Enterprise Resource Planning System Feasibility Study

A Cost/Benefit Analysis for Statewide Implementation of an Enterprise Resource Planning (ERP) System

State of Wisconsin - Department of
ADMINISTRATION

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Executive Summary

BACKGROUND AND OBJECTIVES

The State of Wisconsin (State) Department of Administration (DOA) initiated an ERP System Feasibility Study (Study) in November 2004 to research the feasibility of implementing an Enterprise Resource Planning (ERP) system to meet the State's financial management, procurement, human resources, payroll administration and other administrative business needs. The consulting firm of Salvaggio, Teal & Associates (STA) was engaged to assist in the study. This report documents the results of the study.

An ERP system is a suite of fully integrated software applications that are used to perform an organization's administrative business processes such as financial management, procurement, personnel, and payroll administration. In State of Wisconsin terms, ERP is a software package that provides functionality similar to current State systems (e.g., WiSMART, Central Payroll, PMIS, State Budget System, and numerous agency administrative systems) but in one, fully integrated system. What distinguishes ERP systems from "stand-alone" best-of-breed administrative software solutions is the integration that allows for more efficient processing and eliminates redundant data entry. A detailed definition of ERP systems is provided in the *Background and Scope* section of this report.

World-class businesses have found that implementing an ERP system is a fundamental way to improve the efficiency and effectiveness of their business operations. Until recently, the government functionality of ERP systems has lagged behind private sector functionality, but ERP functionality for the public sector has matured considerably in recent years. States like Pennsylvania, Missouri, and Montana have employed ERP systems as a way to achieve more efficient government, streamline administrative business processes, and provide improved service to employees, vendors, and other stakeholders via self-service functionality. In fact, more than twenty (20) states have implemented or are in some phase of implementing ERP software.

APPROACH AND METHODOLOGY

The ERP System Feasibility Study included the following high-level tasks, the results of which are summarized in this report to the State's Chief Information Officer (CIO):

- Conducted initial planning sessions to confirm overall project scope;
- Reviewed and evaluated statewide administrative systems currently in use;
- Reviewed documentation of the State's hardware/systems infrastructure for potential of existing technology to support or integrate with ERP solutions;

- Conducted interviews with key administrative systems stakeholders at the enterprise-level and the largest user agencies, and documented results as support for our recommendations;
- Developed an "As Is" vs. "To Be" business model that documents those systems that would be replaced/potentially be replaced by a statewide ERP system;
- With assistance from State staff, quantified the major areas of savings and efficiencies to be derived from business process improvements associated with the implementation of a statewide ERP system;
- With the assistance of State staff, gathered high-level information on the costs of current systems, including full-time equivalent (FTE) positions involved in the use and support of each major system that would be replaced by a statewide ERP system;
- Calculated and documented the estimated costs of implementing and maintaining a statewide ERP system; and
- Prepared this written report documenting the results of our study.

OUR FINDINGS

Our findings as a result of this study are documented in detail in the *Study Findings* section. The results of this study should be considered as high–level guidance for moving forward with ERP. Study findings are provided in five categories:

- "As-Is" vs. "To-Be" Systems Environment
- General Findings
- Process Improvements
- Financial Analysis
- Headcount Analysis

Study Findings are summarized as follows:

"As-Is" vs. "To-Be" Systems Environment

The "As-Is" and "To-Be" Systems Environment diagrams were created from interviews with subject matter experts and from systems survey responses from the seven agencies included in the Study. Our findings indicate that ERP systems represent an opportunity to consolidate systems into a more streamlined environment with greater functionality and access to data.

General Findings

Key findings include:

1. Numerous stand-alone systems maintained at the enterprise level and in specific user agencies are required to meet the State's administrative business needs. Currently, there are more than 122 systems that support human resources, payroll administration, and financial management areas. Based upon current assumptions of ERP scope, approximately thirty-eight (38) HR/Payroll and fifty-nine (59) financial management systems could be eliminated. The functionality of the remaining twenty-five (25) systems is considered to be outside the current assumed scope of the ERP project.

2. The State currently has no enterprise-wide procurement, asset management, or human resources systems in place. The State does not currently have the ability to track State, University, and municipality "spend" on goods and services at the commodity level. A number of the State's future centralization and efficiency initiatives (e.g., strategic sourcing) will require the ability to analyze the State operations on a macro level to maximize the results of these initiatives.

3. The technology underlying many of the State's administrative systems is dated. Some of these systems are twenty to thirty years old. Aging systems are often difficult to modify as the ongoing business needs of the users change over time. This also exposes the State to the risks of technical obsolescence and increased difficulty in retaining staff with appropriate knowledge of those systems.

4. The current statewide systems do not meet the user agency business needs, as indicated by the "front-end" systems and numerous agency-level systems that either enhance or duplicate functionality that would be expected in a statewide system. As a result of these unmet needs, the State's business processes are less efficient and effective, and agencies continue to spend significant amounts of money on systems with functionality that is contained in ERP systems – money that could be spent toward the implementation of a single, statewide ERP system. For example, DHFS and DOC expend approximately $1 million per year to maintain and support their shared Fiscal Management System.

5. The statewide systems used for financial management (WiSMART), position control (PMIS), payroll administration (Central Payroll System), and budget development (State Budget System) are not integrated. Considerable reconciling effort is spent to keep these systems synchronized. Additionally, the numerous "silos" of data and lack of integration across statewide systems inhibit the State's ability to provide timely and accurate statewide reporting at the enterprise level.

Payroll processing requires the coordination of a multitude of systems and processes to complete recurring and annual payroll tasks. The State does not maintain enterprise position history, employee history, or payroll history. Lack of common, sophisticated time scheduling, reporting, and management tools has led to payment of extensive overtime to employees. One agency interviewed incurred $25 million in overtime in the last fiscal year when it had planned to spend less than half that amount. Additionally, the State has complex human resources and payroll requirements associated with its nineteen (19) bargaining unit agreements. We anticipate that a high percentage of the State's human resources and payroll requirements (including collective bargaining agreements) can be met through Tier 1 ERP software solutions.

6. ERP software functionality is a good fit for meeting the State's business requirements. Though a detailed study has not been conducted, we anticipate that Tier 1 ERP software solutions will meet 85% to 95% of the State's functional requirements without customization.

7. The State's current strategic technology direction is compatible with commercially available web-enabled Tier 1 ERP solutions, as well as several of the Tier 2 solutions. Tier 1 software vendors are view as industry leaders by prominent information technology research firms and are considered the most viable companies for meeting the needs of the largest and most sophisticated governmental organizations. Tier 2 vendors are often viewed as industry climbers who work aggressively through new software releases to add functionality and/or features currently provided by the Tier 1 vendors.

Process Improvements

A total of 95 process improvement opportunities were documented as part of this study and can be found in the *Study Findings* section. These improvements address potential process/integration efficiencies, functional enhancements, cost savings/avoidance, staff reductions, use of technology enablers, employee and vendor self-service, and reduced cycle times.

Financial Analysis

Based on an eleven-year planning period, the ERP Project is expected to offer the State a 77% internal rate of return (IRR) on its invested capital and pay back its initial investment in year four (4) of the project, based on the calculated system savings, projected process improvement savings, and an estimated total ERP project cost of $135 million (over eleven years).

Headcount Analysis

A portion of the estimated *Value Pocket* savings (approximately 12.5%) would come from reductions in State personnel (approximately 151 FTEs). In the course of evaluating systems for replacement by ERP, agencies reported approximately 40 FTEs associated with the maintenance of systems that would likely be replaced by ERP. Total reductions of approximately 191 FTEs could be achieved through

implementation of an ERP solution. These FTE reductions would likely be distributed across the following functional areas:

Functional Area	Estimated FTE Reductions
Accounting	66
Budget	19
HR/Payroll	23
Procurement	43
Systems Support	40
Total FTE Reductions	191

It is assumed that most of these FTE savings would be realized over time through attrition, employee retirement, reassignment to approved but unfilled positions, and the like.

RECOMMENDATIONS

The following recommendations are made as a result of this study:

1. State leadership should consider implementation of a statewide ERP system. All State agencies would be required to participate.
2. The functional scope of the ERP System should include the following functional areas:

   - **Procurement**
     - e-Procurement
     - Vendor Self-Service
     - Strategic Sourcing
   - **Financial Management**
     - General Ledger
     - Accounts Payable
     - Accounts Receivable and Billing
     - Cash Receipting
     - Asset Management
     - Grant Accounting / Management
     - Project Accounting
     - Budget Development (some ERP vendors may need to propose third-party solutions to meet budget development requirements)

- **Human Resources**
  - Personnel Administration
  - Position Control
  - Compensation
  - Payroll
  - Time Reporting and Employee Leave Accounting
  - Benefits Administration
  - Applicant Services
  - Training and Employee Development
  - Employee Self-Service

3. The University System institutions should be excluded from participation in the statewide ERP system with one exception – we recommend the inclusion of the University and other governmental municipalities for eProcurement and strategic sourcing only. This will allow the State to further leverage the combined spend as a means of obtaining better pricing from the vendor community. Note that although the University System is excluded from participation, provision should be made for integration between University and ERP systems where continued exchange of data will be required.

4. Additional analysis should be conducted to confirm whether the Department of Transportation should be included in the scope of the ERP system or whether interfaces should be developed to/from existing DOT administrative systems. Our report assumes the inclusion of the DOT.

5. Additional analysis is required to determine whether an ERP system can meet the functional requirements for enterprise IT asset inventory management. If not, consideration should be given to maintaining the AIM-IT System and interfacing it to the new ERP system. Our report assumes that AIM-IT is replaced by the new ERP system.

6. It is recommended that the State initiate and implement an aggressive strategic sourcing effort as part of its ERP project in order to reduce the cost of goods and services purchased, and to assist in funding the consulting services required to successfully implement the new ERP system. Strategic sourcing is a process that creates quantifiable, hard-dollar savings by reducing the cost of purchased goods and services.

   Implementation of an ERP system with full eProcurement capabilities is critical to strategic sourcing success as the ERP system will support the:

- Capturing and reporting on all procurement activity for price benchmarking;
- Monitoring and controlling of maverick (off-contract) spending by agencies;
- Tracking of savings incurred;
- Tracking of performance metrics by commodity and vendor; and
- Tracking of agency usage by commodity and vendor.

7. The ERP system should be implemented in three phases covering an estimated total of 42 months (3.5 years):

   - Phase 1: The Procurement modules will be implemented in the first 18 months.
   - Phase 2: Implementation of the Financial Management modules will begin twelve months after initiation of the Procurement phase and continue over the following 18 months.
   - Phase 3: Implementation of the Human Resources and Payroll modules will begin twelve months after initiation of the Financial Management phase and continue over the following 18 months.

   See Recommendation #2 above for a listing of functional areas included in Procurement, Financial Management, and Human Resources.

   In a majority of ERP implementations, Financial Management and Procurement models are deployed simultaneously. However, following extensive discussions with State management, STA determined that the three-phased deployment plan described above is most properly aligned with the strategic initiatives of the State. This plan provides the most immediate savings to the State while allowing the costs to be spread over two biennia.

8. The State should establish an ERP Steering Committee to provide leadership and guidance for all future ERP System activities. Defining an appropriate governance structure for this large, multi-agency, multi-discipline project will be essential for obtaining initial buy-in and long-term support of agency and enterprise stakeholders.

Background and Scope

BACKGROUND

The State of Wisconsin (State) Department of Administration (DOA) initiated an ERP Feasibility Study in November 2004 to research the feasibility of implementing a new ERP system to meet the State's financial management, procurement, human resources, payroll and other administrative business needs. DOA engaged the consulting firm of Salvaggio, Teal & Associates (STA) to assist in the study. This report documents the work and results of the study.

WHY CONSIDER ERP?

There are numerous reasons why the State should consider implementing an ERP system. The major drivers toward ERP can be grouped into 3 categories: (1) legacy system deficiencies, (2) technology enablers, and (3) the results of a cost-benefit analysis (CBA). The CBA is discussed in the *Findings* Section of this report under *Financial Analysis*. Legacy system deficiencies and technology enablers are discussed below.

Legacy System Deficiencies

Deficiencies associated with the existing legacy statewide administrative systems include:

- Limitations on meeting new functional and data requirements without costly modification.
- Inefficiencies and staffing costs associated with maintaining multiple stand-alone systems at the statewide level as well as additional "shadow" systems in the user agencies to provide functionality not met by the statewide systems (e.g., DHS, DWD, DOA, DNR, DOR, DOT, and DOC).
- Limited accessibility to information, as reporting is limited to a set of standard reports and queries or a request for a new report. A major benefit of ERP systems is to provide properly trained end users with access to the data needed for timely analysis and decision-making.
- Data is maintained in multiple "stand-alone" systems and is not updated across systems in a "real-time" mode. Data maintained in independent databases or shadow systems can produce conflicting information.

Technology Enablers

The most compelling reasons for implementing an ERP system lie within the technology enablers that support the system. Typical technology enablers found in ERP systems include:

Integration with a Common Database

The most distinguishing factor of an ERP system is its integration across all system modules vs. the current environment that utilizes separate "stand-alone" systems, some of which have automated interfaces between them. This integration is supported by a single database across all functions (or at least a single database for HR/payroll functions and another for financial management/procurement functions). In this way, data elements (e.g., account codes) are not duplicated when used for more than one purpose. With no duplication, every function has access to the most recent information; once any change is made, it is immediately available to all functional modules.

Real-Time Processing

Unlike the current systems that often have delays from the time an action is recorded by the user until that information is available to others due to batch or nightly updates, ERP systems use real-time processing, so processing results are immediately available to all other modules. Reports are generated using up-to-date information.

Increased Functionality/Best Business Practices

Today's ERP systems provide a considerable amount of functionality to meet governmental financial management, procurement, human resources/payroll, and other administrative business needs. The application modules that often comprise ERP systems have typically been designed in accordance with industry-standard best business practices.

While best business practices have not been defined by any governing body or research firm for the private or public sector, such practices have evolved over the years with each new software release and have been validated with each ERP implementation. Best business practices, together with the flexibility provided by technology enablers inherent in ERP software today, allow governments to conduct their administrative business processes in a more efficient and timely manner. Best business practices promote standardization of business processes across government, and it is critical that the government embrace these "best practices" in order to implement the ERP software with minimal customization. Some simple examples of best practices found in ERP systems include:

- Asset Management module "sweeping" the Accounts Payable module for potential capital assets based on specified parameters (selected object codes and threshold amounts) to reduce the possibility of capital assets going unrecorded;
- Electronic three-way match of invoice, purchase order, and receiving report reduces the use of paper documents and processing time, and allows staff to focus their efforts on exception resolution;

- Distribution of the automated requisitioning function eliminates the paper requisition document and workflow ensures compliance with pre-defined business rules and approval paths;
- On-line catalog maintenance and access for purchasers within the State ensure the use of approved suppliers and the latest pricing for goods; and
- Vendor access to payment information reduces staffing required to answer vendor inquiries.

Web-Based / Open Architecture

Today's leading ERP solutions are designed to be accessed through the use of an industry-standard web browser. Vendor products are transitioning to a "pure web-based" architecture whereby no code resides on the client other than the web browser. Web-based ERP solutions result in easier deployment and lower costs of IT infrastructure, network administration, and information access. They also give access to the ERP system at any time as long as they have access to a web browser.

The leading ERP systems comply with open architecture standards as well. Open architecture provides a means whereby the ERP system can be linked to specific "best-of-breed" software if the need arises (e.g., possibly to meet fleet management requirements). Open architecture also provides the ability to interface the ERP system to common desktop "office suite" applications (see *Desktop Software Integration* below).

Scalability

Allows the State to size its system components to meet its ever-changing business needs. Increased capacity can be added, upgraded or removed as computing needs change, without substantial changes to the application. Scalability considerations include increasing memory, adding additional processors, and installing additional disk storage.

Portability

Provides flexibility for application software systems to run on multiple hardware platforms or provides built-in capabilities for switching between platforms without requiring re-installation or additional customization.

Graphical User Interface

ERP systems utilize a graphical user interface (GUI) that provides user-friendly features similar to other office functions on the user's desktop, such as intuitive icons, pull-down menus, point-and-click navigation, pop-up windows, scroll bars, radio buttons, the use of color for clarity and emphasis, and tool bars to assist in the user's learning and ongoing use of the System. They also provide on-line help menus and on-line documentation, as well as screens that can be customizable to user roles, to enhance the end user experience. The same interface and commands are used for all functions, thereby facilitating training for users that access multiple

functions and functional areas.

Efficient Modification Where Necessary

Assuming that an open (n-Tier) architecture is used (browser-based user interface, database, business rules, and web server), the business rules associated with the system are separated from the rest of the architecture, thus it is easier to change the business rules (a common occurrence in government) than if they were included in the user interface or the database design.

Extensive Development Toolset

ERP systems provide for a single (often proprietary) toolset to support software configuration, customization, and ongoing administration of the system. Use of the toolset requires specialized training and knowledge. The development tools are also utilized in establishing workflow, security, and in implementing a software upgrade.

Relational Database Technology

Today's ERP systems utilize powerful relational database technology, which organizes records into a series of tables that may be connected by common "data". Relational databases facilitate ad hoc reporting and querying without the use of extensive programming knowledge.

Application Modularity

An ERP system consists of a series of application modules (e.g., general ledger, accounts payable, purchasing, asset management, payroll). A breakdown of typical modules is described above. These application modules are designed to be "stand-alone" if necessary though some modules require that others be in place to fully utilize the functionality provided. This modular approach allows governments to selectively implement ERP functionality based on priorities, funding availability, and staff availability to implement and support the system. The entire ERP solution may be built on a "piece-meal" basis. Additionally, the government can substitute a third party solution in lieu of the ERP module if necessary to meet the government's functional needs.

Advanced Reporting Tools

ERP systems typically provide a suite of ad hoc reporting /query tools to allow properly trained end users to develop their own custom reports. Electronic report routing capabilities are often provided with some of the systems.

Security

ERP systems provide a robust security function across all ERP modules, including role-based security, screen and field level security, and a comprehensive testing program to detect and correct potential security weaknesses.

Automated Workflow and Approvals

ERP systems provide automated workflow capabilities that support electronic document routing, review and approval, provides for inquiries on document status, and an efficient document filing and retrieval process. Automated workflow also facilitates the implementation of a "paperless" environment.

Automated workflow eliminates "paper document shuffling" and oftentimes reduces the layers of approval.

Drill-Down Capability

ERP "drill-down" capabilities allow an end user to drill down on a field on a screen or report through successively lower levels of detail all the way to the initial entry source document.

Comprehensive Audit Trail

ERP systems provide on-line access to a comprehensive history of all changes made to a record in the system.

Flexible Chart of Accounts

The flexibility provided by the chart of accounts is the greatest factor in determining the usefulness of a financial system. ERP systems provide for a flexible and customizable chart of accounts structure that is supported by relational database technology, sophisticated ad hoc reporting tools to improve financial and budgetary reporting, and minimization of the proliferation of "shadow" systems across state government.

Desktop Software Integration

ERP systems provide the ability to easily extract data from the ERP software into common desktop "office suite" applications such as the Microsoft Office suite for data manipulation and analysis. Most ERP software also support the import and export of data to/from the ERP system; this can facilitate the uploading and downloading of information from different systems or sources.

Electronic Data Interchange (EDI)

ERP systems are designed to support popular EDI standards and technologies:

- UN/EDIFACT
- ANSI X.12
- Internet EDI
- EDI/XML
- Web Services

Remote Access

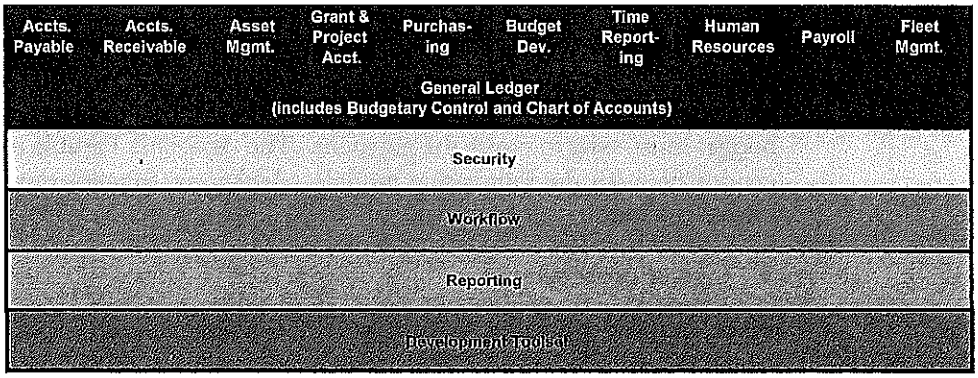
As ERP functionality matures, the need will arise to grant access to those not considered traditional users of ERP systems – vendors, mobile managers, staff working on specific grants, and all employees for self-service functions to name a few. A web-based system facilitates providing this access at a lesser cost to the State.

FUNCTIONAL SCOPE

An ERP system is a suite of fully integrated software applications that are used to perform administrative business functions such as financial accounting, procurement, and personnel administration. What distinguishes ERP systems from "stand-alone" best-of-breed administrative software solutions is the integration that allows for more efficient processing and eliminates redundant data entry.

