



P U B L I C S E R V I C E S

Florida Department of Banking and Finance

FLAIR Replacement Report - Final
8-Mar-2001

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 - Approach: Integrated or Stand-Alone?
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- **Major Changes since Business Case Study**
- **Financial Module Value Propositions**
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- **Estimates**
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 - Schedule
 - Resource Requirements
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- **Conclusions**

- **Document the estimated cost, schedule, and resource requirements to implement a FLAIR replacement system**
- **Identify financial and schedule impact of alternative implementation scenarios**
 - Inclusion of treasury management solution
 - Implementing as standalone solution versus as the foundation for a completely integrated enterprise solution
- **Define Critical Success Factors and Risks**

Approach: Integrated or Standalone?

■ Objective

Document the impact upon cost, schedule, and resources of implementing an Enterprise Resource Planning (ERP) accounting solution without contemplating implementing other modules (Purchasing, Human Resources, Budgeting)

■ Analysis

- Given the size and complexity of State systems, the viable candidates for providing application software are the major ERP vendors
- The primary benefit of packaged ERP systems derives from the integration they provide
- ERP deployments typically start with the accounting application
- It is possible to implement the accounting modules without precluding the later implementation of other modules

The State can deploy an ERP accounting system which serves as the foundation for an enterprise-wide, integrated solution without incurring significant additional costs.

- **Evaluate FLAIR Replacement System including**
 - General Ledger
 - Accounts Payable, Accounts Receivable
 - Financial Asset Management
 - Funds Management
 - Management Reporting

- **Evaluate Treasury Management option including**
 - Cash Flow
 - Investments

- **Incorporate all major cost components**
 - Implementation Costs
 - ◆ Software licensing
 - ◆ Infrastructure (hardware, network, system software)
 - ◆ Implementation Services (configuration, training, integration, deployment)
 - ◆ Incremental DBF Resources
 - ◆ Independent Project Management
 - Operating Costs (help desk, software maintenance fees, data center operations)

This report leverages analysis based upon the following assumptions:

- Incorporates BCS experience, research, and assumptions
- Presumes replacement system is a single, major ERP solution
- Costing presumes implementation of ERP public sector solution (cost of SAP, PeopleSoft, and Oracle options is roughly comparable)
- A uniform, statewide Chart of Accounts will be implemented
- Minimum customization of package required (explicitly included an allowance for customization based upon BCS analysis)
- Deployment of the integrated solution will be done throughout the state as a single event
- Approach to GL based upon funds based management (supports analytical reporting using unit, project, or activity costing)
- Outsourcing or ASP options explicitly excluded

- **Review BCS research and extract relevant FLAIR and financial information**
- **Incorporate impact of new ERP public sector solution in analysis**
- **Leverage KPMG Consulting ERP industry leaders**
 - SAP, PeopleSoft, Oracle implementation leaders
 - Public Sector and Large Private Sector clients
- **Review new requirements provided by the State**
- **Develop estimates**
- **Identify critical success factors and risks**
- **Review and refine**

■ Strategic Factors

- Implementation approach is by module or function
 - ◆ Planned competitive sourcing of selected components (Procurement, Human Resources)
 - ◆ Primary focus on FLAIR replacement
- State transition to knowledge group structures
- Treatment of State University System
 - ◆ State will not do accounting for SUS after implementation of the ERP, based upon the Education Governance Reorganization Transition Task Force Report dated March 1, 2001)
 - ◆ Reduces complexity

■ ERP functionality

- Release of ERP Public Sector Industry Solution
 - ◆ Includes functionality for Grants Management, CAFR, GASB 34 & 35, Accounting on accrual & modified accrual basis
 - ◆ Pre-configured components reduce implementation time / costs

■ Requirements

- Ongoing review by the State has augmented initial requirements

Financial Module Value Propositions

Financial Benefits are significant...

