	\$ 7,490,399	\$ 12,844,919	\$ 15,504,275	\$ 5,420,784	\$ 41,260,377
Transportation Project Accounting	\$ 562,874	\$ 1,646,950	\$ 1,784,379	\$ -	\$ 3,994,204
Application Software	\$ 2,610,000	\$ 1,697,980	\$ 399,500	\$ -	\$ 4,707,480
Other	\$ 1,776,000	\$ 2,417,400	\$ 3,198,956	\$ 3,286,846	\$ 10,679,201
Maintenance	\$ -	\$ -	\$ -	\$ 390,664	\$ 390,664
Other Project Costs	\$ 2,947,605	\$ 3,350,247	\$ 3,568,382	\$ 1,360,899	\$ 11,227,132
Grand Total	\$ 18,101,435	\$ 25,900,757	\$ 28,354,682	\$ 11,909,200	\$ 84,266,074

Exhibit 5-19: Outsource ERP Multi-Year Budget Projection

Category	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	TOTAL
IMPLEMENTATION SERVICES										
State Resources	\$ 1,828,343	\$ 3,030,461	\$ 3,092,144	\$ 898,610	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,849,558
Independent PM/QA	\$ 734,864	\$ 756,910	\$ 647,113	\$ 551,397	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,690,284
Data Warehouse Consulting Services	\$ 151,351	\$ 155,891	\$ 159,933	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 467,175
Transporation Project Accounting	\$ 562,874	\$ 1,646,950	\$ 1,784,379	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,994,204
Implementation Vendor Services	\$ 7,490,399	\$ 12,844,919	\$ 15,504,275	\$ 5,420,784	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,260,377
IMPLEMENTATION SERVICES TOTAL	\$ 10,767,831	\$ 18,435,130	\$ 21,187,845	\$ 6,870,791	\$ -	\$ 57,261,597				
ASP Implementation Software and Services	\$ 2,610,000	\$ 1,697,980	\$ 399,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,707,480
Project Facility Setup / Operations Costs	\$ 100,000	\$ 10,000	\$ 10,000	\$ 10,000						\$ 130,000
Project Workstation / Printers / Other Equipment	\$ 90,000	\$ 24,000	\$ 24,000	\$ 24,000						\$ 162,000
Project Supplies / Paper / Etc.	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000						\$ 120,000
State Project Travel	\$ 43,200	\$ 43,200	\$ 43,200	\$ 43,200						\$ 172,800
Training Facilities Setup / Operations Costs	\$ 555,000	\$ 180,000	\$ 180,000	\$ 180,000						\$ 1,095,000
Project Contingency (15%)	\$ 2,129,405	\$ 3,063,047	\$ 3,281,182	\$ 1,073,699						\$ 9,547,332
State Maintenance Staff Costs	\$ 1,776,000	\$ -	\$ -	\$ 390,664	\$ 402,384	\$ 414,456	\$ 426,889	\$ 439,696	\$ 452,887	\$ 4,302,976
ASP Services		\$ 2,417,400	\$ 3,198,956	\$ 3,286,846	\$ 3,286,846	\$ 3,286,846	\$ 3,348,046	\$ 3,348,046	\$ 3,348,046	\$ 25,521,029
FY Total	\$ 18,101,435	\$ 25,900,757	\$ 28,354,682	\$ 11,909,200	\$ 3,689,230	\$ 3,701,301	\$ 3,774,935	\$ 3,787,741	\$ 3,800,932	\$ 103,020,214