The functionality provided by ERP systems is usually provided in major groupings or modules. Modules include: Human Resources/Personnel/Payroll, Core Financials, etc. Additionally, certain features such as automated workflow, security, reporting, and the development toolset cross all functional modules.

ERP FUNCTIONALITY COMPONENTS



The following functional modules of an ERP system were included in the scope of this study, including:

Financial Management

General Ledger

The General Ledger is an integrated central repository of statewide financial data. Numerous types of financial transactions are recorded in the General Ledger, both directly and through data received from other ERP modules as well from interfacing external systems. The General Ledger is the key module used in financial reporting. The chart of accounts is established and maintained in the General Ledger. Additionally, budgetary control is established and enforced

through this module. Traditionally, this module is implemented first as most other modules require some interaction with the General Ledger.

Additionally, the General Ledger provides:

- Basic fund accounting;
- Corrective and/or adjusting journal entries;
- Interfund/interagency transaction processing;
- Month-end and year-end closing;
- State and federal reporting;
- Budget maintenance and monitoring;
- Budget adjustments;
- Governmental Accounting Standards Board (GASB) Statement No. 34 compliance;
- Cost allocation; and
- Labor distribution.

Accounts Payable

The Accounts Payable module addresses the various means by which the State pays for goods and services. The module is used to record liabilities and payments. The automated matching process takes place in this module. Before a payment is processed, a successful "match" must be completed and sufficient budget must exist to cover the payment. The Accounts Payable module shares the vendor file with the Purchasing module. Additional functionality provided by this module includes:

- Invoice processing;
- Automated matching process (purchase order, receiving report, invoice);
- Payment processing (discounts, holds, warrant/check printing, direct deposit, and handling);
- Automated bank reconciliation;
- Electronic funds transfer;
- Form 1099 processing; and
- Employee reimbursement.

Accounts Receivable and Billing

The Accounts Receivable module is used to record receivables and payments received against specific customer accounts. Billing functionality supports the processing of billings and generation of new receivables. Most systems also provide functionality to support the collection process (e.g., dunning notices).

Cash Receipting

The Cash Receipting module supports cash drawer and lockbox processing. This module is typically designed to work with industry-standard third party cash register products.

Asset Management

The Asset Management module is used to capture and maintain information associated with the government's leased, capitalized, and non-capitalized assets. Information maintained in this module includes acquisition cost, asset type, location, asset description, model number, serial number, insurance information, and replacement cost. Depreciation schedules are used to maintain current asset value.

Specific areas of functionality include:

- Asset creation,
- Asset maintenance (including transfers),
- Asset depreciation,
- Asset disposal, and
- Asset retirement.

Grant Accounting / Management

Basic Grant Accounting modules support the establishment of a grant budget, and the recording of expenditure activity against the grant budget and pre-defined grant budget categories. These modules also allow for the reporting of grant activity by period or over the life of the grant award.

More sophisticated Grants Management modules are just starting to make their way into the governmental ERP marketplace. These modules allow for the recording of detailed information about each grant, grant application activity, as well as grant drawdown activity.

Project Accounting

Project Accounting modules address the recording, tracking, and reporting of financial data for projects and contracts. These modules typically address the key processes for operating and capital projects, including budget development, project development, execution, and the project close process.

Project Accounting modules typically support the establishment of a project budget (which is typically linked to a funding source), and the recording of expenditure activity against the project budget (by pre-defined project task or activity). These modules also allow for the reporting of project activity by period or over the life of the project.

Purchasing / eProcurement

The Purchasing module provides traditional procurement functions such as requisitioning, solicitations, purchase order processing, contract management, and goods and/or services receipt. Vendor and commodity maintenance is also addressed in this module.

New state-of-the-art eProcurement technology supports web-based vendor registration, on-line catalog procurements, web-based solicitations, and reverse auctions.

Budget Development

The Budget Development module enables the development of the State's budget at the agency and the statewide (appropriation) levels. Budget Development integrates with both human resources to facilitate salary projections and general ledger to upload budgetary data for budgetary control. This module is intended to support the analysis of historical expenditure and budgetary data, allow "what if" analyses, salary and position budgeting, salary projections, and other types of forecasting.

Budget development functionality required by sophisticated governments has been the "weak link" in ERP systems to this point, so many governments address their budget preparation needs through electronic spreadsheets or third party budget development applications.

Human Resources

Personnel Administration

The Personnel Administration module provides for the maintenance of personnel information pertaining to each employee from application through retirement. This information includes the following:

- Basic demographic and address information,
- Emergency contact data,
- Organizational and funding source data,
- Employment history, and
- Personnel actions (demotion, promotion, salary increase, leave without pay).

Position Control

The Position Control module supports the maintenance of all budgeted and authorized positions. More specifically, position control allows users to perform the following tasks:

- Provides edits to ensure that no personnel action can take place without an available qualified and active position,
- Tracks and reports budgeted, filled, frozen and vacant positions,
- Links positions to a funding source, and
- Links positions to required skills, certifications, etc.

Compensation

The Compensation module enforces the administration of the State's rules for calculating pay. In addition, this module includes specific functions as follows:

- Maintains effective salary dates,
- Calculates future pay increases,
- Calculates additional pay based on flexible, user defined criteria,
- Calculates step, increment, and percentage pay increases for all or a group of employees,
- Projects costs for future fiscal years, and
- Provides analysis of compensation by Chart of Account element.

Payroll

The Payroll Module provides for the calculation, production, and distribution of payroll warrants and the processing of direct deposits. In addition, this module provides the following additional functionality:

- Maintains salary, deduction, and pay history and totals by employee and fund,
- Complies with State and Federal payroll tax withholding and reporting requirements,
- Supports retroactive and manual payments, and various pay cycle frequencies,
- Calculates benefit deductions based on rules specified in Benefit Administration module, and
- Calculates pay based on user-defined criteria (pay status, overtime rules, etc.).

Payroll modules in some ERP systems now provide employee travel reimbursement processing as well.

Time Reporting and Employee Leave Accounting

Time Reporting addresses the administration of the State's rules for capturing and calculating time. This module includes these functions:

- Supports positive and negative (exception) time entry,
- Provides on-line time entry and the charging of time to pre-defined Chart of Accounts elements,
- Calculates overtime hours and eligibility,
- Supports flexible definition of shift and work schedules, and
- Provides flexible workflow for review and approval of automated timesheets.

Leave Accounting addresses the administration of the State's rules for granting and using the various types of employee leave. In addition, this module provides the following features:

- Calculates leave eligibility and leave availability,
- Allows employees to request leave on-line with automatic routing for approval,
- Notifies employees of leave that will be lost or automatically paid,
- Integrates leave types with Benefits Administration and Payroll, and
- Tracks leave taken, leave lost, and leave payments by leave type and reason.

Benefits Administration

The Benefit Administration module supports the comprehensive administration of multiple employee benefit, retirement and insurance plans. In addition, this module addresses the following functionality:

- Maintains multiple eligibility rules,
- Maintains eligibility dates for different plans based on different rules,
- Tracks eligibility and enrollment of dependents,
- Maintains beneficiary information,
- Calculates employer and employee costs,
- Provides on-line (Web based or kiosks) and telephone benefit enrollment,
- Interfaces with benefit providers and third party administrators,
- Provides functionality to ensure compliance with COBRA requirements, and
- Tracks information related to HIPAA requirements.

Applicant Services

This module provides functionality to support the application process associated with a new job posting. Additionally, this module includes these capabilities:

- Manages recruiting of both internal and external candidates,
- Manages testing requirements and results,
- Supports the submittal of applications and resumes through the web, and
- Supports compliance with civil service requirements.

Training and Employee Development

Training and Employee Development addresses the management of employee training and skills. Additionally, this module includes the following capabilities:

- Provides standard career development curriculum based on position, skill category, and other criteria,
- Allows employees to request training on-line and route request for appropriate approvals,
- Records training session attendance, grades, costs, certifications, etc.,
- Tracks classes and courses needed for career / job progression planning, and
- Tracks training class prerequisites.

Employee Self Service

Employee self-service allows State employees to perform common functions previously performed by human resources and payroll staff through a web browser or kiosk after entering their authorized user ID number and password. Some functions typically accessed through the web by State employees include:

- Viewing pay stub and withholding information,
- Changing basic employee information (e.g. address change),
- Changing benefit options,
- Checking leave balances and requesting time off,
- Checking the status of the travel reimbursements, and
- Registering to attend a training course.

System-Wide

Security

Security is used to regulate who has access to what information. ERP systems typically offer a comprehensive security function that provides for:

- User log-in
- Row level (record) security
- Data field level security
- Restricted access to specific screens or processes
- Object security
- User group security

Workflow

Workflow allows for the establishment of business rules, roles, and routings that are used to route electronic documents (e.g., purchase requisition, timesheet) to proper supervisors and management for approval. It should be noted that workflow functionality is being used in a very limited manner in the public sector because it is typically complicated and expensive to configure. Governments most often use workflow in conjunction with procurement processes. Workflow facilitates an organization's transition to a "paperless" environment. To work properly, Workflow typically requires extensive configuration and a degree of standardization of approval processes across the enterprise. For this reason, it is best to limit the number of workflows to be implemented.

Reporting

ERP systems typically provide a suite of reporting tools that are used to develop ad hoc reports and on-line queries.

Development Toolset

Each ERP vendor provides a suite of tools that are used to configure, customize, troubleshoot, and maintain the application software. The toolset is usually proprietary to each specific vendor.

This study excluded the Inventory and Fleet Management modules because (1) an enterprise-wide business need did not exist for the functionality, and (2) commercially-available "best of breed" solutions exist for these functional areas that provide robust functionality at a reasonable cost to implement and maintain. Should the State proceed with the acquisition of an ERP system, favorable terms and conditions can be negotiated for these ERP modules. Brief descriptions of these modules are provided below:

Inventory

The Inventory module supports the establishment, storage, tracking, and disposal of inventory items, automated inventory replenishment at pre-defined reorder points, and recording of all inventory activity. The Inventory module is typically integrated with the Purchasing and Accounts Payable modules, and checks the General Ledger for funds availability when replenishing goods in inventory.

Fleet Management

Fleet management functionality has just recently become an offering of ERP vendors. Traditionally, this functionality has been provided by specialized "stand alone" software applications. Fleet Management functionality includes asset identification, parts inventory maintenance and processing, and work order processing. More advanced applications also provide fuel supply management, driver licensing, accident tracking, and risk management functionality.

Key Assumptions

GENERAL

Following are general assumptions used in this study.

- The University System is excluded for all purposes of the study, except for strategic sourcing. We have included the University expenditures in our calculations associated with leveraging spend.
- For estimating some support costs, it is assumed that a full-time equivalent number of hours per year for a contractor is 1,920 (2,080 hours less ten days of vacation and ten days of holidays).
- All amounts are in current dollars (i.e., no adjustments have been made for inflation).
- With the exception of strategic sourcing, this report includes system savings and value pockets from DOT, DNR, DOC, DOA, DWD, DOR, and DHFS. These seven agencies represent 86% of the total State budget. All other agencies represent the remaining 14% of the budget. Savings for the agencies not surveyed were estimated by extrapolating the savings amounts identified by the seven agencies.
- The duration of the ERP implementation will be 3.5 years or 42 months. The Procurement modules will be implemented during the first 18 months. Implementation of the Financial Management modules will begin twelve months after initiation of the Procurement phase and continue over the following 18 months. Implementation of the Human Resources and Payroll modules will begin twelve months after initiation of the Financial Management phase and continue over the following 18 months.
- The planning schedule contains a Year 0 (fiscal year ending in 2005). This year was included to allow the State to plan for and select the ERP system.
- To add a degree of conservatism, it is assumed that a six-month stabilization period will be required after each eighteen month deployment before significant process saving will be realized. Therefore, no systems savings were projected, during Years 0, 1, or 2 (FY2005 through FY2007). The first process savings are projected to begin in FY2008 for Procurement. Financial improvements begin in FY2009, and Human Resources improvements begin in FY2010.
- Savings from the elimination of existing and planned systems are assumed to begin with the completion of the Phase 2 Financial Management implementation. Although some existing systems may replicate functionality of the new Procurement modules, ties between current procurement systems and related financial systems would likely delay elimination of those systems until the Financial implementation is complete.

Following the completion of the Financial and HR/Payroll implementations, we have "phased in" the savings by assuming that no costs would be eliminated in the twelve months of production. In subsequent years, we assumed that 100% of the costs would be eliminated.

- State personnel costs include a 35% load for employer-supplied benefits. No load was added for contractor costs.
- Tax systems maintained by the Department of Revenue as well as retirement and other benefits administration systems maintained by the Department of Employee Trust Funds are excluded from the functional scope of this study. Automated interfaces between these systems and the ERP system will be built. The State should explore the use of the benefits administration self-service functions in the new ERP System in order to improve process efficiency and customer service.

COST ESTIMATES

Following are the primary assumptions used in estimating the cost to implement and maintain a statewide ERP system.

- The ERP system will be implemented in three phases covering an estimated total of 42 months (3.5 years):
  - Phase 1: The Procurement modules will be implemented in the first 18 months.
  - Phase 2: Implementation of the Financial Management modules will begin twelve months after initiation of the Procurement phase and continue over the following 18 months.
  - Phase 3: Implementation of the Human Resources and Payroll modules will begin twelve months after initiation of the Financial Management phase and continue over the following 18 months.
- Although the system will be implemented in three phases, it is assumed that one suite of ERP modules will be selected at the beginning of the project to address all Procurement, Financial Management, and HR/Payroll needs. State management has expressed a desire to select one system but only purchase the modules as the respective implementation phases begin. As such, the estimated software license cost of $8 million has been divided equally over Years 1, 2, and 3 of our analysis.
- Prior to the aforementioned phases, the planning schedule contains a Year 0 (fiscal year ending in 2005). During this time period, it is assumed that the State will move forward with procuring ERP software and associated implementation services (e.g., develop an RFP, develop a vendor evaluation process, develop vendor demonstration scripts, etc.), and will perform certain activities that will help the State prepare for implementing an ERP system,

should the State decide to move forward with implementing ERP.

- It is assumed that the same version of the selected software will be implemented for all modules over the 42-month project period (i.e., there will be no interim upgrades to previously implemented modules).
- A technical upgrade (i.e., no significant additional functionality will be implemented) will occur during Year 6 of the project.
- An average hourly, expense-loaded rate of $220 is assumed for all contractors.
- The implementation work effort will be allocated as follows: 60% State resources and 40% contractor resources.
- **The hours for State employees are treated as a separate category below (i.e., the assumptions only apply to contractors, unless otherwise indicated).**

PROJECT MANAGEMENT

This cost category includes the contractor/consultant effort involved in:

- Creating the overall project plan;
- Managing the overall project;
- Creating status reports; and
- Reporting to the executive steering committee.

INDEPENDENT PROJECT OVERSIGHT

Year 0

As indicated above, it is assumed that in Year 0 the State will move forward with procuring ERP software and associated implementation services (e.g., develop an RFP, develop a vendor evaluation process, develop vendor demonstration scripts, etc.). During this period, certain activities will be performed that will help the State prepare for implementing an ERP system, should the State decide to move forward with ERP. Presented in the table below are tasks that could be performed during Year 0 and the possible consultant's role in performing each task:

Task Description	Description of Consultant's Role
Review current account coding block, document shortcomings and perform "clean-up" activities (i.e., clean-up object codes)	Facilitate discussion of existing coding block, documentation of coding block and its deficiencies, and management of "clean-up" activities
Develop requirements for inclusion in RFP	Lead work sessions with each functional team to develop requirements for inclusion in the RFP.

Task Description	Description of Consultant's Role
Provide assistance in support of funding efforts	Support the Department on legislative and funding issues on an "as needed" basis.
Development of evaluation process and evaluation guide	Facilitate development of an evaluation guide that will address the evaluation process to be followed, evaluation criteria, scoring system, and roles and responsibilities of evaluation committee members.
Development of Request for Proposal(s)	Lead the development of the Request for Proposal(s) for acquiring ERP software and implementation services. The RFP will contain the key information necessary for vendors to prepare a comprehensive response including background, information regarding current environment, requirements, schedule of activities, terms and conditions, etc.
Development of demonstration evaluation scripts	Facilitate development of demonstration scripts that will be provided to the vendors so they can structure their software demonstrations.
ERP / Change Management Training	Work with project management to develop and present an overview of ERP software, how it will impact the State's business processes and staff, and provide an initial discussion on organizational change management.
Data cleansing activities	Function in a facilitation role and provide project management to ensure this task is completed as appropriate and on a timely basis.
Development of existing reports inventory	Assist project management in developing the standards / format to be used in documenting existing reports.
Development of project risk assessment methodology and initial risk management plan	Develop the risk assessment methodology and tools to be utilized for the project.

Years 1 – 4

It is assumed that one FTE would perform the oversight role in Years 1 and 4. Two FTEs would be needed for oversight throughout Years 2 and 3 due to the increased project activities associated with overlapping implementations of Procurement and Financials in Year 2 and Financials and HR/Payroll in Year 3. An average hourly rate of $200 is assumed for all oversight hours.

SOFTWARE CONFIGURATION AND PROCESS REENGINEERING

This cost category includes the contractor/consultant effort involved in:

- Reviewing the "As Is" process documentation
- Developing "To Be" processes in keeping with the processes embedded in the selected ERP software
- Configuring the ERP software in accordance with the defined "To Be" processes
- Performing configuration unit testing and assisting in integration, system, and stress testing

WORKFLOW CONFIGURATION

This cost category includes defining the State's workflow business rules and configuring the ERP system's workflow functionality in accordance with those rules. Included are the hours necessary for analysis, design, construction, testing, and moving the technology into the production environment.

CUSTOM DEVELOPMENT

Interface Development

This cost category includes the entire effort required to develop an interfaced/integrated environment, which would include the ERP system, the State's legacy systems that remain, and the systems of entities external to the State. This effort includes analysis, design, construction, testing, and moving the interfaces into the production environment. The State intends to leverage its investment in the enterprise service bus (ESB) to facilitate integration with the State's legacy systems and other external systems

Software Modification

This cost category includes all the effort necessary to develop modifications/enhancements to the ERP system in order for the ERP system to meet the State's business requirements (i.e., analysis, design, construction, testing, and moving the modifications/enhancements into the production environment).

Report Development

This cost category includes all the effort necessary to develop the reports necessary for the ERP system to meet the State's business requirements (i.e., analysis, design, construction, testing, and moving the reports into the production environment).

Data Conversion / Loading

This cost category includes all the effort necessary to convert/load data into the ERP system (i.e., analysis, design, and construction of the conversion/loading programs, testing, and getting the necessary data loaded into the production system). The manual data loading effort is also included in this category.

CHANGE MANAGEMENT & DEPLOYMENT

This cost category includes the effort required to work to build executive sponsorship, and to create and manage communication regarding the initiative. The category also includes the effort required to support the agencies during the deployment of the ERP system.

TRAINING AND DOCUMENTATION

Project Team Training

This cost category includes the expenditures necessary to train the project team. It is assumed that the State will pay for the project team to attend classes given by the ERP vendor rather than having the training delivered on a per-hour basis.

End-User Training and Documentation

This cost category contains the effort for contractors/consultants to develop end user training materials based on the "To Be" process designs, to train the State trainers to assist in delivering training to the end users, and to assist in delivering the training.

It is our understanding that the State will investigate ways to deliver cost-effective, on-demand training by leveraging its investment in online training by providing training resources through the Virtual University.

INFRASTRUCTURE DEVELOPMENT AND PROJECT SUPPORT

This cost category includes the cost of resources to:

- Install the ERP hardware
- Apply updates/patches to the ERP software during the implementation period
- Install the ERP software
- Control the movement of software configuration changes through the development environment and into the production environment
- Direct system stress (i.e., volume) testing

- Tune system performance
- Assist in developing procedures for ongoing system operations

POST-IMPLEMENTATION SUPPORT

We are assuming the implementation contractor will stay on to provide post-implementation support six months after each phase goes live.

STATE EMPLOYEE IMPLEMENTATION COST

Year 0

The number of State employee hours was estimated by STA based upon STA's experience with similar efforts.

Years 1 – 4

It is assumed that the implementation work effort will be allocated as follows: 60% State resources and 40% contractor resources. These resources would be involved in activities relating to all of the cost categories presented above, including deployment. We also assumed that only 60% of the State positions would be backfilled at an average hourly rate of $42.19 ($65k salary; 35% benefits; 2,080 hours per year). Backfilling will begin six months prior to the beginning of each project phase.

APPLICATION SOFTWARE LICENSE AND SOFTWARE MAINTENANCE FEE

The software license and maintenance fee was estimated based upon STA experience.

ALL OTHER (FACILITIES, ETC.)

We are basing the estimate for the project team facilities and infrastructure on STA experience with similar projects. This cost category also contains a $5 million contingency allotment.

ANNUAL OPERATING COSTS (DATA CENTER)

It is difficult at this stage of the initiative to estimate with any precision the annual cost for this category. The estimate is based on the $2.5 million per year that the State of Pennsylvania pays for hardware (servers, operating system, network, switches, and firewalls, as well as hardware warranties). That amount was adjusted pro rata for the State of Wisconsin's smaller size in terms of number of employees ($2.5MM x 36k WI employees / 83k PA employees = $1.1MM).