- ➔ Nearly \$40M in technology dependent, long-term financial savings identified in BCS are realizable based solely on financial systems deployment
- ➔ An additional \$25M in non-technology dependent savings are possible (requiring process changes)
- ➔ Significant additional opportunity for increased savings as multiple, redundant agency systems are eliminated

Full chart in BCS, Chapter 3, section 1, exhibit 3-3 Process	Net Budgetary Savings		Increased Efficiency		Total
	Tech. Dpndnt.	Other	Tech. Dpndnt.	Other	
Management & Financial Reporting	56,000	(100,000)	90,000	0	46,000
Reconciliation	2,848,000	0	145,000	0	2,993,000
Accounting Payments for Multiple Accounts	0	0	2,783,000	0	2,783,000
Allocation of Common Costs	2,324,000	0	0	0	2,324,000
Flow of Federal Funds	303,000	0	0	0	303,000
Travel Reimbursement	3,260,000	3,482,000	0	0	6,742,000
Payment for Goods and Services	17,905,000	0	0	0	17,905,000
Certified Forward	0	3,125,000	0	0	3,125,000
Cash Receipts and Cash Management	10,000,000	14,656,000	0	0	24,656,000
Accounts Receivable	0	0	0	193,000	193,000
Asset Management	0	2,528,000	178,000	1,514,000	4,220,000
Total	36,696,000	23,691,000	3,196,000	1,707,000	65,290,000

...yet most ERP implementations are justified for non-financial factors.

■ Operational Benefits

- Enables CFO to manage financials for the entire enterprise
- Increased integration between back-end financial systems (GL, AP, etc.) and between departmental and central accounting
 - ◆ Removes effort in maintaining customized interfaces
 - ◆ More analytical data available
 - ◆ Enables refocus of State resources from system maintenance and manual reporting activities to more value-added services
- Increased functionality
- Faster responses to information requests from policy makers
- Faster implementation of required and value-added enhancements, including future changes to Chart of Accounts

■ Other Benefits

- ERP public sector solutions also include functionality for managing the budgeting process (costing for LAS/PBS replacement not included in this assessment but could be phased in later)
- Eliminates the need for many agency-run shadow systems

■ Overview

- Conceptual approach to building applications in well-defined layers which support specific activities (process, business logic, user interface, etc.) which are highly integrated yet clearly delineated
- Technological approach to building applications that leverages internet-based industry standards to create open, flexible applications
- Focus on providing true application integration at the transaction level

■ Key Benefits

- High degree of interoperability between applications (ERP, legacy systems, bolt-ons, etc.)
- Applications are extremely scalable, minimizing the expense of expanding the user base
- Integration is extremely flexible, minimizing the time and expense to implement changes in response to changing business needs
- Business processes which require information to be shared with internal and external partners are more easily built

Major ERP vendors have all invested significantly in creating enterprise architecture approaches to their systems, thereby facilitating integration between the ERP modules and external applications.

■ Accounting Applications

- **General Ledger Accounting:** Chart of Accounts, Transaction Processing, Period Closing, Account Balances and Reporting.
- **Accounts Payable:** Vendor Master, Pre-encumbrances, Encumbrances, Purchasing Card Transactions, Invoices, Payments and Returns Processing.
- **Accounts Receivable:** Customer Master, Billing, Receipts and Balances.
- **Travel Expense Reimbursement:** Trips, Approvals, Computation of Reimbursement, Payment and Transfer to Payroll.
- **Cash and Bank Management:** Cash Receipts, Posting and Clearing, Bank Master Data, Clearing House (Such As Wire and Lockbox), and Bank Statement Reconciliation.
- **Asset Accounting:** Master Data, Acquisition, Valuation, Depreciation, Betterment, Maintenance and Warranty, Disposition, Physical Inventory Processing, and Risk Management/building Management Information.
- **Funds Management:** Budgetary, Accounting and Availability Control by Organization, Program, Activity, Grant, Project, Contract and Other Allotments.
- **Management Reporting:** Flexible Reporting and Consolidation at Various Levels for State's Financial Reporting in Accordance With GAAP and GASB.

■ Treasury Management Application

- **Cash Flow Management:** Payment Advices, Interest Computation, Analyze Cashed Checks, Payment Flow and Cash Concentration.
- **Treasury Management:** Investment, Disinvestments, Certificate of Deposits, State Fund Accounting, Liquidation of Investments, Market Risk Management, and Returns Management.
- **Bond Accounting:** Tracking Issues, Premiums, Discounts, Proceeds, and Managing Debt.