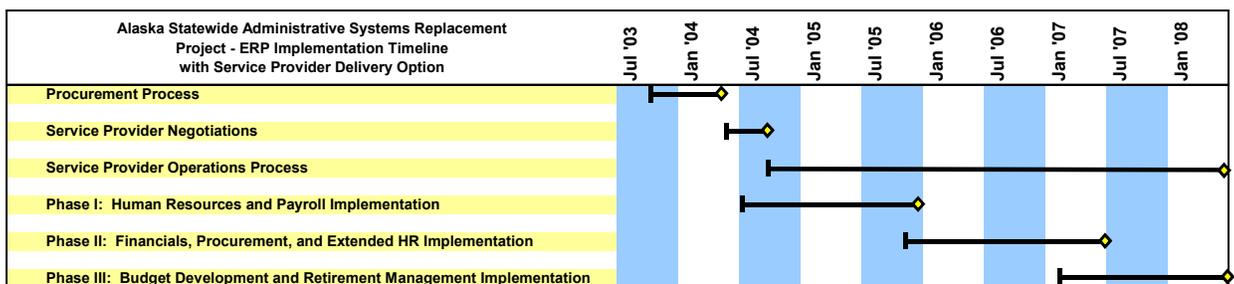
Provisions, Constraints, Limitations, or Other Controls

The state must be aware that any cost savings it anticipates through outsourcing is directly related to the degree of freedom the service provider has to determine the best mix of resources and locations of resources for providing the desired service. The service provider has the option of sharing cost savings achieved through efficiencies, location of services, cost of personnel, and any economies of scale achieved through configuring services delivery. The greater the number and extent of contract provisions, constraints, limitations, or other controls, the more adverse effect on cost savings. If cost savings are a driving factor to outsource, the greatest degree of freedom in configuring resources must be provided outsourcing vendors.

5.3.4.5. Timeframes

Previous timelines assume the time required for product selection. This alternative requires additional time to negotiate the various aspects of the receiver-provider relationship: scope of services, communications, service levels, and termination. MAXIMUS understands that the more complex the relationship, the more time required for communications and negotiation. Therefore, the procurement process is likely to take three additional months. This additional time is labeled below as *Service Provider Negotiations* and can occur during preliminary analysis and configuration processes. Although it is possible that the overall project timeline may not be affected by this additional effort, it will require additional effort and staffing from the state’s perspective. *Appendix G: Outsourcing IT Services Contracts* contains detailed information necessary to define and manage the outsourcing relationship. *Exhibit 5-20: Timeframes for Private Sector Outsourcing Service Structure* shows the effects of this alternative on the overall project timeline.

Exhibit 5-20: Timeframes for Private Sector Outsourcing Service Structure



5.3.4.6. Strategies

- **Outsourcing Contract Development** – The effort involved in outsourcing of significant services should not be underestimated. Adherence to the strategies and practices defined in *Appendix G: Outsourcing IT Services Contracts* is essential to the effective definition of the relationship the state requires with its outsourcing service provider.
- **Continued Agency Commitment and Support** – Agencies must support the use of a service provider and commit to transitioning internal administrative systems to the system(s) maintained by the vendor for the state to realize effective systems and any potential cost savings.
- **Organizational Change Management** – Changes associated with service delivery must be managed within the overall change management strategy of the project.

5.3.5. Service Delivery Alternative 4: Total Business Process Outsourcing

Section 5.3.4. Service Delivery Alternative 3: Private Sector Outsourcing introduced outsourcing application and infrastructure services that support the state’s administrative systems, with the state retaining ownership of managing and providing the business activities. This section explores the feasibility of the state outsourcing entire administrative business processes.

5.3.5.1. Description

Business Process Outsourcing, what is it and why would Alaska consider this approach for providing state administrative functions?

Outsourcing of services in the public and private sectors began roughly 40 years ago. In the government arena, outsourcing has been predominantly accomplished in the Information Technology (IT) service area, or in areas that make use of fiscal agent vendors to operate traditional government functions such as claims processing or provider relations (e.g. Medicaid Management Information Systems (MMIS), child support collections, and managed care services). The State of Florida is the only statewide government entity engaged in a project to outsource all of the functions of a state administrative service area, human resources, with the state retaining only policy decision-making.

Some examples of Business Process Outsourcing (BPO) alternatives are:

- **Full Service BPO.** Outsources **all** key processes with the exception of strategy and policy to a vendor to provide services that are traditionally being provided by state employees. While a vendor performs the business