ONGOING SUPPORT/OPERATIONS

Help Desk/Functional Support

It is assumed that only State resources will fill the positions covered in this cost category. In developing estimates for this (and all of the Ongoing Support/Operations sub-categories), we took into consideration the staffing levels of other states and STA's prior ERP experiences. Also, the assumption was made

that the best and brightest from the project implementation team would fill these Ongoing Support/Operations positions.

It is assumed that 11 FTEs will support the HR/Payroll functional area and 11 FTEs will support the Financial/Procurement areas. It is also assumed that 70% of these resources will be centralized, and the remaining 30% will be housed in the business-unit agencies.

Technical Operations and Support

It is assumed that only State resources will fill the positions covered by this cost category.

This cost category includes all activities to support the technical environment (e.g., hardware operation and maintenance, the application of software patches/fixes, moving development items into the production environment, etc.) The category also includes resources necessary to support the system interfaces and modifications/enhancements.

We are assuming that 15 State FTEs will be required to provide ongoing technical operations and support.

Ongoing Training

We are assuming that 3 FTEs will be assigned to Financial/Procurement training once that functionality has gone live. Three (3) more full-time trainers will be added to handle the HR/Payroll areas once that functionality has gone live. The training team will be supplemented, at times, by the ongoing functional and technical support personnel. Virtual University may also provide a cost-effective means to deliver on-demand training for end-users.

UPGRADE IN YEAR 6

For the purpose of our analysis, we are assuming the number of contractor hours that will be required for the upgrade will be 15% of the hours required for the initial implementation.

Approach

High-Level Tasks

As stated in the *Executive Summary*, the ERP System Feasibility Study included the following high-level tasks, the results of which are summarized in this report to the State's Chief Information Officer (CIO):

- Conducted initial planning sessions to confirm overall project scope;
- Reviewed and evaluated statewide administrative systems currently in use;
- Reviewed documentation of the State's hardware/systems infrastructure for potential of existing technology to support or integrate with ERP solutions;
- Conducted interviews with key administrative systems stakeholders at the enterprise-level and the largest user agencies, and documented results as support for our recommendations;
- Developed an "As Is" vs. "To Be" business model that documents those systems that would be replaced/potentially be replaced by a statewide ERP system;
- With assistance from State staff, quantified the major areas of savings and efficiencies to be derived from business process improvements associated with the implementation of a statewide ERP system;
- With the assistance of State staff, gathered high-level information on the costs of current systems, including full-time equivalent (FTE) positions involved in the use and support of each major system that would be replaced by a statewide ERP system;
- Calculated and documented the estimated costs of implementing and maintaining a statewide ERP system; and
- Prepared this written report documenting the results of our study.

Information-Gathering Process

Using its proven ROI Methodology, STA held meetings with key statewide and user agency stakeholders and subject matter experts (SMEs). Due to the short timeframe mandated for completion of the study, we focused our information gathering on the following agencies due to their size and complexity:

- Department of Administration (DOA)
- Department of Corrections (DOC)
- Department of Health and Family Services (DHFS)
- Department of Natural Resources (DNR)

- Department of Revenue (DOR)
- Department of Transportation (DOT)
- Department of Workforce Development (DWD)

Additional meetings were held with the Department of Employee Trust Funds (ETF) to discuss how their role in administering employee retirement and other benefit programs would impact the implementation of a new ERP system, and with the Office of State Employee Relations (OSER) to discuss their role in supporting user agencies in human resource management.

Meetings were conducted on the following topics:

- Project kick-off meeting and briefings with project sponsors
- Roundtable discussion on human resources and payroll business processes with DOA and OSER SMEs
- Roundtable discussion with DOA SMEs on State budget operations and position control
- Roundtable discussion with State Controller's Office and other DOA SMEs on statewide financial management operations and systems
- Overview of financial management and budget operations and systems with SMEs from:
  - DHFS
  - DOR
  - DWD
  - DNR
  - DOT
- Overview of central payroll and position control processes and systems with SMEs from DOA
- Roundtable discussion with user agency human resources and payroll business process owners from:
  - DNR
  - DOA
  - DOT
  - DOC
  - DHFS
  - DWD
  - DOR

- Roundtable discussion with DOA procurement business process owners
- Roundtable discussion with user agency procurement business process owners from:
  - DNR
  - DOA
  - DOC
  - DHFS
  - DOR
- Roundtable discussion with Office of State Employee Relations regarding State human resources management business processes
- Discussion with Department of Employee Trust Funds representatives regarding the State's employee retirement and other benefit programs and associated systems
- Discussions with Enterprise Technology staff that support existing statewide enterprise applications
- Discussion with DOC information technology executive management

Meeting participants included:

- Alice Morehouse – DOT Budget Director
- Anthony Timmons – DOR Acting Director Financial and Management Services Bureau
- Bill Komarek – DWD Director, Human Resource Services Bureau
- Bill Nash – DOA Assistant Director, Bureau of Development and Operations
- Bill Raftery – DOA State Controller
- Blanca Rivera – DNR
- Bob Halverson – DOA State Controller's Office
- Cheryl Anderson – DHFS Director, Bureau of Personnel & Employment Relations
- Cindy Dombrowski – DOA Budget Analyst
- Dan Caucutt – DOA Budget Office, State Government Operations Team Leader
- Dana Denny – OSER
- Dave Hinrichs – DOA Deputy Administrator, Division of Enterprise Technology

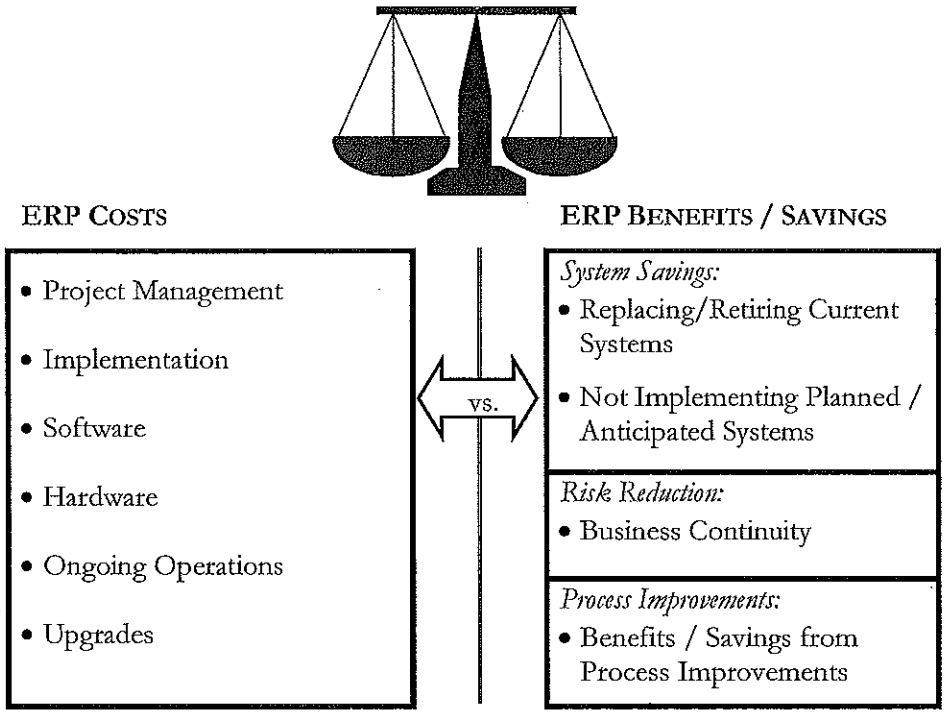
- Dave Schmiedicke – DOA Administrator, Division of Executive Budget and Finance
- Debora Martinelli – DNR Director, Bureau of Human Resources
- Demetri Fisher – OSER
- Earl Fischer – DOC Administrator, Division of Management and Technology
- Elaine Gerber – DOA Central Payroll Section Chief
- Greg Smith – DWD
- Jan Hamik – DOA Administrator, Division of Administrative Services
- Jane Pawasarat – DOA Director, Bureau of Procurement, Division of State Agency Services
- Jean Nichols – DOC Director, Bureau of Personnel and Human Resources
- Jeff Anderson – DOA State Controller's Office
- Jennifer Padden – DHFS
- Jenny Kraus – DOA Deputy Administrator, Division of Executive Budget and Finance
- Jerry Salvo –DOC Director, Bureau of Finance and Administrative Services
- Jim Langdon – DOA Deputy Administrator, Division of State Agency Services
- Jim Pankratz – OSERJon Kranz – Employee Trust Funds
- Karen Timberlake – OSER Director
- Kathy Skiera – DOA Applications Section Chief
- Kipp Sonnentag – DWD Director, Bureau of Finance
- Kirbie Mack – Administrator, Division of Enterprise Services
- Leeann White – OSER
- Marilyn Klement – DOA State Controller's Office
- Matt Miszewski – DOA Administrator, Division of Enterprise Technology
- Mike Corbett – DOA Applications Section Chief
- Mike Pohlman – DOA Director of Procurement, Division of Administrative Services
- Pat Farley – DOA Administrator, Division of State Agency Services

- Pat Lashore – Director, Budget and Strategic Services Bureau
- Patricia Almond – OSER
- Paul Breen – DNR
- Peter Olson – DOA Director, Bureau of Personnel
- Sari King – DOA Assistant Administrator, Division of Enterprise Technology
- Scott Thompson – DOR
- Scott Thornton – DOA State Controller's Office
- Sue Reinardy – Administrator, Division of Management and Technology
- Susan Christopher – DOT Director, Human Resource Services Bureau
- Thomas Smith – DWD Director, Bureau of Budget and Planning

FINANCIAL ANALYSIS PROCESS

The Financial Analysis evaluates the costs of acquiring, implementing and operating a new statewide ERP system against the benefits yielded by the ERP System once implemented. These benefits include:

- Retiring multiple current administrative systems and their associated computer infrastructure, often built on obsolescent technology;
- Avoiding the cost of new enhancements or upgrades to the multiple aging applications;
- Avoiding the cost of implementing additional new administrative systems now not needed;
- Realizing savings from business process improvements facilitated by the new ERP software system; and
- Reducing business risk through using adoption of industry-standard platforms and technology.



Each of the components of the Financial Analysis depicted in the diagram above (ERP Costs, System Savings, Risk Reduction, and Process Improvements) is discussed below.

ERP Costs

Based on prior experience in working with other large enterprise state and local government ERP projects and our ERP cost-estimating model, STA provided an estimate of the acquisition, implementation, and operating costs associated with a new ERP system.

System Savings

STA collected the estimated operational and maintenance costs for existing administrative systems that would be replaced by the new ERP system, and costs related to anticipated systems that will no longer be necessary. The estimates were collected through the meetings listed above and through responses to a survey by the participating agencies.

Risk Reduction

The category of "Risk Reduction" includes those factors observed as potential risks to project success. These risks are not included in the *Financial Analysis* section, but are documented in the *Risks and Lessons Learned* section of the report.

Process Improvement

STA also determined the expected business process improvements that the new system could reasonably be expected to generate. The participating agencies supported these efforts by providing specific metrics that drive the savings calculations. In its methodology, STA calls these process improvements *Value Pockets*™ since the value to be realized from the improvements are generally concentrated in a number of areas or "pockets" within the system. Locating and quantifying these Value Pockets was a critical step in thoroughly evaluating the ROI associated with the new ERP system.

Through meetings and analysis of findings, STA also documented a number of process improvements and efficiencies that will provide significant benefits to the State but whose value is not quantifiable and/or cannot be validated. Benefits like these are substantial and will result in tangible savings, although they may be difficult to quantify.

After gathering this information, STA performed financial analysis using common investment factors based on an eleven-year planning period. The results were validated with executives and staff at DOA and are presented in this report.

Study Findings

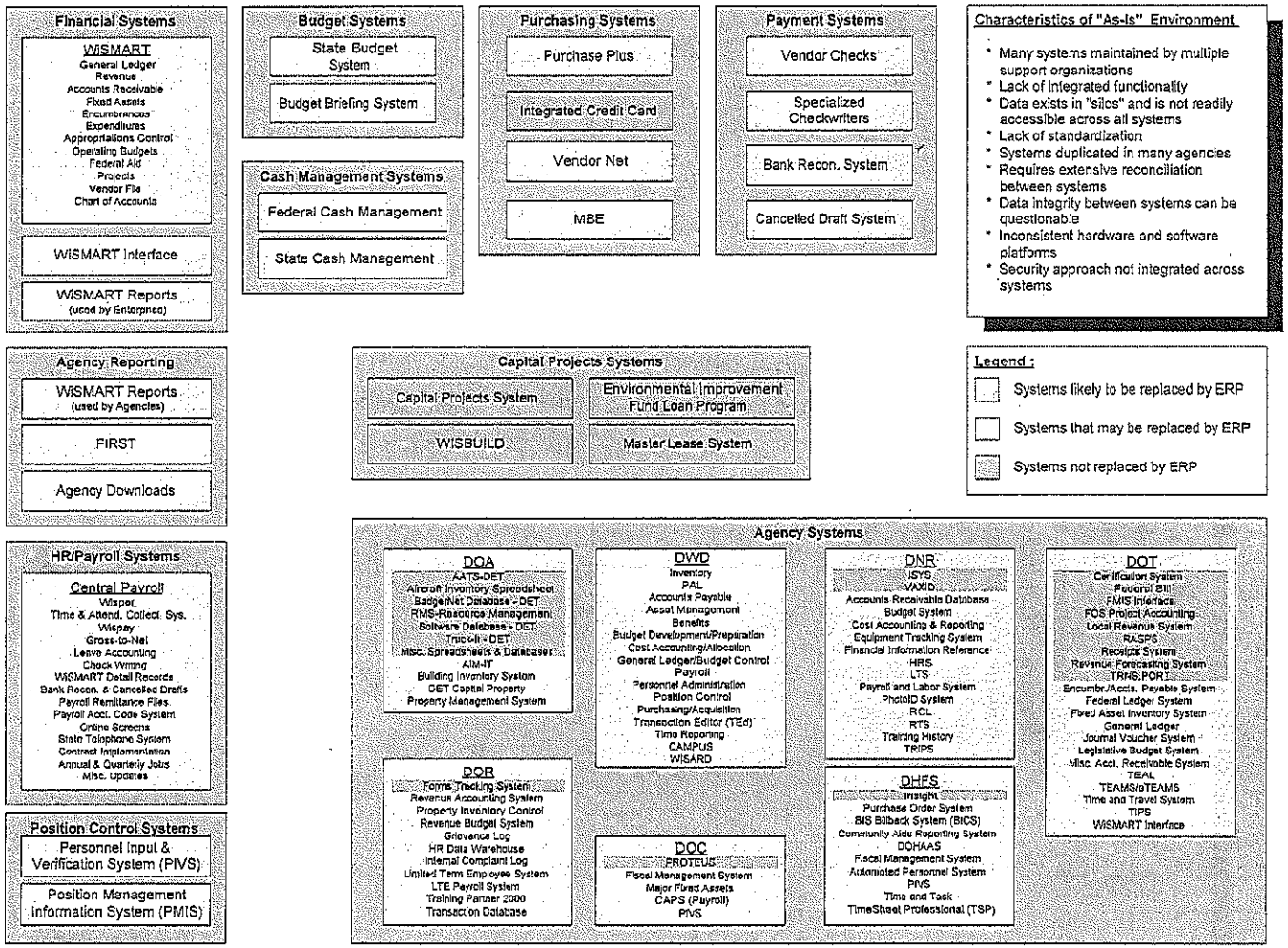
Comparison of "As-Is" vs. "To-Be" Systems Environments

The following "As-Is" vs. "To-Be" Systems Environment diagrams were created from interviews with subject matter experts and from systems survey responses from the seven agencies included in the Study.

All administrative systems reported in the systems surveys were included in the diagrams. Central systems of the State were grouped by major function. Agency systems were grouped by agency. Systems in the "As-Is" diagram were noted as to the likelihood that they could be replaced with ERP functionality. In the "To-Be" diagram, those disparate systems that can likely be replaced by integrated ERP functionality were grouped together as being replaced by either Financial or HR/Payroll and the corresponding ERP reporting tools.

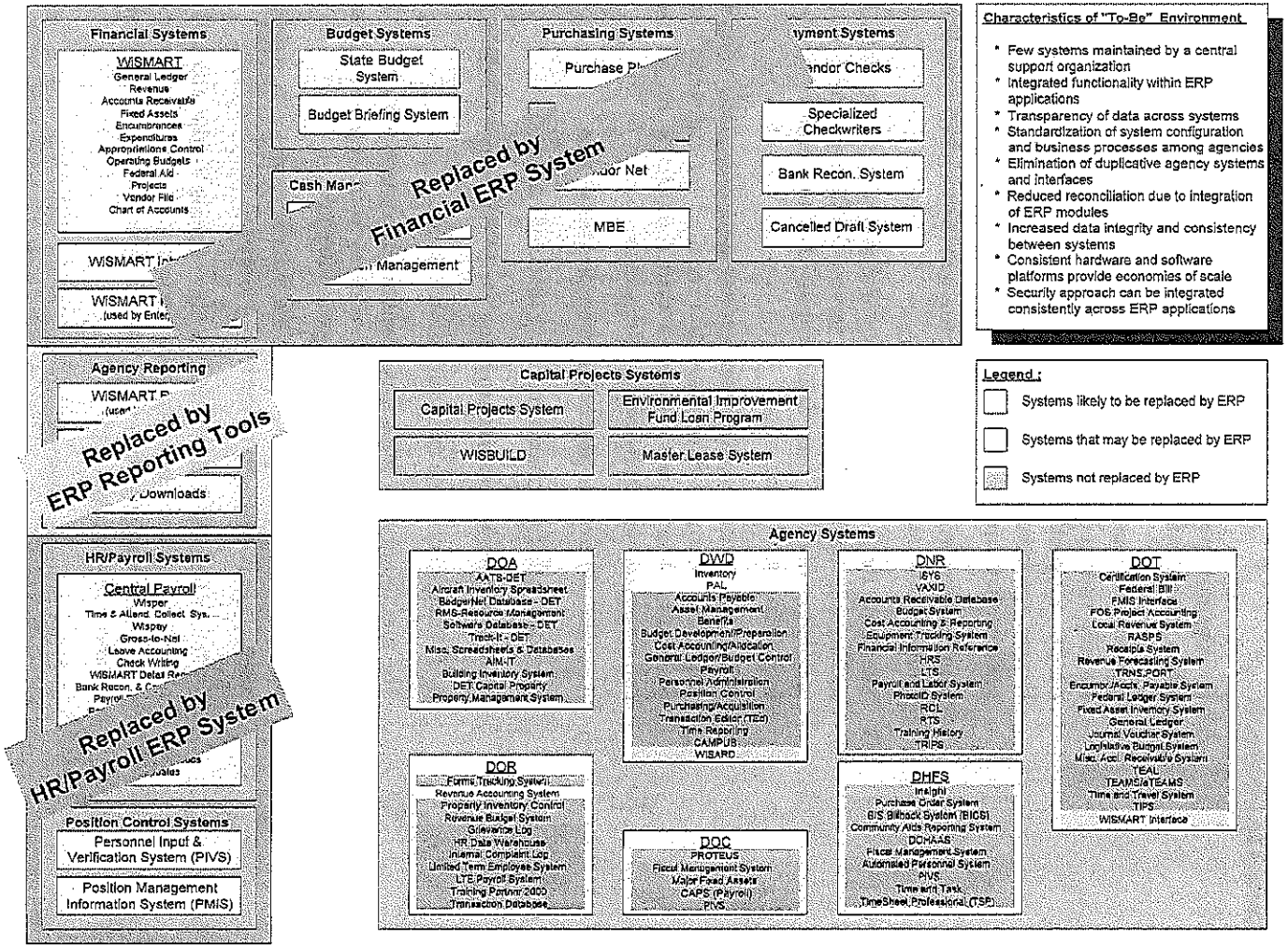
State of Wisconsin

"As-Is" Environment - Administrative Systems



State of Wisconsin

"To-Be" Environment - Administrative Systems



GENERAL FINDINGS

All findings not specific to process improvement, financial analysis, or headcount reduction are included as *General Findings*. These findings are described below:

1. Numerous stand-alone systems maintained at the enterprise level and in specific user agencies are required to meet the State's administrative business needs. Currently, there are more than thirty-eight (38) systems that support human resources and payroll administration, and more than fifty-nine (59) systems that support financial management areas.
2. The State currently has no enterprise-wide procurement, asset management, or human resources systems in place.
3. The State does not currently have the ability to track State, University, and municipality spend on goods and services at the commodity level other than by requesting that the user organizations and/or vendors manually submit the requested spend data.
4. Without a statewide asset management system in place, considerable effort is required to compile fixed asset data required for statewide financial reporting purposes. The State Controller's Office must rely on its user agencies for compiling and validating much of this data.
5. A review of previous procurement studies noted that:
   - High-dollar purchases are being made off-contract;
   - Overlapping contracts are being used for identical goods; and
   - Multiple contracts exist with same vendor.
6. The procurement process is predominately a manual process. Agency-specific purchase requisitioning/ordering systems exist (e.g., Purchase Plus, Rapids, Tips) that feed WiSMART through an interface.
7. The technology of the State's administrative systems is dated. Some of the systems are twenty (20) to thirty (30) years old, and as a result:
   - It is often difficult to modify the systems as the changes require "hard-coding" (i.e., changes must be made to the actual computer code instead of simply changing data table entries to make the changes as is the case in more modern systems);
   - The State is exposed to significant risk (e.g., some technologies are becoming obsolete and will eventually become difficult to replace, and it will become increasingly difficult to find people to maintain these systems);
   - The staff with skills that maintain these systems are rapidly approaching retirement; and

- The systems are difficult to use as they lack the modern, Windows-based, common user interfaces that system users are accustomed to using (e.g., email, office applications, Internet browsing).