■ Treasury Management Incremental Impact

- Presuming undertaken as part of financial accounting implementation
 - ◆ Cost: Additional \$650K
 - ◆ Schedule: No impact
 - ◆ Resources: Additional State Functional Experts (1) and IT resources (3)

■ Treasury Management Benefits

- Leverages project infrastructure, thereby reducing incremental cost
- Solution will be tightly integrated with accounting applications
- Increased functionality for Treasury

The remainder of this document includes Treasury Management in the solution.

The current FLAIR system has two types of interfaces to external systems (“external” includes interfaces to other State systems).

- **Transaction Interfaces**

- Support Purchasing Process
- Four total transactions (2 update + 2 inquiry)

- **Batch Interfaces (rounded totals)**

General Area	Inbound	Outbound	Total
Payroll	50	80	130
Departmental	40	30	70
Central	20	50	70
Total	110	160	270

■ Estimating Approach

- Each interface is classified as either simple, medium, or complex based upon the type of interface and experience of typical breakdown
- Standard effort for a type is applied (simple → 5 person-days, medium → 10 person-days, complex → 15 person-days)

■ Person-Day Estimates

Item	Effort per Interface	Number of Interfaces	Total Person Days
Transactions	15	4	60
Batch Outbound	5	160	800
Batch Inbound – Simple	5	66	330
Batch Inbound - Medium	10	22	220
Batch Inbound - Complex	15	22	330
Total		274	1740

■ Notes

- Probably 30-40% of existing interfaces can be eliminated
- Payroll interfaces account for 800 person-days (46%)

Project Estimates

■ Specific Estimating Assumptions

- Application implementation incorporates services for conversion, configuration, customization, integration, and deployment support
- Procurement of systems integrator & ERP completed by the end of Q1, FY 2002
- Infrastructure & software licensing costs based upon half of BCS numbers
Training estimate includes costs of training State project team personnel as well as 2750 end users
- Using “train the trainer” approach for casual users
- Planning phase is reduced from the BCS estimate of 6 months to 3 months based upon the fact that the COA development can leverage work done as part of the Services and Activities Project
- Allocation for new PCs excluded (most existing PCs should be adequate)
- Incremental costs of State personnel above the current base are included
- Salary costs of State personnel while being trained or working on the project on a part-time basis are not included
- Incremental network costs were not evaluated as part of BCS and are not incorporated into estimates
- Impact of competitive bidding not included

Changes in these assumptions will impact schedule and/or cost.

Cost Estimate – Implementation

<u>Component</u>	<u>Estimated Cost (000)</u>	<u>Subtotals</u>	<u>Totals</u>
Software licensing	\$12,500	\$12,500	
Infrastructure	\$15,000	\$15,000	
Implementation Services			
Development	\$23,430		
Technical Support	\$4,540		
Program Management	\$3,020		
Training	\$2,540		
Transitional Support	\$1,010		
Miscellaneous Expenses	\$1,000	\$35,540	\$63,040
Additional Factors			
Incremental DBF Resources	\$3,055		
Independent Project Mgmt.	\$2,646		
TRW	\$300	\$6,001	\$6,001
Contingency for Risk (5%)	\$3,150	\$3,150	\$3,150
Totals	\$72,191	\$72,191	\$72,191

■ Operating Costs Assumptions

- The ERP system will be upgraded once every 3 years.
- External consultants will be utilized to assist in the upgrade process.

Component	Estimated Costs (000)	
	Yearly	Every 3rd Year
Software maintenance fees	\$2,125	\$2,125
Hardware maintenance fees	\$450	\$450
Consulting (upgrade support)		\$2,000
Total	\$2,575	\$4,575