8. The current statewide systems do not meet the user agency business needs. Examples of these needs include budget development "front-ends", purchase requisitioning, position control, cost, grant and project accounting, asset management, time scheduling and reporting, human resources administration, and financial reporting. As a result of these unmet needs:
   - The State's business processes are less efficient and effective than they could be.
   - Agencies continue to spend significant amounts of money on systems with functionality that is contained in ERP systems – this money could be spent toward the implementation of a single, statewide ERP system. The numerous agency-specific systems being used to meet administrative business requirements are included in the *Comparison of "As Is" vs. "To Be" Systems Environments*. For example, DHFS and DOC expend approximately $1 million per year to maintain and support their shared Fiscal Management System.
9. The statewide systems used for financial management (WiSMART), position control (PMIS), payroll administration (Central Payroll System), and budget development (State Budget System) are not integrated. Considerable effort is spent to keep these systems reconciled. Common edits found in ERP systems do not exist; for example, there is no edit to ensure that employees are placed in valid, authorized positions before a payroll payment can be generated for an employee.
10. The larger agencies maintain their own time reporting systems or utilize PTAWeb, a web-based application developed by DWD that is now being maintained by DOA as an optional-use enterprise application. There are instances in which agencies are maintaining multiple timesheets (e.g., some DHFS employees complete one timesheet for payroll processing and leave accounting purposes and a second timesheet to document the tasks they are actually working on for project and grant accounting purposes).
11. The State's enterprise payroll administration system deficiencies include:
    - The Central Payroll System does not support complex time reporting and shift differential calculations.
    - The Central Payroll System is not integrated with PMIS (position control).
    - Multiple time reporting and payroll feeder systems have been developed and are being maintained by the user agencies, resulting in considerable duplicate data entry, lack of electronic interface between some systems, and lack of enterprise data across agencies.

- No ability to track historical employee data when an employee transfers from one agency to another agency or changes classifications.
- Limited capacity to generate enterprise statewide human resources and payroll reports; agencies are often required to compile data manually.
- Lack of data to be used for workforce planning purposes.
- Lack of common, sophisticated time scheduling, reporting, and management tools have led to payment of extensive overtime to employees. One agency interviewed incurred $25 million in overtime in the last fiscal year when it had planned to spend less than half that amount.
- Considerable time and effort is required to meet the State's affirmative action reporting requirements.
- Many routine human resource transactions are not automated. Human resources staff devote considerable time to tracking paper documents and forms – forms and processes are not standard across agencies, resulting in some duplication of work. In addition, paperwork relating to benefits must be resubmitted, if an employee transfers to a new agency.
- The State has complex human resources and payroll requirements associated with its nineteen (19) bargaining unit agreements. Complexities associated with collective bargaining include:
  - Multiple rules for employee leave accrual and annual carry-forward;
  - Multiple methods for calculating pay;
  - Multi-dimensional eligibility and pay elements;
  - Exceptions to generally accepted federal pay practices; and
  - Frequent changes to biennial base pay and supplemental pay changes process with each bargaining cycle, as well as to meet federal and state mandated changes.

  Additionally, the State must have the ability to retroactively process payroll-related financial transactions when it takes a long period of time to agree on a contract.

12. Multiple asset management systems (e.g., RMS, Tivoli, ITTP, Great Plains) are being used to meet financial reporting, asset management, and IT inventory purposes at the user agency level; no enterprise-level asset management system exists.
13. The State lacks the ability to provide timely and accurate statewide reporting at the enterprise level.

14. Multiple vendor files exist within the State. The statewide vendor file resides in WiSMART, while user agencies maintain their own vendor files as well.

    The State does not maintain enterprise data on:

    - Position history,
    - Employee history,
    - Payroll history,
    - Employee training history, and
    - Employee grievance and appeals history.

15. Based on our initial high-level review of the State's statewide and user agency-specific functional needs, it appears that ERP software functionality is a good fit for meeting the State's business requirements. Though a detailed study has not been conducted, we are confident that an ERP system will meet the needs we documented and can infer from our prior experience with governmental organizations. We anticipate that Tier 1 ERP software solutions will meet 85% to 95% of the State's functional requirements without customization.

    It should be noted that the Department of Transportation has specific project accounting, cost accounting, and federal reporting requirements that are not traditionally found in baseline ERP software products.

PROCESS IMPROVEMENTS

Numerous process improvement opportunities were noted during our study. Major opportunities are listed below by topic or functional area:

Staff Reductions

- Reduction in staff effort in a number of functional/process areas due to the adoption of "best practice" processes and standardization of business processes and supporting technology across departments.
- Reduction in technical/programming costs over time by making more efficient and accurate reporting capabilities available to the end user through enhanced ad hoc reporting and inquiry functionality.
- Better management decision-making through the availability of software tools for decision support, such as reporting, modeling and forecasting.
- Reduction in staff effort and technical support through elimination of numerous "shadow systems" in departments.
- Reduction in staff effort due to elimination of duplicate data entry and related errors as pertinent data is entered once in the ERP system and then carried

throughout the system and updates other modules where appropriate.

- Improved data integrity and reduction in staff effort due to elimination of reconciling tasks associated with maintaining duplicate data in multiple databases.
- Reduction in staff effort over time due to paperless environment.
- Reduction in staff effort over time due to more efficient processing and control of documents through enterprise-wide use of workflow management in a number of areas in the organization, which provides for electronic document routing, review and approval, provides for inquiries on document status, and provides a more efficient document filing and retrieval process.
- Reduction in staff training costs over time through the use of a consistent enterprise-wide graphical user interface that provides an easy-to-use, intuitive interface and user-friendly features such as pull-down menus, point and click operation, pop-up windows, scroll bars, radio buttons, and on-line help to assist in the user's learning and ongoing use of the system.

General Ledger

- Provide for an automated reconciliation of bank activity per the ERP system to bank transactions received from the State's bank accounts through automated means.
- Reduction in staff effort to perform month-end and year-end close, and in preparation of annual financial reports.
- Easier and timelier access to more consistent financial information for administrative end users.
- Improved efficiencies in interagency transfer processes.

Budget Development

- Reduction in staff effort to develop the State's budget and administer a distributed budget process through online entry of budget, online management of changes and online reporting throughout the cycle.
- More accurate budget numbers through quicker budget review cycles and improved forecasting tools.
- Full integration with the General Ledger module to provide validation of all account coding block elements entered.
- Full integration with the Position Control module to provide validation of authorized positions.

- Provide for "what if" budget forecasting.
- Full integration to support the loading of the final Authorized Budget balances in the General Ledger module.

Accounts Payable

- Reduction in staff effort to process payables due to automated three-way (purchase order, invoice, receiving report) matching process that is fully-integrated with other impacted ERP modules.
- Maximization of cash flow through automatic scheduling of payments based on due date, while also taking advantage of vendor discounts where possible.
- Reduction in staff effort and better management of employee travel through automated handling of employee travel advances and travel reimbursement.
- Basic vendor information (e.g., address change) can be maintained on-line by vendors by utilizing self-service functionality through a web browser or kiosk.
- Single consolidated vendor file for purchasing and accounts payable use reduces duplicate data entry and provides for consistent entry of vendor information.
- Remittance advice information can be accessed on-line by vendors by utilizing self-service functionality through a web browser or kiosk.
- Vendors can inquire into the status of their outstanding payments by utilizing self-service functionality through a web browser or kiosk.
- Reduction in accounts payable cycle time.
- Employees can complete expense reimbursement reports by utilizing self-service functionality through a web browser or kiosk, and obtain proper approvals through pre-defined workflow capabilities.
- Employees check the status of travel and expense reimbursements by utilizing vendor payment status inquiry functionality through a web browser or kiosk.
- Compliance with all IRS 1099 reporting requirements.
- Provide mechanism for "offsetting" payment to vendors that have outstanding liabilities to the State, due to unresolved contractual problems, failure to pay taxes, court-ordered garnishments, or for other reasons as dictated by State law.

Accounts Receivable

- Establish a customer file for accounts receivable that is independent of the vendor file used for purchasing and accounts payable activities.
- Customer service improvements associated with standardized billings.
- Ability to charge interest against customer accounts.
- Automatic generation of customer statements with invoice and interest detail.
- Automatic generation of dunning notices.
- Access to dunning history for each customer.

Purchasing

- More competition for the State's business through more dynamic pricing models (e.g., vendor catalogs that can be accessed by the public). Price savings through volume discount realization -- currently vendors are able to use the State's disaggregated approach to purchasing to avoid offering volume discounts (sell lower volumes to each agency); market research shows 5% - 20% reduction in prices -- government experience has been 2% - 10%.
- Aggregation of buying information enables accurate reporting and strategic buying (volume discounts) and pure market-based competition.
- Increased vendor access to bid opportunities through the use of "push" technology to notify vendors of bid opportunities (based on the commodities they are registered to provide) through industry-standard email applications.
- Full integration with General Ledger to:
  - Provide automatic online budget validation and verification of account distribution for transactions (e.g., requisition, purchase order).
  - Provide the ability to post appropriate financial impact in the General Ledger to support procurement activities (e.g., post pre-encumbrance for an approved purchase requisition, post encumbrance and liquidate pre-encumbrance for a purchase order).
- Automation of solicitation process
- Single consolidated vendor file for purchasing and accounts payable use reduces duplicate data entry and provides for consistent entry of vendor information.
- Lower inventory carrying costs.
- Reduced paper printing and mailing costs.

- Reduced purchasing cycle times by 50% to 80%
- Enhanced budgetary control through funds validation provided through full integration with General Ledger module.
- Reduced errors because of real-time data validation edits (reduces data entry errors).
- Automated workflow provides for automation of business rules to increase compliance with state and agency policy, and approval paths with easy status inquiry are provided online so management has visibility into the procurement process as opposed to the current paper, phone, and in-person based tracking mechanism.
- Improved State code/purchasing policy compliance because rules are automated. For example, commodities requiring special approvals would be automatically routed to the required approvers.
- Ability to receive invoices electronically from vendors and have the invoice automatically posted to the State's system (i.e., no manual entry).
- Reduction in maverick (off-contract) spending.
- Ability to consolidate State agency and University spend and leverage combined spend to obtain better pricing from the vendor community.
- On-line receipt of goods by utilizing self-service receiving functionality through a web browser or kiosk.
- On-line vendor registration and commodity code maintenance through self-service functionality through a web browser or kiosk.
- Automated history of vendor performance.
- Improvements to the State's monitoring and oversight of the procurement process.
- Establishment of standards for the effective use of reverse auctions.
- Increased monitoring of contract compliance and performance.
- Reduced vendor printing and mailing costs.
- Ability to replace overlapping contracts by consolidating volume in some categories.
- Ability to track and report on Chapter 16 state spending by various combinations of commodity code, vendor, agency, and time period.
- Ability to standardize on a single commodity code system (NIGP is recommended).

Asset Management

- Ability to consolidate all asset management and reporting activities into a single system to track:
  - Assets that meet the State's capitalization threshold for financial reporting purposes:
  - "Controlled" assets as required by State policy,
  - "Controlled" assets as required by agency policy, and
  - Information technology and infrastructure items.

  Controlled assets are property items that are not to be capitalized per State financial reporting policy but are secured and/or tracked by State or user agency policy (e.g., handguns, computers).
- Provide for integration with the Accounts Payable and Purchasing modules to automatically identify expenditure transactions as asset acquisitions when items meet user-defined criteria (e.g., State capitalization policy and control by specific GL accounts or commodity codes). This will ensure that new purchases (both capitalized and controlled) are accurately recorded in the fixed asset records. Asset Management is fully integrated with Accounts Payable and Purchasing modules to carry forward relevant purchasing, descriptive, invoice and accounting information as a starting point for recording the asset.
- Asset Management is fully integrated with the Financial Management module to support the recording of capitalized assets related to specific proprietary funds and trust funds, and to the General Fixed Asset Account Group.
- Asset Management is fully integrated with the Financial Management module to allow for recording depreciation expense in the General Ledger for capitalized assets of specified funds.
- Easier and timelier access to asset information for administrators and end users.

Project/Grant Accounting

- Enhanced grant and project accounting and integrated billing functionality will eliminate the need for numerous agency "shadow systems"
- Better compliance with grant terms and conditions and more accurate reporting to grantors.
- More accurate and more accessible grant information for grant administrators, managers and end users.

Training

- Better management and coordination of staff training over time through centralization of all training information.
- Increased utilization of training classes over time through better access to classes by employees and easier management of schedules from staff.
- Employees can register for available training classes by utilizing self-service functionality through a web browser or kiosk

Position Control

- Full integration with Human Resources and Payroll modules to ensure that no personnel and/or payroll transactions can be processed without a properly authorized position to support the transaction.
- More accurate and timely reporting on staff budget as a result of unfilled vacancies and better projection of liabilities from filled positions.
- Extensive position history.

Personnel Management

- More timely and accurate reporting of employee information.
- Basic employee information (e.g., address change) can be completed on-line by employees by utilizing self-service functionality through a web browser or kiosk.
- Ability to automate the reduction in force process based on specified criteria.
- Extensive employee history.

Time Reporting/Leave Accounting

- Integrated time reporting and leave accounting functionality.
- Supports positive or exception reporting of time information.
- Employees can enter their own time information by utilizing self-service time entry functionality through a web browser or kiosk.
- Employees can view their leave balances and request time off by utilizing self-service functionality through a web browser or kiosk.
- Better policy compliance and fewer errors on hourly employee timesheets through balance validation during online timesheet entry.

Payroll

- Payroll remittance advice data can be accessed on-line by utilizing self-service functionality through a web browser or kiosk.
- W-4 data can be accessed and updated by employees on-line by utilizing self-service functionality through a web browser or kiosk.
- Elimination of distribution process for paper paychecks and remittance advices.
- Extensive payroll history.

Applicant Services

- Prospective applicants can complete applications for state jobs on-line by utilizing self-service functionality through a web browser or kiosk.
- Reduced paperwork associated with the job application process.
- Enhanced search capabilities for matching current State employees with the skill set requirements for open positions in state government.

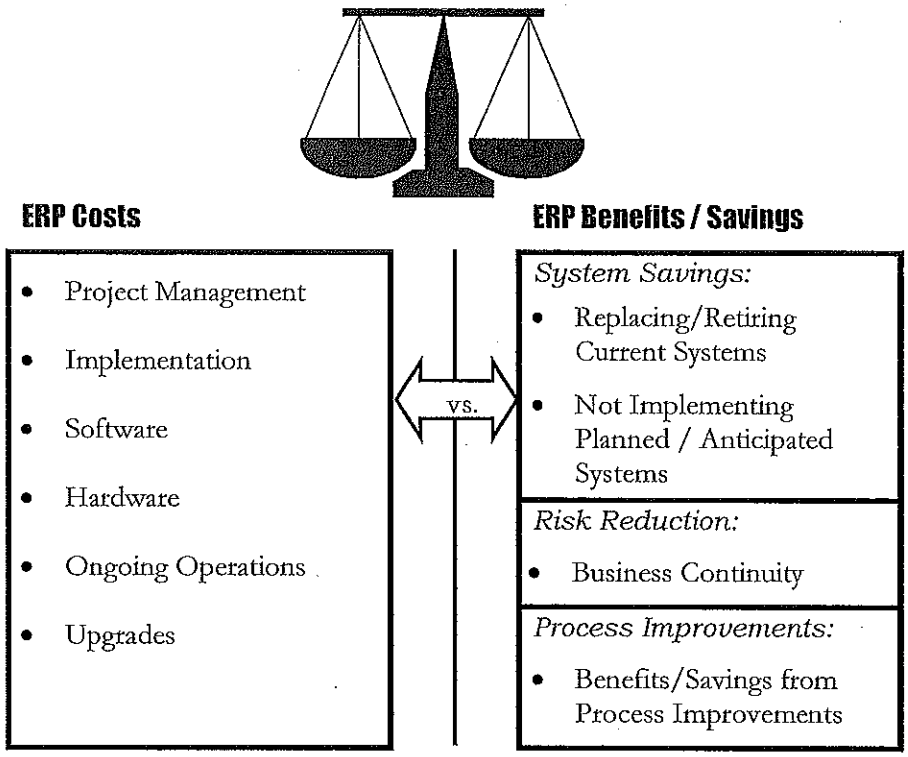
Benefits Administration

- Participant self-service for maintaining basic information on-line by utilizing self-service functionality through a web browser or kiosk.
- Changes to benefits during open enrollment can be completed by employees on-line by utilizing self-service functionality through a web browser or kiosk.

FINANCIAL ANALYSIS OVERVIEW

The Cost Benefit Analysis (Feasibility Study) evaluates the estimated cost of implementing and maintaining a statewide ERP system vs. the potential benefits/savings from such an implementation, including: (1) retiring current systems and avoiding the implementation of planned/anticipated systems, (2) reducing business risk, and (3) realizing benefits/savings from process improvements.

Each of the three dollar-quantifiable components of the analysis depicted in the diagram below (represented by three of the boxes: ERP Costs, System Savings, Process Improvements) is discussed in the *Approach and Key Findings* section below.



The Feasibility Study was conducted for an 11-year planning period and was based on the following assumptions regarding the timing of the initiative:

- **Project Preparation and ERP Acquisition** - Prior to the actual ERP implementation effort (Years 1 through 3), the Feasibility Study schedule contains a Year 0 (assumed to be fiscal year ending in 2005). During this time period, it is assumed that the State will move forward with procuring ERP software and associated implementation services (e.g., develop and issue a RFP, create a formal vendor evaluation process, develop vendor demonstration scripts, etc.), and will perform certain activities that will help the State prepare for implementing an ERP system.
- **ERP Implementation** - It is assumed that the ERP system will be implemented in three phases covering an estimated total of 42 months (3.5 years) as follows:
  - Phase 1: The Procurement modules will be implemented in the first 18 months.
  - Phase 2: Implementation of the Financial Management modules will begin twelve months after initiation of the Procurement phase and continue over

the following 18 months.

- Phase 3: Implementation of the Human Resources and Payroll modules will begin twelve months after initiation of the Financial Management phase and continue over the following 18 months.

In a majority of ERP implementations, Financial Management and Procurement models are deployed simultaneously. However, following extensive discussions with State management, STA determined that the three-phased deployment plan described above is most properly aligned with the strategic initiatives of the State. This plan provides the most immediate savings to the State while allowing the costs to be spread over two biennia.

- **System Upgrade** - It is assumed that a system upgrade will be performed in Year 6 of the planning period.
- **Ongoing Operations** - Ongoing operational activities will begin when Phase 1 goes live (in the middle of Year 2) and continue through the remainder of the Feasibility Study planning period.

APPROACH AND KEY FINDINGS

As mentioned previously, this section of the document addresses each of the three primary components of the Feasibility Study analysis:

- **ERP Costs** - Cost to acquire, implement, operate, and upgrade a statewide ERP system
- **ERP Benefits/Savings – System Savings** - Savings resulting from retiring/avoiding existing/planned systems
- **ERP Benefits/Savings – Process Improvements** - Savings from improving business processes in terms of reduced cost of process execution, as well as improved process outcomes

ERP COSTS

The category includes cost estimates to acquire, implement, and maintain an ERP system over an 11-year period. The primary inputs to this section of the Feasibility Study were STA experience and responses to a Request for Information (RFI):

- **STA Analysis and Experience** - STA has considerable experience assisting public sector clients in evaluating, selecting, acquiring, and implementing ERP systems. In particular, STA consultants have extensive experience in estimating ERP implementation costs.
- **Responses to a RFI** - The State of Tennessee issued and received responses to an RFI related to ERP systems. The RFI requested cost estimates for the ERP software (including ongoing software maintenance fees) and services which would be required to (1) implement the software over a five-year period,

and (2) perform a software upgrade in Year 6 of the planning schedule.

It is appropriate to use the cost estimate from this RFI, as the State of Tennessee and the State of Wisconsin are approximately the same size. The estimated ERP costs are shown below.

State of Wisconsin - ERP Feasibility Study
Summary Estimated ERP Costs
($ millions)

Cost Category	Year 0	1	2	3	4	5	6	7	8	9	10	Total
Implementation Costs												
Consulting Fees	$ 0.6	$ 4.1	$ 12.7	$ 22.5	$ 11.5	$ -	$ -	$ -	$ -	$ -	$ -	$ 51.4
State Employees	0.1	0.7	2.3	4.2	2.2	-	-	-	-	-	-	9.6
ERP Software – license	-	2.7	2.7	2.7	-	-	-	-	-	-	-	8.0
Facilities & Other	5.0	0.3	0.3	0.3	0.2	-	-	-	-	-	-	6.1
Total Cost of Implementation	5.7	7.8	18.0	29.7	13.9	-	-	-	-	-	-	75.0
Ongoing Operations												
ERP Software – maintenance	-	0.2	0.7	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	12.2
Data Center	-	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	10.8
Support / Operations	-	-	1.1	2.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	28.1
ERP Upgrade	-	-	-	-	-	-	9.1	-	-	-	-	9.1
Total Cost of Ongoing Operations	-	1.3	2.9	4.5	6.1	6.1	15.2	6.1	6.1	6.1	6.1	60.3
Grand Total	$ 5.7	$ 9.1	$ 20.9	$ 34.2	$ 19.9	$ 6.1	$ 15.2	$ 6.1	$ 6.1	$ 6.1	$ 6.1	$ 135.3

ERP BENEFITS/SAVINGS – SYSTEMS SAVINGS

It is assumed that savings will be realized from (1) retiring existing systems as relevant portions of the ERP system become productional, and (2) avoiding costs that would likely be incurred to procure, implement, maintain, and upgrade planned/anticipated systems during the 11-year planning period (Years 0-10). An ERP system would replace many of the business systems currently in use by the State today – only highly specialized systems such as those at the retirement programs in the Department of Employee Trust Funds would likely remain. For information on the functional areas being considered in the ERP assessment, refer to the Background and Objectives section of this report. The costs in this category are system operation and support costs, not user-related costs.

Cost information for existing and planned systems was collected for the following three systems categories:

1. The State's central administrative systems such as:
   - WiSMART
   - Purchasing Plus
   - State Budget System
   - Central Payroll
   - Personnel Input and Verification System (PIVS)

- Position Management System (PMIS)

The Department of Administration (DOA) bills the cost of these systems to agencies according to each agency's respective use of the system.

2. Systems maintained by the agencies to enhance the functionality of the central administrative systems. The costs relating to these systems are costs incurred by agencies over and above the costs that are billed to the agencies by DOA for operating and maintaining the central administrative systems.
3. Agency-specific systems that provide functionality that is within the scope of the ERP study, but this functionality is not provided by the central administrative systems (e.g., Inventory).

A survey was conducted to collect costs from a limited number of agencies (including the central administrative agencies) associated with their existing and planned systems. Costs were collected from the following state agencies: DOT, DNR, DOC, DOA, DWD, DOR and DHFS. These agencies represent 86% of the total State budget. Meetings and follow-up discussions were also conducted to collect system cost information. All other agencies represent the remaining 14% of the budget. Savings for the agencies not surveyed were estimated by extrapolating the savings amounts identified by the seven agencies.

Presented in the table below is a summary of the cost of existing and planned Financial and HR/Payroll systems. Note that the financial systems category includes the following modules: General Ledger, Accounts Payable, Accounts Receivable, Project Management, Grant Accounting, Cost Accounting/Allocation,

State of Wisconsin - ERP Feasibility Study
Summary Savings from Elimination of Existing and Planned Systems
($ millions)

System Category	# of Systems	Year 1	2	3	4	5	6	7	8	9	10	Total
Financial & Procurement Systems	59	$ -	$ -	$ -	$ 2.7	$ 5.5	$ 5.5	$ 5.5	$ 5.5	$ 5.5	$ 5.5	$ 35.6
HR/Payroll Systems	38	-	-	-	-	1.0	1.9	1.9	1.9	1.9	1.9	10.6
Grand Total	97	$ -	$ -	$ -	$ 2.7	$ 6.4	$ 7.4	$ 7.4	$ 7.4	$ 7.4	$ 7.4	$ 46.2

Budget Development, Asset Management, Purchasing, and Inventory.

It is assumed that systems savings would be realized over time. Note that the system costs presented in the table above would not be realized as savings until after relevant portions of the ERP system goes live (i.e., after mid-Year 4 for Financials and mid-Year 5 for HR/Payroll). It is also assumed that the related systems are eliminated twelve months after the relevant portion of ERP enters

production. Due to the required interaction of legacy procurement and financial management systems, no systems were considered for elimination with the go-live of the procurement modules.

ERP Benefits/Savings – Process Improvements

The State could potentially realize process improvements in a number of areas of the organization as a result of implementing a statewide ERP system. STA has coined the term "*Value Pockets*" for what are the most likely sources of value (i.e., cost savings and other benefits) to be found in each process/functional area within the scope of a possible ERP implementation.

Dollar-quantifiable benefits were estimated from data collected from a limited number of State agencies via a *Value Pocket* survey and from data collected via interviews with central sources (e.g., Accounts Payable). Meetings and follow-up discussions were also conducted to collect information used to estimate savings from process improvements. The compiled results of the survey are in Appendix D of this document.

Savings factors were applied to the data collected from the agencies. These savings factors were derived from a variety of sources, including the experiences of other organizations, and estimates made by STA based on STA's analysis of the respective processes and STA's experience, in general, in these matters.

A portion of the estimated *Value Pocket* savings (approximately 12.5%) would come from the reduction in State personnel (approximately 151 FTEs). It is assumed that most of these FTE savings would be realized over time through attrition, employee retirement, reassignment to approved but unfilled positions, and the like. In keeping with this assumption, it is assumed that a six-month stabilization period will be required after each eighteen month deployment before significant process saving will be realized. Therefore, no process savings were projected, during Years 0, 1, or 2 (FY2005 through FY2007). The first process savings are projected to begin in FY2008 for Procurement. Financial improvements begin in FY2009, and Human Resources improvements begin in FY2010.

Note that the State expects to begin achieving savings from pre-system implementation process improvements as early as FY2006. However, because the ERP system will drive large portions of the savings, strategic sourcing savings have been excluded from our analysis for fiscal years 2006 and 2007. The pre-system implementation savings are the result of current Department of Administration initiatives with anticipated savings of $15 million and $35 million for Years 1 and 2, respectively. These estimated savings amounts were based upon a prior study conducted by Silver Oaks Solutions.

SUMMARY RESULTS

The schedule below presents a summary of estimated ERP costs applied against estimated benefits/savings.

State of Wisconsin - ERP Feasibility Study
Summary of Net Benefits/Savings from Implementing an ERP System
($ millions)

Cost/Benefit Component	Year 0	1	2	3	4	5	6	7	8	9	10	Total
ERP Cost	$ 5.7	$ 9.1	$ 20.9	$ 34.2	$ 19.9	$ 6.1	$ 15.2	$ 6.1	$ 6.1	$ 6.1	$ 6.1	$ 135.3
ERP Benefits/Savings												
System Savings	-	-	-	-	2.7	6.4	7.4	7.4	7.4	7.4	7.4	46.2
Process Improvements	-	-	-	52.6	57.9	75.5	79.3	84.5	84.3	84.5	84.3	603.0
Total ERP Savings	-	-	-	52.6	60.7	81.9	86.7	91.9	91.7	91.9	91.7	649.1
Net Savings (Cost)	$ (5.7)	$ (9.1)	$ (20.9)	$ 18.4	$ 40.8	$ 75.8	$ 71.6	$ 85.8	$ 85.7	$ 85.8	$ 85.7	$ 513.8
Cumulative Net Savings	$ (5.7)	$ (14.8)	$ (35.7)	$ (17.3)	$ 23.5	$ 99.3	$ 170.9	$ 256.7	$ 342.4	$ 428.2	$ 513.8	
Internal Rate of Return												76.7%

No contingency/risk factors have been applied to these estimates as all the estimates are considered to be sufficiently conservative for the following reasons:

- ERP Costs
  - The estimated cost of ongoing operations is thought to be accurate within +/-15%. It is assumed that the potential 15% underestimate of these costs would be more than offset by the combined underestimates of savings described in the bullet points that immediately follow.
  - The total cost of ERP implementation contains a $5 million contingency.
- ERP Benefits / Savings – System Savings
  - The system savings amount includes only the agencies in the study. The estimated savings were not extrapolated for agencies not included in the study.
  - Upgrade/enhancement costs were only added to the Feasibility Study for a few of the existing systems, and the actual total upgrade/enhancement cost for all of the existing systems could be significant over the next 11 years.
  - It is assumed that the cost of new systems that would likely be implemented during the planning period in order to meet business needs not met by the current systems would most likely be sizable, and the cost of only a few of these new systems has been included in the Feasibility Study.

- ERP Benefits / Savings – Process Improvements
  - The estimated Value Pocket amounts have already been significantly discounted. Potential savings were delayed for a six-month stabilization period following go-live for the respective phases of the ERP project.

Recommendations

RECOMMENDED ACTIONS

1. State leadership should consider implementation of a statewide ERP system. All State agencies would be required to participate. ERP is considered feasible for the State for the following reasons:

   - Increased Productivity / Cost Savings / Reduced Headcount
     - Increased productivity due to adoption of best business practices commonly found in ERP software solutions.
     - Provides individual agencies with a viable alternative to purchasing new budget development "front-ends", purchase requisitioning, position control, cost, grant and project accounting, asset management, time scheduling and reporting, and human resources administration, and financial reporting systems, or maintaining/enhancing their existing systems.
     - Elimination of paper documents or reduction of paper to the extent allowed by law.
     - More efficient processing and control of documents through automated workflow, review and approvals, and inquiries on document status and possible "bottlenecks" in approval process.
     - Elimination of duplicate data entry as pertinent data is entered once in the system and then carried throughout the system.
     - Reduction of data integrity concerns and the effort required to reconcile duplicate data in multiple databases.
     - Reduced headcount due to implementation of process improvement opportunities associated with best business practices and software integration.
   - Functionality Enhancements
     - Correction of functional deficiencies associated with existing administrative systems.
     - Provides much needed statewide procurement, human resources/payroll/position control, and asset management functionality.
     - Provides for detailed position, employee, and payroll history.
     - Anticipated high fit (85% to 95%) of Tier 1 ERP software solutions to the State's functional requirements.

- New eProcurement functionality will form the framework for consolidating State agency and University spend, and will allow for leveraging combined spend to obtain better pricing from the vendor community.

♦ Technology Improvements

- The State's existing enterprise administrative systems are based on prior generation technology and are difficult to maintain. Changes often require hard-coded system modifications (i.e., specifically written into the software rather than controlled by data-table entries that can easily be changed) that are difficult and time-consuming to make. Due to the age of these systems, few of the State's personnel have a thorough knowledge of the systems, leaving the State vulnerable to exiting employees.
- Supports a graphical user interface, which provides user-friendly features such as pull-down menus, point and click operation, pop-up windows, scroll bars, radio buttons, and online help, to assist in the user's learning and ongoing use of the system.
- More efficient and accurate research capabilities, through enhanced ad hoc reporting and inquiry functionality associated with new technologies.
- System-wide integration – the integration of the various ERP modules has been built by, and will be maintained by, the software vendor.
- ERP's web-based, open architecture will enable the State to "plug and play" with new technologies. This will also decrease the State's exposure to the risks of the current aging systems (i.e., obsolescence and scarcity of resources to support the systems).
- Use of a single development toolset to support software configuration, customization, and ongoing administration of the system makes for the most efficient use of IT resources.
- Use of relational database technology.
- Application modularity allows the State to selectively implement ERP functionality based on priorities, funding availability, and staff availability to implement and support the system.
- Comprehensive drill-down capabilities and audit trail.
- Desktop software integration allows for extracting data from the ERP software into common desktop applications such as the Microsoft Office suite for data manipulation and analysis.

2. It is recommended that the functional scope include the following functional areas:

   - **Procurement**
     - e-Procurement
     - Vendor Self-Service
     - Strategic Sourcing
   - Financial Management
     - General Ledger
     - Accounts Payable
     - Accounts Receivable and Billing
     - Cash Receipting
     - Asset Management
     - Grant Accounting / Management
     - Project Accounting
     - Budget Development (some vendors may need to propose 3rd party solutions to meet budget development requirements)
   - Human Resources
     - Personnel Administration
     - Position Control
     - Compensation
     - Payroll
     - Time Reporting and Employee Leave Accounting
     - Benefits Administration
     - Applicant Services
     - Training and Employee Development
     - Employee Self-Service

   Based on a detailed requirements study, the State may learn that there is a considerable need for Inventory Management and Fleet Management software functionality as well.

3. In implementing a new ERP system, it is recommended that the University System institutions be excluded from participation, with one exception. We recommend the inclusion of the University and other governmental municipalities for eProcurement and strategic sourcing only. This will allow the State to further leverage the combined spend as a means of obtaining better pricing from the vendor community. Note that although the University System is excluded from participation, provision should be made for integration between University and ERP systems where continued exchange of data will be required.

4. Additional analysis should be conducted to determine whether the Department of Transportation should be included in the scope of the ERP system or whether interfaces should be developed to/from their existing administrative systems. Additional analysis is required because DOT's typically have unique project accounting, cost accounting, and federal reporting requirements that are not traditionally found in baseline ERP software products. It is possible that the DOT could utilize some ERP functionality (e.g., human resources, payroll, procurement) but not other functionality (e.g., cost accounting, project accounting). Our report assumes the inclusion of the DOT.

5. Additional analysis is required to determine whether an ERP system can meet the functional requirements for enterprise IT asset inventory management. If not, consideration should be given to maintaining the AIM-IT System and interfacing it to the new ERP system. Our report assumes that AIM-IT is replaced by the new ERP system.

6. It is recommended that the State initiate and implement an aggressive strategic sourcing effort as part of its ERP project in order to reduce the cost of goods and services purchased, and to assist in funding the consulting services required to successfully implement the new ERP system. Strategic sourcing is a process that creates quantifiable, hard-dollar savings by reducing the cost of purchased goods and services.

   Implementation of an ERP system with full eProcurement capabilities is critical to strategic sourcing success as the ERP system will support the:

   - Capturing and reporting on all procurement activity for price benchmarking;
   - Monitoring and controlling of maverick (off-contract) spending by agencies;
   - Tracking of savings incurred;
   - Tracking of performance metrics by commodity and vendor; and
   - Tracking of agency usage by commodity and vendor.

7. When all software functionality is deployed across the entire organization at one time, this is known as a "big bang" implementation. The benefit of a "big bang" implementation is that the software is installed more quickly than under other deployment strategies. Therefore, the implementation consultant costs, as well as other costs, are minimized. With the "big bang" approach, cost of developing temporary interfaces can be avoided. Furthermore, legacy systems can be retired earlier resulting in reduced costs. However, there is a greater risk with the "big bang" approach, as the organization may not be able to quickly absorb all of the changes associated with this approach. This approach also presents a tremendous training challenge.

   Software can also be deployed in a phased manner across the organization. When a phased implementation approach is used, agencies and software modules are typically grouped in accordance with the abilities of the project team to support each phase. With this approach, there is an increased ability to absorb change and therefore decrease project risk. In addition, training is more manageable. The shortcoming of the phased approach is that it is usually considerably more expensive than a "big bang" approach, as the total project duration is typically longer than a "big bang" approach. Additional cost factors associated with this approach include the cost of developing temporary interfaces and the cost of legacy systems that remain in production for a longer period of time.

   When software functionality is deployed in a phased manner, the functionality is typically implemented in two broad functionality groupings: Human Resources/Payroll and Financial Management. A few organizations have chosen to implement core ERP modules from one of those groupings first, followed by other modules at a future date. For example, Applicant Services and Training/Career Development may be implemented months or years after the core modules of HR/Payroll are implemented. Also, Inventory, Asset Management, Fleet Management and Billing may be implemented after the core Financial Management modules are implemented. It is important, however, to minimize the "breaking" of the integration within the broad functionality groupings.

   Typically, for a large organization, the "big bang" approach should be avoided. The risks and strain on the organization are too great. In most cases, large organizations implement the core Financial Management modules, including General Ledger, Budgetary Control, Accounts Payable, Accounts Receivable, and Procurement during the first phase or "wave," since Financials are the backbone of an ERP system. However, there may be a compelling business case for considering other alternatives.

   As recommended by other organizations, it is normally best for Financials to be deployed at the beginning of the fiscal year to avoid mid-year conversions.

However, each organization must consider whether the complexity and cost of mid-year conversions outweigh the risk of bringing financials "live" for all organizations at one time.

While there are a number of implementation best practices, each organization must consider its own business priorities and complexities in selecting the appropriate deployment strategy. The State of Wisconsin must consider the unique requirements of some state agencies as well, such as the Department of Transportation. For example, some agencies have unique funding or project management requirements. Factors to be considered in determining a deployment strategy include:

- **Value Proposition** – Does a portion of functionality offer a greater financial or service benefit than another?
- **Risk Avoidance** – Is there risk associated with implementing or not implementing a portion of the functionality?
- **Mandate** – Is there an executive, legislative or federal mandate that requires a portion of functionality on a specified date?
- **Strategic Initiative** – Does the functionality support an on-going or new business program?
- **Funding Availability** – Is funding available to support the functionality?
- **Organizational Readiness** – Has any part of the organization demonstrated a greater ability to accept change?
- **Sponsorship** – Have the senior executives identified a preference for a specific functionality that is more important?

Each of these factors has been analyzed at a high level for the State of Wisconsin. No distinguishing factors were found for the Value Proposition, Mandate, Strategic Initiative, or Funding Availability factors.

Our recommendation was primarily determined by Risk Avoidance and Organizational Readiness. There are risks associated with the Human Resources/Payroll (e.g., no statewide HR system exists, Payroll system is not integrated with Position Control system, current systems are old and difficult to maintain, system changes often require program coding to implement necessary changes due to the lack of system flexibility, few State staff are trained to maintain the current systems, those who currently maintain that system are very senior, leaving the State vulnerable to resignations and retirements).

However, we believe that the State is better prepared to initially implement the Procurement and Financial Management modules due to: (1) numerous compelling process improvements and (2) substantial savings to be gained

from to leveraging combined state agency and university spend to obtain better pricing from the vendor community.

The ERP system should be implemented in three phases covering an estimated total of 42 months (3.5 years):

- Phase 1: The Procurement modules will be implemented in the first 18 months.
- Phase 2: Implementation of the Financial Management modules will begin twelve months after initiation of the Procurement phase and continue over the following 18 months.
- Phase 3: Implementation of the Human Resources and Payroll modules will begin twelve months after initiation of the Financial Management phase and continue over the following 18 months.

  See Recommendation #2 above for a listing of functional areas included in Procurement, Financial Management, and Human Resources.

In a majority of ERP implementations, Financial Management and eProcurement models are deployed simultaneously. However, following extensive discussions with State management, STA determined that the three-phased deployment plan described above is most properly aligned with the strategic initiatives of the State. This plan provides the most immediate savings to the State while allowing the costs to be spread over two biennia.

8. It is recommended that the State establish an ERP Steering Committee to provide leadership and guidance for all future ERP System activities. The Steering Committee should be composed of a single representative from each of the following user agencies:

   - Department of Administration
   - Department of Corrections
   - Department of Health and Family Services
   - Department of Natural Resources
   - Department of Revenue
   - Department of Transportation
   - Department of Workforce Development
   - At least one medium-size agency representative (to be determined)
   - At least one small agency representative (to be determined)

The Steering Committee should also include a representative from each of the following enterprise/oversight organizations:

- DOA Enterprise Technology
- DOA Budget
- DOA Procurement
- DOA Financial Management
- DOA Central Payroll
- Office of State Employee Relations
- Governor's Office
- State Auditor (usually not a voting member)
- The recommended responsibilities of the Steering Committee are to:
- Attend regularly scheduled Steering Committee meetings;
- Provide leadership and high-level guidance to the ERP Project Team;
- Evaluate action items and other recommendations presented for Steering Committee review and evaluation;
- Assist in fostering support for ERP initiatives and
- Assist in resolving high-level issues and problems.

Risks and Lessons Learned

LEARNING FROM THE PAST

Based on STA's findings in performing this study for the State of Wisconsin, our prior experiences in providing ERP related services to governmental entities, results of surveying and interviewing other states that have implemented ERP systems, and additional marketplace research, we offer the following as major risks that can materially impact and sometimes lead to failure of ERP projects and lessons learned that will help mitigate those risks. These risks and lessons have been grouped as follows:

- Project Management
- Personnel
- Change Management/Organization Alignment
- Software Implementation
- Software and Services Acquisition

The major risks and lessons learned are documented in the following sections.

PROJECT MANAGEMENT

- **Project "Scope Creep"** – Project scope must be well defined and tightly controlled to mitigate "scope creep". A recommended method to control "scope creep" is to utilize a detailed project workplan and budget, and implement a structured scope control process that is rigorously followed.**Inadequate Project Control** – Projects often fail due to inadequate and ineffective project management. Utilization of a formal project management methodology and an experienced project manager (in-house or contractor) is required for a successful ERP implementation. Additionally, structured processes should be implemented to ensure that all issues and project risks are properly logged in, assigned, tracked, and managed.

PERSONNEL

- **Part-Time Resources** – Projects are understaffed when not enough resources are assigned and/or resources are committed on a part-time basis to the project because these resources are forced to choose between competing job duties. An adequate number of the right State resources should be committed to the project on a full-time basis, and key positions should be back-filled as necessary to ensure the project team has access to the proper subject matter experts.

- **Inadequate Knowledge Transfer** – ERP projects frequently experience inadequate knowledge transfer and a continued reliance on consultants to provide ongoing support for the system. It is not uncommon for consulting resources to continue providing post-implementation support to a government for several years after "go live". The software is too complex and the business changes too dramatic to trust the project to anyone other than the best and brightest State resources. Contracts for ERP implementations typically require that the State commit specific levels and types of resources to the project. These State resources must be available when needed, and must have the types of skills required for the role they have been placed in. Additionally, the selected vendor's implementation methodology should transition the consultants from a "doer" to a "mentoring" role as execution of the project workplan progresses.

- **Project Staffing and Retention** – Project team turnover can also pose a problem. Care should be taken to recruit the best and brightest resources to the project team, and a plan should be developed to provide incentives for keeping staff; otherwise, consulting firms and other companies will "scoop them up" once they have acquired ERP training and experience.

- **Unqualified Implementation Consultants** – The implementation can be delayed, fail, or seemingly never end due to incorrect actions/decisions by the implementation consultant. The implementation consulting team must have thorough knowledge of the ERP software to be implemented and/or knowledge of how public sector entities operate.

CHANGE MANAGEMENT/ORGANIZATION ALIGNMENT

- **Unrealistic Expectations** – End users and management are often times disappointed in the capabilities of the implemented ERP system. Some public sector ERP projects have failed to deliver system capabilities on which the business case justification and return on investment were established. It is not uncommon to find governmental ERP installations that have not implemented workflow and budget development functionality, and are not using the ad hoc reporting tools that are provided as part of the ERP software suite as extensively as originally envisioned. Project management must manage expectations of the State's leadership, the project sponsors, the project team, and the end users. It is important that realistic expectations be clearly and frequently communicated throughout the organization. **Insufficient Change Management** – Though there is major support to enhance and/or replace the State's existing enterprise administrative systems and several of the user agencies need to make significant changes to their existing agency-specific administrative systems, we did observe several "pockets" of resistance. It is common for organizations to underestimate the level of change management required as part of an ERP implementation.

Most projects that fail do so because the human aspects of the project fall short – not because the system does not work as designed. The new system will drive the implementation of new business processes that may radically change the work environment and job tasks of employees. The risks associated with not recognizing and properly managing organizational change impacts can disrupt the project implementation effort and system acceptance, decrease employee productivity, and increase employee stress and anxiety.

- **Conflicting Objectives** – Turf battles over system ownership and software functionality may arise. Legacy systems were often developed to meet the business needs of specific agencies, while the entire government, as an enterprise, owns a properly implemented ERP system. Conflicting objectives can greatly impact the success of a project. It is critical that key executives and elected officials are correctly aligned and are "pulling together" to support the project. ERP systems require government agencies to fully cooperate with each other in order to operate efficiently.**Inadequate Decision-Making Authority** – The project team must not only have the skills to make good decisions regarding the State's business processes, they must also be empowered with the appropriate authority to resolve issues and make decisions in a timely manner. In the case where the issue is beyond the authority for the project team to resolve, the steering committee must be prepared to make decisions quickly so that the project is not delayed.

- **Insufficient End User Training** – Training of end users is absolutely critical to success when implementing an ERP system. Care must be taken to properly staff the training function, especially if a "train-the-trainer" approach is to be used.

- **Lack of Executive Support** – A perceived or real lack of executive support for the project almost certainly will ensure its failure; strong executive management support and commitment across state government are a must. Widespread communication of executive support is essential to obtaining buy-in from all levels of the organization, especially since ERP systems generate so much change across the enterprise.

- **Lack of Trust in State's Ability to Deliver on Enterprise Projects** – In conducting meetings with the user agencies, there was considerable support for the implementation of new ERP system; however, there was considerable skepticism that the DOA's Division of Enterprise Technology can deliver the functionality needed to the user agencies in a timely manner without major cost over-runs. As part of its change management process, the Division of Enterprise Technology should begin its communications outreach program with the user agencies once a decision has been made to pursue the implementation of a new ERP system. The user agencies should be actively involved in all phases of the ERP project, including developing system

requirements, evaluating the software and implementation services selected (through representation on the Evaluation Committee), and as participants on the actual implementation project. Care should be taken to approach the ERP project with an emphasis on functionality instead of as a technology initiative.

SOFTWARE IMPLEMENTATION

- **Extensive Modifications** – Extensive modifications to the ERP software increase project risk, lead to project cost and time overruns, and often impair the installation of future product releases. In early ERP projects implemented for governments, a heavy emphasis was placed on modifying the software to better meet the government's system needs. ERP functionality for the public sector has matured in recent years and governments have begun to embrace process change by adopting the best practices found in today's ERP systems, resulting in a significant decrease in the amount of customization to the underlying software code.

- **Unreasonable Timelines** – Unrealistic implementation timeframes and deployment strategies have led to cost overruns and scaled-back functionality. These days, ERP vendors are touting accelerated implementation methodologies to reduce implementation costs. However, the timelines associated with an accelerated approach may be unrealistic given the degree of change that must be absorbed across the entire government enterprise.

- **Inadequate Planning for Data Conversion and Software Testing** – The government is typically tasked with converting data from the legacy systems. The more data that is converted from the legacy system, the greater the risk to the ERP project. Care must be taken to ensure that adequate time and appropriate personnel are available to successfully complete the task.

- **Unprepared for Ongoing Operations** – Some governments have not adequately prepared to administer and run the ERP system after implementation. Care should be taken to ensure that the organization has the capability to adequately maintain the system and provide end user support.

- **Unprepared for Software Technology Change** – The software, tools and databases formerly used in legacy software are not readily transferable to modern ERP systems. Extensive training and retooling of IT staff is required to ensure successful ERP implementation and ongoing maintenance.

SOFTWARE AND SERVICES ACQUISITION

- **Insufficient Contract Accountability** – At times, during prior government ERP implementation projects, the governments have not been able to hold the prime contractor accountable for project results. These problems can be mitigated by drafting a well-crafted procurement instrument and contract with the vendor that is results-based and ties vendor payments to deliverables and

project milestones.

- **Vendor Protests** – Software or implementation service acquisition can result in contested awards or dissatisfaction with the implementation contractor selected. Care should be taken to develop and utilize a formal proposal evaluation methodology to evaluate all proposals received for ERP software and implementation services. In order to decrease the likelihood of a vendor protest and increase the likelihood of obtaining a qualified implementation partner, organizations have obtained external help with the proposal evaluation process and with contract negotiations if such expertise is not available in-house.

- **Unmet Business Needs** – The ERP software, as configured, may not meet the State's business needs and/or may include components of "vaporware".

  A major concern exists regarding ERP systems' ability to meet the State's human resources and payroll requirements associated with its nineteen (19) bargaining unit agreements. Complexities associated with collective bargaining include:

  - Multiple employee leave accrual and annual carry-forward rules;
  - Multiple methods for calculating pay;
  - Multi-dimensional eligibility and pay elements;
  - Exceptions to generally accepted federal pay practices; and
  - Frequent changes to biennial base pay and supplemental pay changes process with each bargaining cycle, as well as to meet federal and state mandated changes.

  At the time of this report, other large public sector organizations with complex bargaining agreements have successfully implemented ERP systems. These public sector organizations include the City of Philadelphia, the City of New York and the State of New York, which has 46 unions representing 110 bargaining units with 753 different payment types. Selecting and implementing an ERP system that does not meet the State's bargaining unit requirements could result in (1) making considerable customizations to the baseline ERP software, (2) continuing to maintain and interface with the State's current systems that support these requirements, (3) incurring legal exposure associated with a failure to comply with the bargaining agreements, and/or (4) halting the project altogether.

  To mitigate this problem, the State must start by including a comprehensive set of system requirements in the RFP, and require that vendor responses to meeting the requirements be made a part of the contract between the State and the vendor. Vendors should be required to demonstrate complex bargaining unit requirements in accordance with a structured demonstration script developed by the State's evaluation committee. A formal process should then

be established and followed to monitor that all system requirements are being met during system design and configuration.

Alternative Solutions

PURPOSE

The maturity of public sector functionality commonly found in Enterprise Resource Planning software and the emergence of eProcurement and Constituent Relationship Management (CRM) software are driving governments to look at replacing their existing administrative systems. However, major budgetary constraints are causing elected officials and government administrators to closely scrutinize this decision and consider possible alternatives to implementing an ERP system.

WHAT ARE THE MOST VIABLE ALTERNATIVES TO ERP?

The following solutions offer the most viable alternatives to ERP for the State:

1. Status Quo
2. Custom Development
3. Implement a "Best-of-Breed" Solution to Address Immediate Needs
4. Enhance Existing Systems and Processes
5. Hosted ERP Processing

These alternative solutions are presented for discussion purposes only and none are recommended for implementation at this time.

STATUS QUO

Description of Solution

The "Status Quo" alternative is presented as a baseline for comparison with other solutions. This solution provides for keeping the existing statewide legacy systems in place, while making no enhancements in functionality to the current systems or new integration among these systems.

The State's current administrative business processes are conducted through the use of numerous legacy applications as well as user agency applications that are used to meet specific agency needs (e.g., grant, project, and cost accounting needs, fleet management). Integration is limited, but there is some interfacing across user agency administrative systems, between user agency and statewide administrative systems, and across statewide administrative systems.

Pros

- No disruption of current business processes.
- Limits inherent risks associated with changing current systems (assumes ongoing maintenance will still occur where applicable).

- No additional costs beyond normal maintenance.

Cons

Fails to address the following problems:

- Current administrative systems require considerable technical skills/resources and time to modify.
- Continued reliance on paper documents and the inefficient workflow associated with processing them.
- Lack of real-time integration within and among statewide financial, procurement, and human resources/payroll systems and symptoms thereof.
- Fails to take advantage of best business practices inherent in ERP systems.
- Time-consuming reconciling tasks associated with maintaining duplicate data in multiple databases. Reconciling required:
  - Between user agency administrative systems,
  - Between user agency and statewide administrative systems, and
  - Between statewide administrative systems.
- Facilitates user agencies' continuance to fund new systems projects in order to meet agency administrative business needs not being met by existing statewide systems.
- Lack of adequate ad hoc reporting capabilities.

Constraints and Risks

The risk associated with the "Status Quo" solution is that it provides no additional functionality or technological improvements; therefore, current systems may not meet statewide and user agency future needs. Specifically, the existing systems lack real-time integration with one another, and do not include an adequate end user reporting facility. Additionally, the State's legacy financial, procurement, and human resources/payroll systems and associated support are not positioned to respond rapidly to changes in business processes or technology.

This option includes a major risk of technical obsolescence. While the State has followed industry standards in maintaining and enhancing its existing systems, these standards are being applied to a group of systems lacking integration, a common database, data consistency, and extensive management reporting capabilities.

Feasibility of Solution

As stated above, this solution ensures that current financial, procurement, human resources/payroll, and other administrative systems will remain operational in the

near term; however, it places the States strategic direction on hold indefinitely. It is not considered a viable solution for addressing future administrative systems needs.

CUSTOM DEVELOPMENT

Description of Solution

The "Custom Development" (Custom) option will provide for the in-house development of a new fully integrated client/server, web-centric application that will meet the State's functional and technical system requirements. System programs would be developed using fourth-generation or higher programming languages, development tools, and development environment. All data would be maintained in a single, uniform, database. By adapting to an open client/server system architecture, modern tools and design techniques would assist the State in achieving a flexible, interoperable, and modular system, which can meet the future needs of the State.

Pros

- Assumed to meet 100% of the State's functional requirements.
- System will be designed to provide full integration among the core areas of functionality.
- Will be built in compliance with the State's strategic technology direction.

Cons

- Will take a minimum of three to four years to design, develop, properly test, and deploy.
- Requires extensive training of existing personnel and/or outside support assistance in the latest system development tools and methodologies.
- The State would solely fund all initial development costs and risks, as well as future ongoing software upgrades and maintenance costs.

Constraints and Risks

Based on our experience with custom solutions, we believe that the extremely high risk of project failure associated with the Custom option renders this option unacceptable to the State due to its size, complexity, project duration, and funding requirements. Only organizations with considerable funding can support the high cost of ownership and complexity associated with developing and maintaining custom-developed applications.

Feasibility of Solution

Due to the numerous risks associated with a project of this magnitude and the ongoing costs associated with maintaining and enhancing the system for future

use, custom development of a new fully integrated system is not considered a feasible alternative and will be given no further consideration.

BEST-OF-BREED

Description of Solution

Increasingly, organizations are looking at commercially available software solutions' ability to meet specific business requirements as the primary driver in determining the best solution. The "Best-of-Breed" option means that the State would choose the best product available for each business function and build and maintain the necessary integration. Specifically, the State could focus its efforts on acquiring software and implementation services to address its most compelling needs at this time -- human resources and payroll administration, and implement other "best of-breed" solutions to address financial, procurement, and other administrative systems needs as the need arises and funding is made available.

Pros

- Ability to meet a high percentage of the State's business requirements in specific functional areas; potentially greater depth of functionality in these areas.
- Take less time to implement or upgrade.
- Typically costs considerably less, initially, than ERP software solutions, though ERP software is often implemented using a "best-of-breed" approach (e.g., one vendor's human resources/payroll software with another vendor's financial management software).
- Provide many of the same features commonly found in ERP systems (e.g., automated workflow, ad hoc reporting tools, self-service functionality).

Cons

- Requires the State to maintain resources skilled in multiple development toolsets and programming languages.
- Lacks "true" integration of ERP systems, though some "best-of-breed" vendors now provide for integration points with common ERP systems that allow for "real-time" integration.
- Higher total cost of ownership than ERP over time because of the cost of integration, supporting multiple development environments, and managing multiple vendor relationships.
- Time-consuming reconciling tasks associated with maintaining duplicate data in multiple databases.

Constraints and Risks

Care should be taken in planning for the acquisition of "best of-breed" software to ensure a proper "breaking of the integration" – by this we mean that there are best practices for combining "best-of-breed" software applications to meet an organization's administrative business needs. A common and relatively low-risk option is to buy acquire one vendors human resources and payroll software suite, and interface it with another vendors financial management and procurement software suite.

Feasibility of Solution

"Best-of-Breed" solutions are viable alternatives for meeting the State's administrative business needs as long as care is taken to select a high quality solution that is supported by a stable company. These solutions are especially attractive during difficult economic times when funding is limited.

ENHANCE EXISTING SYSTEMS AND PROCESSES

Description of Solution

This alternative would provide for enhancements to the existing statewide legacy systems. Potential enhancements include:

- Deployment of sophisticated ad hoc reporting tools to allow end users to create many of their own reports;
- Modification of the existing systems and/or acquisition of third party "add-on" software to enhance functionality and/or address process improvement opportunities; and
- Improved user interface for selected applications.

This option has the potential to produce a greatly improved reporting capability, but will provide only a marginal increase in productivity due to limited opportunities to improve integration and system functionality, and the lack of use of best business practices and automated workflow capabilities.

Pros

- Does not disrupt normal business operations as much as a system replacement project.
- Does not require the replacement of application software.
- Not necessary to train users on an entirely new system, only certain features.
- Leverages the skills of existing IT personnel.
- Costs would be considerably less than with a replacement solution.

Cons

- High risk associated with modifying the existing legacy systems.
- Fails to provide the efficiencies and process improvements that other options will provide.
- Considered only a "stop gap" option.

Constraints and Risks

Any potential modifications to the human resources will include high risk due to the fact that the system has been modified numerous times in the past, and the State has limited IT resources that are technically proficient with this system. Customization of any of the administrative systems includes inherent risks.

Feasibility of Solution

This option is considered feasible only as a "stop gap" until other more viable options can be implemented.

HOSTED ERP

Description of Solution

Hosting means contracting with independent suppliers to meet an organization's in-house needs. Numerous hosting models exist today, but the most common model involves the client paying a subscription fee for use of specified software that is maintained by the application service provider (ASP). The ASP provides the technical infrastructure and support services to the client organization.

Pros

- Expected cost savings (brief history has shown varied actual results).
- Reduced need to hire and retain highly skilled (and expensive) technical resources.
- Very high levels of "uptime" and maintenance that is seamless to the user.
- Improved levels of customer service (brief history has shown varied actual results).
- Reduced need to purchase new, rapidly depreciating hardware and software.
- Reduced initial investment and "pay-as-you-go" financing.
- Predictability of cash flow.
- Decreased cost of ownership.
- Operating expense versus capital expense.

Cons

- Negotiations typically involve multi-year "lock-in" contracts, which raise concerns of vendor stability (GartnerGroup analysts estimate that 60% of the ASPs in business today will fail in the near future) and quality of service.
- On multi-year contracts, vendor profits are often "backend loaded" into the later years of the contract, so that attractive first year pricing may be misleading.
- As needs and business grow, organizations see their use of computer services increase over the years, and vendor billings increase accordingly; however, additional work typically is priced higher than the initial services, so that anticipated cost savings may not materialize.
- Political risk (State jobs may go away).
- Offer limited flexibility – these solutions work well in a standardized environment but tend to break down when an entity has unique needs.

Constraints and Risks

The potential for contract disagreement over what activities and services are included in the price is very high, particularly in later years when vendors expect their profits to increase.

Where hosting has failed to be cost-effective or does not yield satisfactory service delivery, the organizations involved have struggled to reinitiate in-house functions without impacting services.

Feasibility of Solution

Hosting is a viable alternative if the delivery of service can be measurably improved and/or costs controlled or reduced significantly without unacceptable levels of risk and side effects.

Should State leadership choose to initiate the acquisition of ERP software and associated implementation services, the Request for Proposal can be structured in such a way to allow vendors to propose alternative hosting models as part of their ERP offering.

Appendix A: Net Savings for ERP Project

State of Wisconsin - ERP Feasibility Study

Net Benefits/Savings from Implementing an ERP System

Phases →	Acquire	Enterprise Wide	Finance	HR/Payroll			Upgrade					Total
Cost/Benefit Component	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**	
ERP Implementation & Operation Cost	$ 5,723,398	$ 9,110,936	$ 20,886,008	$ 34,184,883	$ 19,914,114	$ 6,061,759	$ 15,162,969	$ 6,061,759	$ 6,061,759	$ 6,061,759	$ 6,061,759	$ 135,291,105
Savings from Elimination of Existing and Planned Systems – Financials/Procurement	-		-	-	2,737,544	5,475,088	5,475,088	5,475,088	5,475,088	5,475,088	5,475,088	
Savings from Elimination of Existing and Planned Systems – HR/Payroll	-	-		-	-	961,760	1,923,519	1,923,519	1,923,519	1,923,519	1,923,519	
Total Eliminated System Cost	-	-	-	-	2,737,544	6,436,848	7,398,607	7,398,607	7,398,607	7,398,607	7,398,607	46,167,429
Value Pocket Benefits/Savings – Financials/Procurement	-	-	-	52,597,125	57,939,091	74,072,037	77,939,091	83,072,037	82,939,091	83,072,037	82,939,091	
Value Pocket Benefits/Savings – HR/Payroll			-	-	-	1,397,985	1,397,985	1,397,985	1,397,985	1,397,985	1,397,985	
Total Value Pocket Benefits/Savings	-	-	-	52,597,125	57,939,091	75,470,023	79,337,076	84,470,023	84,337,076	84,470,023	84,337,076	602,957,510
Net Benefit	$ (5,723,398)	$ (9,110,936)	$ (20,886,008)	$ 18,412,242	$ 40,762,521	$ 75,845,111	$ 71,572,714	$ 85,806,871	$ 85,673,924	$ 85,806,871	$ 85,673,924	$ 513,833,834
Cumulative Net Benefit	$ (5,723,398)	$ (14,834,335)	$ (35,720,343)	$ (17,308,101)	$ 23,454,419	$ 99,299,531	$ 170,872,245	$ 256,679,115	$ 342,353,039	$ 428,159,910	$ 513,833,834	
Internal Rate of Return (IRR)												76.7%

Appendix B: Cost to Implement and Maintain a Statewide ERP System

State of Wisconsin - ERP Feasibility Study
Estimated ERP Cost Schedule

Cost Category	Yr 0 FYE 2005	Yr 1 FYE 2006	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Total
Implementation Cost												
Project Management	$ -	$ 443,520	$ 887,040	$ 887,040	$ 443,520	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,661,120
Independent Project Oversight	600,000	403,200	806,400	806,400	403,200	-	-	-	-	-	-	3,019,200
Total Software Configuration & Process Re-engineering	-	606,400	3,622,080	6,504,960	2,217,600	-	-	-	-	-	-	13,031,040
Total Workflow Configuration	-	-	591,360	1,182,720	295,680	-	-	-	-	-	-	2,069,760
Custom Development												
Total Interfaces	-	-	264,000	836,000	396,000	-	-	-	-	-	-	1,496,000
Total Software Modification	-	-	887,040	2,328,480	665,280	-	-	-	-	-	-	3,880,800
Total Report Development	-	-	406,560	1,034,880	221,760	-	-	-	-	-	-	1,663,200
Total Data Conversion / Loading	-	443,520	887,040	1,700,160	369,600	-	-	-	-	-	-	3,400,320
Total Change Management & Deployment	-	1,108,800	1,219,680	2,328,480	1,108,800	-	-	-	-	-	-	5,765,760
Total Training & Documentation	-	200,000	1,094,200	1,219,680	1,219,680	-	-	-	-	-	-	3,733,560
Infrastructure Development & Project Support	-	792,000	1,188,000	1,188,000	792,000	-	-	-	-	-	-	3,960,000
Total Post-Implementation Support	-	-	922,360	2,467,080	3,400,320	-	-	-	-	-	-	6,689,760
State Employee Implementation Cost (backfill)	123,398	732,493	2,318,657	4,218,826	2,163,915	-	-	-	-	-	-	9,557,291
Grand Total Implementation Cost (people only)	723,398	4,869,933	14,994,417	26,702,708	13,097,355	-	-	-	-	-	-	60,927,811
Application Software License												
Total Application Software License	-	2,666,666	2,666,668	2,666,666	-	-	-	-	-	-	-	8,000,000
Software Maintenance Fee												
Total Software Maintenance Fee	-	240,000	720,000	1,200,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000	12,240,000
All Other (hardware, facilities, etc.)	5,000,000	310,000	310,000	310,000	155,000							6,085,000
Annual Operating Costs (data center)		1,084,337	1,084,337	1,084,337	1,084,337	1,084,337	1,084,337	1,084,337	1,084,337	1,084,337	1,084,337	10,843,373
Total Implementation Cost	5,723,398	9,110,936	19,775,422	31,963,711	16,376,692	2,524,337	2,524,337	2,524,337	2,524,337	2,524,337	2,524,337	98,096,185
Ongoing Support and Operations												
Help Desk / Functional Support (central)	-	-	411,328	822,656	1,316,250	1,316,250	1,316,250	1,316,250	1,316,250	1,316,250	1,316,250	10,447,734
Help Desk / Functional Support (in agencies)	-	-	164,531	329,063	493,594	493,594	493,594	493,594	493,594	493,594	493,594	3,948,750
Technical Operations and Support	-	-	370,195	740,391	1,233,984	1,233,984	1,233,984	1,233,984	1,233,984	1,233,984	1,233,984	9,746,477
Ongoing Training	-	-	164,531	329,063	493,594	493,594	493,594	493,594	493,594	493,594	493,594	3,948,750
Other	-	-	-	-	-	-	-	-	-	-	-	-
Total Support/ Operations	-	-	1,110,586	2,221,172	3,537,422	3,537,422	3,537,422	3,537,422	3,537,422	3,537,422	3,537,422	28,093,711
Upgrade in Year 6												
Contractor							7,667,616					7,667,616
State Employees							1,433,594					1,433,594
Total Upgrade Cost							9,101,210					9,101,210
Total Annual ERP Cost	$ 5,723,398	$ 9,110,936	$ 20,886,008	$ 34,184,883	$ 19,914,114	$ 6,061,759	$ 15,162,969	$ 6,061,759	$ 6,061,759	$ 6,061,759	$ 6,061,759	$ 135,291,105
Cumulative ERP Cost	$ 5,723,398	$ 14,834,335	$ 35,720,343	$ 69,905,226	$ 89,819,340	$ 95,881,100	$ 111,044,068	$ 117,105,828	$ 123,167,587	$ 129,229,346	$ 135,291,105	

Appendix C: Replaced and Avoided Systems Costs

State of Wisconsin ERP Feasibility Study
Savings from Elimination of Existing and Planned Systems

Central/Agency Systems	Responding Agency	Current/ Planned	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
Financial/Procurement Systems												
BIS Billback system (BICS)	DHFS	Current	-	-	129,371	129,371	129,371	129,371	129,371	129,371	129,371	905,597
Community Aids Reporting System (CARS)	DHFS	Current	-	-	122,000	122,000	122,000	122,000	122,000	122,000	122,000	854,000
Division of Health Activity Accounting System (DOHAAS)	DHFS	Current	-	-	59,228	59,228	59,228	59,228	59,228	59,228	59,228	414,596
Fiscal Management System (FMS)	DHFS	Current	-	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	7,000,000
Accounts Receivable Database	DNR	Current	-	-	923	923	923	923	923	923	923	6,462
Budget System	DNR	Current	-	-	923	923	923	923	923	923	923	6,462
Cost Accounting and Reporting (CARS)	DNR	Current	-	-	7,077	7,077	7,077	7,077	7,077	7,077	7,077	49,538
Equipment Tracking System	DNR	Current	-	-	923	923	923	923	923	923	923	6,462
Financial Information Reference (FIRS)	DNR	Current	-	-	923	923	923	923	923	923	923	6,462
TRIPS	DNR	Current	-	-	923	923	923	923	923	923	923	6,462
Agency Business Systems	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
Agency Downloads	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
AMS Advantage Upgrade	DOA Ent	Planned	-	-	-	-	-	-	-	-	-	-
Bank Reconciliation System	DOA Ent	Current	-	-	28,600	28,600	28,600	28,600	28,600	28,600	28,600	200,200
Budget Briefing System	DOA Ent	Current	-	-	6,600	6,600	6,600	6,600	6,600	6,600	6,600	46,200
Canceled Draft System	DOA Ent	Current	-	-	28,600	28,600	28,600	28,600	28,600	28,600	28,600	200,200
Capital Projects System	DOA Ent	Current	-	-	1,800	1,800	1,800	1,800	1,800	1,800	1,800	12,600
Federal Cash Management System	DOA Ent	Current	-	-	1,200	1,200	1,200	1,200	1,200	1,200	1,200	8,400
FIRST	DOA Ent	Current	-	-	125,396	125,396	125,396	125,396	125,396	125,396	125,396	877,772
IRIS	DOA Ent	Planned	-	-	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
MBE	DOA Ent	Current	-	-	325	325	325	325	325	325	325	2,275
Purchase Plus	DOA Ent	Current	-	-	117,050	117,050	117,050	117,050	117,050	117,050	117,050	819,350
Roster	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
Specialized Checkwriters	DOA Ent	Current	-	-	352,126	352,126	352,126	352,126	352,126	352,126	352,126	2,464,882
State Budget System	DOA Ent	Current	-	-	87,200	87,200	87,200	87,200	87,200	87,200	87,200	610,400
State Cash Management Systems	DOA Ent	Current	-	-	58,343	58,343	58,343	58,343	58,343	58,343	58,343	408,401
Vendor Checks	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
Vendor Net	DOA Ent	Current	-	-	71,400	71,400	71,400	71,400	71,400	71,400	71,400	499,800

State of Wisconsin ERP Feasibility Study
Savings from Elimination of Existing and Planned Systems

Central/Agency Systems	Responding Agency	Current/ Planned	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
WISMART	DOA Ent	Current	-	-	1,498,563	1,498,563	1,498,563	1,498,563	1,498,563	1,498,563	1,498,563	10,489,941
WISMART Interface	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
WISMART Reports (EOS Distribution)	DOA Ent	Current	-	-	528,215	528,215	528,215	528,215	528,215	528,215	528,215	3,697,505
AIM-IT (Asset Inventory Management for IT)-DET	DOA Int	Current	-	-	252,688	252,688	252,688	252,688	252,688	252,688	252,688	1,768,816
Building Inventory System-DSF	DOA Int	Current	-	-	30,200	30,200	30,200	30,200	30,200	30,200	30,200	211,400
DET Capital Property-Appropriation 126 purchases.-DOAS	DOA Int	Current	-	-	2,500	2,500	2,500	2,500	2,500	2,500	2,500	17,500
DOA Property Mgt. System-DOAS	DOA Int	Current	-	-	16,000	16,000	16,000	16,000	16,000	16,000	16,000	112,000
FMS	DOC	Current	-	-	-	-	-	-	-	-	-	-
MFA	DOC	Current	-	-	7,380	7,380	7,380	7,380	7,380	7,380	7,380	51,660
Contracts/Vendor Database	DOR	Current	-	-	-	-	-	-	-	-	-	-
Fundware	DOR	Current	-	-	2,600	2,600	2,600	2,600	2,600	2,600	2,600	18,200
Property Inventory Control (PIC) System	DOR	Current	-	-	-	-	-	-	-	-	-	-
Revenue Budget System	DOR	Current	-	-	-	-	-	-	-	-	-	-
Encumbrance/Accounts Payable (EAPS)	DOT	Current	-	-	32,560	32,560	32,560	32,560	32,560	32,560	32,560	227,920
Federal Ledger System	DOT	Current	-	-	28,287	28,287	28,287	28,287	28,287	28,287	28,287	198,009
Fixed Asset Inventory System	DOT	Current	-	-	28,287	28,287	28,287	28,287	28,287	28,287	28,287	198,009
General Ledger system	DOT	Current	-	-	28,287	28,287	28,287	28,287	28,287	28,287	28,287	198,009
Journal Voucher System	DOT	Current	-	-	28,287	28,287	28,287	28,287	28,287	28,287	28,287	198,009
Legislative Budget	DOT	Current	-	-	13,988	13,988	13,988	13,988	13,988	13,988	13,988	97,916
Misc. Accounts Receivable System	DOT	Current	-	-	28,287	28,287	28,287	28,287	28,287	28,287	28,287	198,009
Transportation Interactive Procurement System (TIPS)	DOT	Current	-	-	32,560	32,560	32,560	32,560	32,560	32,560	32,560	227,920
WISMART Interface	DOT	Current	-	-	13,988	13,988	13,988	13,988	13,988	13,988	13,988	97,916
Accounts Payable	DWD	Current	-	-	128,000	128,000	128,000	128,000	128,000	128,000	128,000	896,000
Accounts Receivable	DWD	Current	-	-	-	-	-	-	-	-	-	-
Asset Management	DWD	Current	-	-	-	-	-	-	-	-	-	-
Budget Development/Preparation	DWD	Current	-	-	76,800	76,800	76,800	76,800	76,800	76,800	76,800	537,600
Cost Accounting/Allocation	DWD	Current	-	-	16,000	16,000	16,000	16,000	16,000	16,000	16,000	112,000
General Ledger/Budget Control	DWD	Current	-	-	-	-	-	-	-	-	-	-

State of Wisconsin ERP Feasibility Study
Savings from Elimination of Existing and Planned Systems

Central/Agency Systems	Responding Agency	Current/ Planned	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
Purchasing/Acquisition	DWD	Current	-	-	-	-	-	-	-	-	-	-
TEd	DWD	Current	-	-	436,480	436,480	436,480	436,480	436,480	436,480	436,480	3,055,360
WISARD	DWD	Current	-	-	19,200	19,200	19,200	19,200	19,200	19,200	19,200	134,400
												-
Financial/Procurement Subtotal			-	-	5,475,088	5,475,088	5,475,088	5,475,088	5,475,088	5,475,088	5,475,088	38,325,618
System Phase In Percentages			0%	0%	50%	100%	100%	100%	100%	100%	100%	
Financial/Procurement Total			-	-	2,737,544	5,475,088	5,475,088	5,475,088	5,475,088	5,475,088	5,475,088	35,588,074
HR/Payroll Systems												
Automated Personnel System	DHFS	Current	-	-	-	154,000	154,000	154,000	154,000	154,000	154,000	924,000
Personnel Input and Verification System (PIVS)	DHFS	Current	-	-	-	130,000	130,000	130,000	130,000	130,000	130,000	780,000
Time and Task (T+T)	DHFS	Current	-	-	-	70,000	70,000	70,000	70,000	70,000	70,000	420,000
TimeSheet Professional (TSP)	DHFS	Current	-	-	-	-	-	-	-	-	-	-
HRS	DNR	Current	-	-	-	18,560	18,560	18,560	18,560	18,560	18,560	111,360
LTS	DNR	Current	-	-	-	7,040	7,040	7,040	7,040	7,040	7,040	42,240
Payroll and Labor System (PALS)	DNR	Current	-	-	-	4,000	4,000	4,000	4,000	4,000	4,000	24,000
PhotoID System	DNR	Current	-	-	-	96	96	96	96	96	96	576
RCL	DNR	Current	-	-	-	2,880	2,880	2,880	2,880	2,880	2,880	17,280
RTS	DNR	Current	-	-	-	7,040	7,040	7,040	7,040	7,040	7,040	42,240
Training History	DNR	Current	-	-	-	2,880	2,880	2,880	2,880	2,880	2,880	17,280
Central Payroll	DOA Ent	Current	-	-	-	787,300	787,300	787,300	787,300	787,300	787,300	4,723,800
PIVS	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
PMIS	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
WiscJobs	DOA Ent	Current	-	-	-	254,339	254,339	254,339	254,339	254,339	254,339	1,526,034
PTA Web	DOA Ent	Current	-	-	-	-	-	-	-	-	-	-
Biddle	DOA Int	Current	-	-	-	-	-	-	-	-	-	-
CAPS	DOC	Current	-	-	-	167,800	167,800	167,800	167,800	167,800	167,800	1,006,800
PIVS	DOC	Current	-	-	-	135,700	135,700	135,700	135,700	135,700	135,700	814,200
Grievance Log	DOR	Current	-	-	-	-	-	-	-	-	-	-
HR Data Warehouse	DOR	Current	-	-	-	4,000	4,000	4,000	4,000	4,000	4,000	24,000
Internal Complaint Log	DOR	Current	-	-	-	-	-	-	-	-	-	-

State of Wisconsin ERP Feasibility Study
Savings from Elimination of Existing and Planned Systems

Central/Agency Systems	Responding Agency	Current/ Planned	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
LTE (Limited Term Employee) System	DOR	Current	-	-	-	8,000	8,000	8,000	8,000	8,000	8,000	48,000
LTE Payroll System	DOR	Current	-	-	-	4,000	4,000	4,000	4,000	4,000	4,000	24,000
Training Partner 2000/Training Partner Online	DOR	Current	-	-	-	8,000	8,000	8,000	8,000	8,000	8,000	48,000
Transaction Database	DOR	Current	-	-	-	2,500	2,500	2,500	2,500	2,500	2,500	15,000
TEAL	DOT	Current	-	-	-	13,988	13,988	13,988	13,988	13,988	13,988	83,928
TEAL Phase 5: Expenses	DOT	Planned	-	-	-	-	-	-	-	-	-	-
TEAL Phase 6: Remote Access	DOT	Planned	-	-	-	-	-	-	-	-	-	-
TEAL Phase 7: Adjustments	DOT	Planned	-	-	-	-	-	-	-	-	-	-
TEAMS/eTEAMS	DOT	Current	-	-	-	13,988	13,988	13,988	13,988	13,988	13,988	83,928
Time and Travel System	DOT	Current	-	-	-	13,988	13,988	13,988	13,988	13,988	13,988	83,928
Benefits	DWD	Current	-	-	-	8,320	8,320	8,320	8,320	8,320	8,320	49,920
Payroll	DWD	Current	-	-	-	-	-	-	-	-	-	-
Personnel Administration	DWD	Current	-	-	-	53,900	53,900	53,900	53,900	53,900	53,900	323,400
Position Control	DWD	Current	-	-	-	-	-	-	-	-	-	-
Time Reporting	DWD	Current	-	-	-	32,000	32,000	32,000	32,000	32,000	32,000	192,000
Training & Employee Development (CAMPUS)	DWD	Current	-	-	-	19,200	19,200	19,200	19,200	19,200	19,200	115,200
HR/Payroll Subtotal			-	-	-	1,923,519	1,923,519	1,923,519	1,923,519	1,923,519	1,923,519	11,541,114
System Phase In Percentages			0%	0%	0%	50%	100%	100%	100%	100%	100%	
HR/Payroll Total			-	-	-	961,760	1,923,519	1,923,519	1,923,519	1,923,519	1,923,519	10,579,355
Grand Total			-	-	2,737,544	6,436,848	7,398,607	7,398,607	7,398,607	7,398,607	7,398,607	46,167,429

Appendix D: Value Pocket Savings/Benefits Results

State of Wisconsin ERP Feasibility Study
Value Pocket Savings/Benefits Results

Value Pocket	Responding Agency	$ Value or Number of Gross Effort	Savings Start in Year X	$ % Reduction of Work	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
Procurement Systems														
Note: Year 1 and 2 are implementation and stabilization activities only, so there are no process improvement savings until the system is in production and stabilized.														
Number of Hard-copy Purchase Orders Processed Annually	DHFS	4,300	3	$ 10.00	-	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	344,000
	DNR	-	3	$ 10.00	-	-	-	-	-	-	-	-	-	-
	DOA Ent	96,000	3	$ 10.00	-	960,000	960,000	960,000	960,000	960,000	960,000	960,000	960,000	7,680,000
	DOA Int	4,402	3	$ 10.00	-	44,020	44,020	44,020	44,020	44,020	44,020	44,020	44,020	352,160
	DOC	19,100	3	$ 10.00	-	191,000	191,000	191,000	191,000	191,000	191,000	191,000	191,000	1,528,000
	DOR	600	3	$ 10.00	-	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	48,000
	DOT	5,821	3	$ 10.00	-	58,210	58,210	58,210	58,210	58,210	58,210	58,210	58,210	465,680
	DWD	75,600	3	$ 10.00	-	755,000	755,000	755,000	755,000	755,000	755,000	755,000	755,000	6,040,000
	Value Pocket Subtotal	205,723			-	2,057,230	2,057,230	2,057,230	2,057,230	2,057,230	2,057,230	2,057,230	2,057,230	16,457,840
Number of Paper Solicitations Generated Annually	DHFS - Unknown	-	3	$ 10.00	-	-	-	-	-	-	-	-	-	-
	DNR	-	3	$ 10.00	-	-	-	-	-	-	-	-	-	-
	DOA Ent - Rare	-	3	$ 10.00	-	-	-	-	-	-	-	-	-	-
	DOA Int	100	3	$ 10.00	-	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	8,000
	DOC	-	3	$ 10.00	-	-	-	-	-	-	-	-	-	-
	DOR	40	3	$ 10.00	-	400	400	400	400	400	400	400	400	3,200
	DOT	1,902	3	$ 10.00	-	19,020	19,020	19,020	19,020	19,020	19,020	19,020	19,020	152,160
	DWD	5	3	$ 10.00	-	50	50	50	50	50	50	50	50	400
	Value Pocket Subtotal	2,047			-	20,470	20,470	20,470	20,470	20,470	20,470	20,470	20,470	163,760
Strategic Sourcing - Estimated Savings	DHFS				-	-	-	-	-	-	-	-	-	-
	DNR				-	-	-	-	-	-	-	-	-	-
	DOA Ent				-	-	-	-	-	-	-	-	-	-
	DOA Int				-	-	-	-	-	-	-	-	-	-
	DOC				-	-	-	-	-	-	-	-	-	-
	DOR				-	-	-	-	-	-	-	-	-	-
	DOT				-	-	-	-	-	-	-	-	-	-
	DWD				-	-	-	-	-	-	-	-	-	-
	Value Pocket Subtotal	1,600,000,000	3	4.5%	-	50,000,000	50,000,000	66,000,000	70,000,000	75,000,000	75,000,000	75,000,000	75,000,000	
Procurement Subtotal					-	52,077,700	52,077,700	68,077,700	72,077,700	77,077,700	77,077,700	77,077,700	77,077,700	
Unsurveyed Agency Extrapolation					-	519,425	519,425	519,425	519,425	519,425	519,425	519,425	519,425	
Procurement Total					-	52,597,125	52,597,125	68,597,125	72,597,125	77,597,125	77,597,125	77,597,125	77,597,125	556,777,000

State of Wisconsin ERP Feasibility Study
Value Pocket Savings/Benefits Results

Value Pocket	Responding Agency	$ Value or Number of Gross Effort	Savings Start in Year X	% Reduction of Work	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
Financial Systems														
Note: Year 2 and 3 are implementation and stabilization activities only, so there are no process improvement savings until the system is in production and stabilized.														
Conducting Asset Management Activities	DHFS	58,800	4	30%	-	-	17,640	17,640	17,640	17,640	17,640	17,640	17,640	123,480
	DNR	8,960	4	30%	-	-	2,688	2,688	2,688	2,688	2,688	2,688	2,688	18,816
	DOA Ent	-	4	30%	-	-	-	-	-	-	-	-	-	-
	DOA Int	309,212	4	30%	-	-	92,764	92,764	92,764	92,764	92,764	92,764	92,764	649,345
	DOC	194,432	4	30%	-	-	58,330	58,330	58,330	58,330	58,330	58,330	58,330	408,307
	DOR	27,272	4	30%	-	-	8,182	8,182	8,182	8,182	8,182	8,182	8,182	57,271
	DOT	22,848	4	30%	-	-	6,854	6,854	6,854	6,854	6,854	6,854	6,854	47,981
	DWD	5,208	4	30%	-	-	1,562	1,562	1,562	1,562	1,562	1,562	1,562	10,937
	Value Pocket Subtotal	**626,732**			-	-	**188,020**	**188,020**	**188,020**	**188,020**	**188,020**	**188,020**	**188,020**	**1,316,137**
Develop and Maintain Agency Biennial Budget	DHFS	240,240	4	30%	-	-	72,072	72,072	72,072	72,072	72,072	72,072	72,072	504,504
	DNR	16,800	4	30%	-	-	5,040	5,040	5,040	5,040	5,040	5,040	5,040	35,280
	DOA Ent	-	4	30%	-	-	-	-	-	-	-	-	-	-
	DOA Int	75,348	4	30%	-	-	22,604	22,604	22,604	22,604	22,604	22,604	22,604	158,231
	DOC	189,120	4	30%	-	-	54,936	54,936	54,936	54,936	54,936	54,936	54,936	384,552
	DOR	80,694	4	30%	-	-	24,208	24,208	24,208	24,208	24,208	24,208	24,208	169,457
	DOT	-	4	30%	-	-	-	-	-	-	-	-	-	-
	DWD	217,413	4	30%	-	-	65,224	65,224	65,224	65,224	65,224	65,224	65,224	456,567
	Value Pocket Subtotal	**813,615**			-	-	**244,084**	**244,084**	**244,084**	**244,084**	**244,084**	**244,084**	**244,084**	**1,708,591**
Develop and Maintain Agency Operating Budget	DHFS	-	4	30%	-	-	-	-	-	-	-	-	-	-
	DNR	-	4	30%	-	-	-	-	-	-	-	-	-	-
	DOA Ent	-	4	30%	-	-	-	-	-	-	-	-	-	-
	DOA Int	100,464	4	30%	-	-	30,139	30,139	30,139	30,139	30,139	30,139	30,139	210,974
	DOC	504,448	4	30%	-	-	151,334	151,334	151,334	151,334	151,334	151,334	151,334	1,059,341
	DOR	93,632	4	30%	-	-	28,090	28,090	28,090	28,090	28,090	28,090	28,090	196,627
	DOT	-	4	30%	-	-	-	-	-	-	-	-	-	-
	DWD	273,319	4	30%	-	-	81,996	81,996	81,996	81,996	81,996	81,996	81,996	573,970
	Value Pocket Subtotal	**971,863**			-	-	**291,559**	**291,559**	**291,559**	**291,559**	**291,559**	**291,559**	**291,559**	**2,040,913**
Enterprise Budget Preparation and Maintenance	DOA Ent (Budget Year - July to January)	1,251,264	4	30%	-	-	-	375,379	-	375,379	-	375,379	-	1,126,138
	DOA Ent (Budget Year - SBO Only)	104,272	4	30%	-	-	-	31,282	-	31,282	-	31,282	-	93,846
	DOA Ent (Non-Budget Year - SBO Only	312,816	4	30%	-	-	93,845	-	93,845	-	93,845	-	93,845	375,379
	DOA Ent (Non-Budget Year - Values and Budget Adjustment)	688,195	4	30%	-	-	206,459	-	206,459	-	206,459	-	206,459	825,834
	Value Pocket Subtotal	**2,356,547**			-	-	**300,303**	**406,661**	**300,303**	**406,661**	**300,303**	**406,661**	**300,303**	**2,421,196**

State of Wisconsin ERP Feasibility Study
Value Pocket Savings/Benefits Results

Value Pocket	Responding Agency	$ Value or Number of Gross Effort	Savings Start in Year X	% Reduction of Work	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
Maintaining Chart of Accounts	DHFS	1,190	4	80%	-	-	952	952	952	952	952	952	952	6,664
	DNR	33,600	4	80%	-	-	26,880	26,880	26,880	26,880	26,880	26,880	26,880	188,160
	DOA Ent	-	4	0%	-	-	-	-	-	-	-	-	-	-
	DOA Int	5,872	4	80%	-	-	4,697	4,697	4,697	4,697	4,697	4,697	4,697	32,881
	DOC	8,638	4	80%	-	-	6,910	6,910	6,910	6,910	6,910	6,910	6,910	48,373
	DOR	851	4	80%	-	-	681	681	681	681	681	681	681	4,767
	DOT	6,893	4	80%	-	-	5,514	5,514	5,514	5,514	5,514	5,514	5,514	38,601
	DWD	9,600	4	80%	-	-	7,840	7,840	7,840	7,840	7,840	7,840	7,840	54,880
	Value Pocket Subtotal	**66,844**			-	-	**53,475**	**53,475**	**53,475**	**53,475**	**53,475**	**53,475**	**53,475**	**374,325**
EOS Charges for Agency Custom Report Generation from WISMART	DHFS	-	4	80%	-	-	-	-	-	-	-	-	-	-
	DNR	200	4	80%	-	-	160	160	160	160	160	160	160	1,120
	DOA Ent	380,000	4	0%	-	-	-	-	-	-	-	-	-	-
	DOA Int	-	4	80%	-	-	-	-	-	-	-	-	-	-
	DOC - Unknown	-	4	80%	-	-	-	-	-	-	-	-	-	-
	DOR	-	4	80%	-	-	-	-	-	-	-	-	-	-
	DOT	-	4	80%	-	-	-	-	-	-	-	-	-	-
	DWD	9,800	4	80%	-	-	7,840	7,840	7,840	7,840	7,840	7,840	7,840	54,880
	Value Pocket Subtotal	**390,000**			-	-	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**56,000**
Maintaining Vendor File in Agency Systems	DHFS	11,130	4	100%	-	-	11,130	11,130	11,130	11,130	11,130	11,130	11,130	77,910
	DNR	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DOA Ent	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DOA Int	847	4	100%	-	-	847	847	847	847	847	847	847	5,930
	DOC	5,594	4	100%	-	-	5,594	5,594	5,594	5,594	5,594	5,594	5,594	39,161
	DOR	638	4	100%	-	-	638	638	638	638	638	638	638	4,469
	DOT	18,550	4	100%	-	-	18,550	18,550	18,550	18,550	18,550	18,550	18,550	129,850
	DWD	34,551	4	100%	-	-	34,551	34,551	34,551	34,551	34,551	34,551	34,551	241,856
	Value Pocket Subtotal	**71,311**			-	-	**71,311**	**71,311**	**71,311**	**71,311**	**71,311**	**71,311**	**71,311**	**499,176**
Maintaining Vendor File in WISMART	DHFS	14,068	4	70%	-	-	9,869	9,869	9,869	9,869	9,869	9,869	9,869	69,080
	DNR	26,880	4	70%	-	-	18,816	18,816	18,816	18,816	18,816	18,816	18,816	131,712
	DOA Ent	3,275	4	70%	-	-	2,293	2,293	2,293	2,293	2,293	2,293	2,293	16,046
	DOA Int	5,376	4	70%	-	-	3,763	3,763	3,763	3,763	3,763	3,763	3,763	26,342
	DOC	5,594	4	70%	-	-	3,916	3,916	3,916	3,916	3,916	3,916	3,916	27,413
	DOR	519	4	70%	-	-	364	364	364	364	364	364	364	2,545
	DOT	-	4	70%	-	-	-	-	-	-	-	-	-	-
	DWD	9,872	4	70%	-	-	6,910	6,910	6,910	6,910	6,910	6,910	6,910	48,371
	Value Pocket Subtotal	**65,514**			-	-	**45,930**	**45,930**	**45,930**	**45,930**	**45,930**	**45,930**	**45,930**	**321,511**
Responding to Vendor Inquiries	DHFS	-	4	40%	-	-	-	-	-	-	-	-	-	-
	DNR	-	4	40%	-	-	-	-	-	-	-	-	-	-
	DOA Ent	9,825	4	40%	-	-	3,930	3,930	3,930	3,930	3,930	3,930	3,930	27,510
	DOA Int	10,237	4	40%	-	-	4,095	4,095	4,095	4,095	4,095	4,095	4,095	28,663
	DOC	129,853	4	40%	-	-	51,941	51,941	51,941	51,941	51,941	51,941	51,941	363,586
	DOR	532	4	40%	-	-	213	213	213	213	213	213	213	1,490
	DOT	212,208	4	40%	-	-	84,883	84,883	84,883	84,883	84,883	84,883	84,883	594,183
	DWD	19,880	4	40%	-	-	7,952	7,952	7,952	7,952	7,952	7,952	7,952	55,664
	Value Pocket Subtotal	**382,535**			-	-	**153,014**	**153,014**	**153,014**	**153,014**	**153,014**	**153,014**	**153,014**	**1,071,098**

State of Wisconsin ERP Feasibility Study
Value Pocket Savings/Benefits Results

Value Pocket	Responding Agency	$ Value or Number of Gross Effort	Savings Start in Year X	$ % Reduction of Work	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
Processing Vendor Payments	DHFS	148,512	4	60%	-	-	89,107	89,107	89,107	89,107	89,107	89,107	89,107	529,750
	DNR	560,000	4	60%	-	-	336,000	336,000	336,000	336,000	336,000	336,000	336,000	2,352,000
	DOA Ent	-	4	60%	-	-	-	-	-	-	-	-	-	-
	DOA Int	71,680	4	60%	-	-	43,008	43,008	43,008	43,008	43,008	43,008	43,008	301,056
	DOC	1,985,424	4	60%	-	-	1,191,254	1,191,254	1,191,254	1,191,254	1,191,254	1,191,254	1,191,254	8,339,781
	DOR	93,894	4	60%	-	-	56,216	56,216	56,216	56,216	56,216	56,216	56,216	393,513
	DOT	1,061,042	4	60%	-	-	636,625	636,625	636,625	636,625	636,625	636,625	636,625	4,456,376
	DWD	253,470	4	60%	-	-	152,082	152,082	152,082	152,082	152,082	152,082	152,082	1,064,574
	Value Pocket Subtotal	4,173,821			-	-	2,504,293	2,504,293	2,504,293	2,504,293	2,504,293	2,504,293	2,504,293	17,530,050
Number of Vendor Payments Mailed	DHFS	354,000	4	$ 0.30	-	-	106,200	106,200	106,200	106,200	106,200	106,200	106,200	743,400
	DNR	20,000	4	$ 0.30	-	-	6,000	6,000	6,000	6,000	6,000	6,000	6,000	42,000
	DOA Ent	-	4	$ 0.30	-	-	-	-	-	-	-	-	-	-
	DOA Int	15,227	4	$ 0.30	-	-	4,568	4,568	4,568	4,568	4,568	4,568	4,568	31,977
	DOC	80,000	4	$ 0.30	-	-	24,000	24,000	24,000	24,000	24,000	24,000	24,000	168,000
	DOR	5,400	4	$ 0.30	-	-	1,620	1,620	1,620	1,620	1,620	1,620	1,620	11,340
	DOT	43,300	4	$ 0.30	-	-	12,990	12,990	12,990	12,990	12,990	12,990	12,990	90,930
	DWD	80,500	4	$ 0.30	-	-	24,150	24,150	24,150	24,150	24,150	24,150	24,150	169,050
	Value Pocket Subtotal	598,427			-	-	179,528	179,528	179,528	179,528	179,528	179,528	179,528	1,256,697
Reconciling Agency Administrative Systems with State Budget System	DHFS	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DNR	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DOA Ent	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DOA Int	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DOC	976	4	100%	-	-	976	976	976	976	976	976	976	6,831
	DOR	4,426	4	100%	-	-	4,426	4,426	4,426	4,426	4,426	4,426	4,426	30,984
	DOT	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DWD	74,542	4	100%	-	-	74,542	74,542	74,542	74,542	74,542	74,542	74,542	521,791
	Value Pocket Subtotal	79,944			-	-	79,944	79,944	79,944	79,944	79,944	79,944	79,944	559,605
Reconciling Agency Administrative Systems with WISMART	DHFS	4,800	4	100%	-	-	4,800	4,800	4,800	4,800	4,800	4,800	4,800	33,600
	DNR	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DOA Ent	-	4	100%	-	-	-	-	-	-	-	-	-	-
	DOA Int	1,336	4	100%	-	-	1,336	1,336	1,336	1,336	1,336	1,336	1,336	9,349
	DOC	8,638	4	100%	-	-	8,638	8,638	8,638	8,638	8,638	8,638	8,638	60,466
	DOR	117,533	4	100%	-	-	117,533	117,533	117,533	117,533	117,533	117,533	117,533	822,730
	DOT	15,365	4	100%	-	-	15,365	15,365	15,365	15,365	15,365	15,365	15,365	107,555
	DWD	6,440	4	100%	-	-	6,440	6,440	6,440	6,440	6,440	6,440	6,440	45,080
	Value Pocket Subtotal	154,112			-	-	154,112	154,112	154,112	154,112	154,112	154,112	154,112	1,078,781
Financial Subtotal					-	-	4,273,573	4,379,930	4,273,573	4,379,930	4,273,573	4,379,930	4,273,573	
Unsurveyed Agency Extrapolation					-	-	1,068,393	1,094,982	1,068,393	1,094,982	1,068,393	1,094,982	1,068,393	
Financial Total					-	-	5,341,966	5,474,912	5,341,966	5,474,912	5,341,966	5,474,912	5,341,966	
Total Procurement/Financial					-	52,597,125	57,939,091	74,072,037	77,939,091	83,072,037	82,939,091	83,072,037	82,939,091	594,569,600

State of Wisconsin ERP Feasibility Study
Value Pocket Savings/Benefits Results

Value Pocket	Responding Agency	$ Value or Number of Gross Effort	Savings Start in Year X	% Reduction of Work	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
HR/Payroll Systems Note: Year 3 and 4 are implementation and stabilization activities only, so there are no process improvement savings until the system is in production and stabilized.														
Entering Time Reporting Data	DHFS	33,896	5	60%	-	-	-	20,217	20,217	20,217	20,217	20,217	20,217	121,305
	DNR	-	5	60%	-	-	-	-	-	-	-	-	-	-
	DOA Ent	-	5	60%	-	-	-	-	-	-	-	-	-	-
	DOA Int	6,314	5	60%	-	-	-	3,788	3,788	3,788	3,788	3,788	3,788	22,731
	DOC	180,782	5	60%	-	-	-	108,469	108,469	108,469	108,469	108,469	108,469	650,815
	DOR	-	5	60%	-	-	-	-	-	-	-	-	-	-
	DOT	235,919	5	60%	-	-	-	141,551	141,551	141,551	141,551	141,551	141,551	849,309
	DWD	-	5	60%	-	-	-	-	-	-	-	-	-	-
	Value Pocket Subtotal	456,711			-	-	-	274,027	274,027	274,027	274,027	274,027	274,027	1,644,159
Reconciling Agency Administrative Systems with Central Payroll System	DHFS	1,176	5	90%	-	-	-	1,058	1,058	1,058	1,058	1,058	1,058	6,350
	DNR	1,400	5	90%	-	-	-	1,260	1,260	1,260	1,260	1,260	1,260	7,560
	DOA Ent	-	5	90%	-	-	-	-	-	-	-	-	-	-
	DOA Int	-	5	90%	-	-	-	-	-	-	-	-	-	-
	DOC	54,235	5	90%	-	-	-	48,811	48,811	48,811	48,811	48,811	48,811	292,867
	DOR	21,056	5	90%	-	-	-	18,950	18,950	18,950	18,950	18,950	18,950	113,702
	DOT	3,177	5	90%	-	-	-	2,859	2,859	2,859	2,859	2,859	2,859	17,154
	DWD	51,536	5	90%	-	-	-	46,382	46,382	46,382	46,382	46,382	46,382	278,294
	Value Pocket Subtotal	132,579			-	-	-	119,321	119,321	119,321	119,321	119,321	119,321	715,928
Maintaining Employee Data	DHFS	-	5	60%	-	-	-	-	-	-	-	-	-	-
	DNR	2,779	5	60%	-	-	-	1,667	1,667	1,667	1,667	1,667	1,667	10,004
	DOA Ent	3,275	5	60%	-	-	-	1,965	1,965	1,965	1,965	1,965	1,965	11,790
	DOA Int	6,314	5	60%	-	-	-	3,788	3,788	3,788	3,788	3,788	3,788	22,731
	DOC	45,196	5	60%	-	-	-	27,117	27,117	27,117	27,117	27,117	27,117	162,704
	DOR	23,688	5	60%	-	-	-	14,213	14,213	14,213	14,213	14,213	14,213	85,277
	DOT	19,660	5	60%	-	-	-	11,796	11,796	11,796	11,796	11,796	11,796	70,776
	DWD	4,859	5	60%	-	-	-	2,915	2,915	2,915	2,915	2,915	2,915	17,492
	Value Pocket Subtotal	105,770			-	-	-	63,462	63,462	63,462	63,462	63,462	63,462	380,773
Processing Employee Benefit Selections during Open Enrollment	DHFS	8,696	5	80%	-	-	-	6,957	6,957	6,957	6,957	6,957	6,957	41,741
	DNR	600	5	80%	-	-	-	480	480	480	480	480	480	2,882
	DOA Ent	-	5	80%	-	-	-	-	-	-	-	-	-	-
	DOA Int	2,105	5	80%	-	-	-	1,684	1,684	1,684	1,684	1,684	1,684	10,103
	DOC	36,156	5	80%	-	-	-	28,925	28,925	28,925	28,925	28,925	28,925	173,551
	DOR	7,896	5	80%	-	-	-	6,317	6,317	6,317	6,317	6,317	6,317	37,901
	DOT	35,896	5	80%	-	-	-	28,717	28,717	28,717	28,717	28,717	28,717	172,299
	DWD	14,581	5	80%	-	-	-	11,665	11,665	11,665	11,665	11,665	11,665	69,987
	Value Pocket Subtotal	105,930			-	-	-	84,744	84,744	84,744	84,744	84,744	84,744	508,464

State of Wisconsin ERP Feasibility Study
Value Pocket Savings/Benefits Results

Value Pocket	Responding Agency	$ Value or Number of Gross Effort	Savings Start in Year X	$ % Reduction of Work	Yr 2 FYE 2007	Yr 3 FYE 2008	Yr 4 FYE 2009	Yr 5 FYE 2010	Yr 6 FYE 2011	Yr 7 FYE 2012	Yr 8 FYE 2013	Yr 9 FYE 2014	Yr 10 FYE 2015	Years 2 - 10 Total
Number of Payroll Remittance Advices Distributed to Employees	DHFS	5,534	5	$ 0.30	-	-	-	1,960	1,960	1,960	1,960	1,960	1,960	11,761
	DNR	85,800	5	$ 0.30	-	-	-	25,740	25,740	25,740	25,740	25,740	25,740	154,440
	DOA Ent	950,269	5	$ 0.30	-	-	-	285,081	285,081	285,081	285,081	285,081	285,081	1,710,484
	DOA Int	1,000	5	$ 0.30	-	-	-	300	300	300	300	300	300	1,800
	DOC	262,210	5	$ 0.30	-	-	-	78,663	78,663	78,663	78,663	78,663	78,663	471,978
	DOR	33,600	5	$ 0.30	-	-	-	10,080	10,080	10,080	10,080	10,080	10,080	60,480
	DOT	98,800	5	$ 0.30	-	-	-	29,640	29,640	29,640	29,640	29,640	29,640	177,840
	DWD	45,084	5	$ 0.30	-	-	-	13,525	13,525	13,525	13,525	13,525	13,525	81,151
	Value Pocket Subtotal	1,483,297			-	-	-	444,989	444,989	444,989	444,989	444,989	444,989	2,669,935
Reconciling Agency Administrative Systems with PMIS	DHFS	31,780	5	100%	-	-	-	31,780	31,780	31,780	31,780	31,780	31,780	190,680
	DNR	2,800	5	100%	-	-	-	2,800	2,800	2,800	2,800	2,800	2,800	16,800
	DOA Ent	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DOA Int	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DOC	6,342	5	100%	-	-	-	6,342	6,342	6,342	6,342	6,342	6,342	38,052
	DOR	8,512	5	100%	-	-	-	8,512	8,512	8,512	8,512	8,512	8,512	51,072
	DOT	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DWD	74,542	5	100%	-	-	-	74,542	74,542	74,542	74,542	74,542	74,542	447,250
	Value Pocket Subtotal	123,976			-	-	-	123,976	123,976	123,976	123,976	123,976	123,976	743,854
Reconciling Central Payroll System with PMIS	DHFS	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DNR	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DOA Ent	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DOA Int	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DOC	4,397	5	100%	-	-	-	4,397	4,397	4,397	4,397	4,397	4,397	26,384
	DOR	3,472	5	100%	-	-	-	3,472	3,472	3,472	3,472	3,472	3,472	20,832
	DOT	-	5	100%	-	-	-	-	-	-	-	-	-	-
	DWD	-	5	100%	-	-	-	-	-	-	-	-	-	-
	Value Pocket Subtotal	7,869			-	-	-	7,869	7,869	7,869	7,869	7,869	7,869	47,216
HR/Payroll Subtotal					-	-	-	1,118,388	1,118,388	1,118,388	1,118,388	1,118,388	1,118,388	
Unsurveyed Agency Extrapolation					-	-	-	279,597	279,597	279,597	279,597	279,597	279,597	
HR/Payroll Total					-	-	-	1,397,985	1,397,985	1,397,985	1,397,985	1,397,985	1,397,985	8,387,910
Grand Total					-	52,597,125	57,939,091	75,470,023	79,337,076	84,470,023	84,337,076	84,470,023	84,337,076	602,957,510