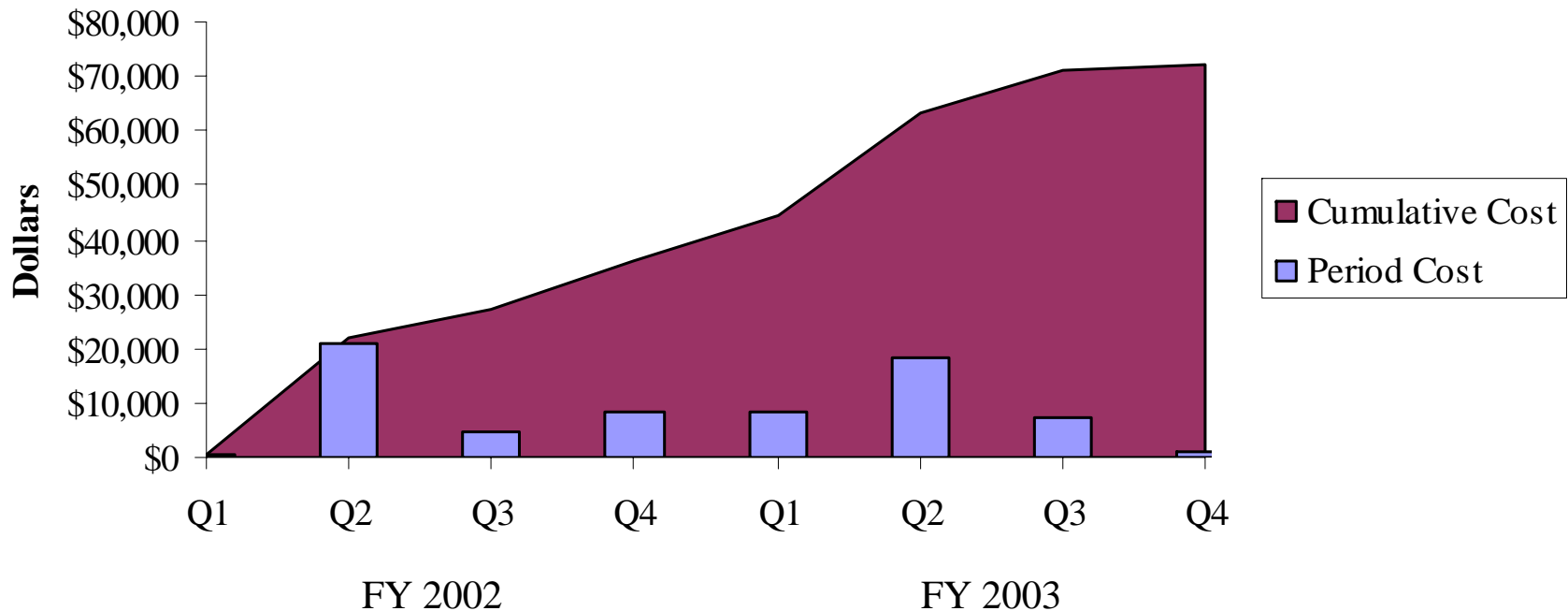
Cost Estimate – By Fiscal Year

Consolidated Estimated Costs (000) by Fiscal Year

<u>Component</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>5 Year Expense</u>
Software licensing	\$12,500					\$12,500
Infrastructure	\$5,000	\$10,000				\$15,000
Implementation Services						
Development	\$9,378	\$14,052				\$23,430
Technical Support	\$2,270	\$2,270				\$4,540
Program Management	\$1,510	\$1,510				\$3,020
Training		\$2,540				\$2,540
Transitional Support		\$1,010				\$1,010
Miscellaneous Expenses	\$400	\$600				\$1,000
Additional Factors						
Incremental DBF Resources	\$1,589	\$1,466				\$3,055
Independent Project Mgmt.	\$1,512	\$1,134				\$2,646
TRW	\$150	\$150				\$300
Contingency for Risk (5%)	\$1,575	\$1,575				\$3,150
Sub-Totals	\$35,884	\$36,307	\$0	\$0	\$0	\$72,191
Operating Costs						
Software maintenance fees		\$2,125	\$2,125	\$2,125	\$2,125	\$8,500
Hardware maintenance Fees		\$150	\$450	\$450	\$450	\$1,500
Consulting (upgrade support)					\$2,000	\$2,000
Sub-Totals	\$0	\$2,275	\$2,575	\$2,575	\$4,575	\$12,000
Grand Total	\$35,884	\$38,582	\$2,575	\$2,575	\$4,575	\$84,191

Cost Estimate – By Period

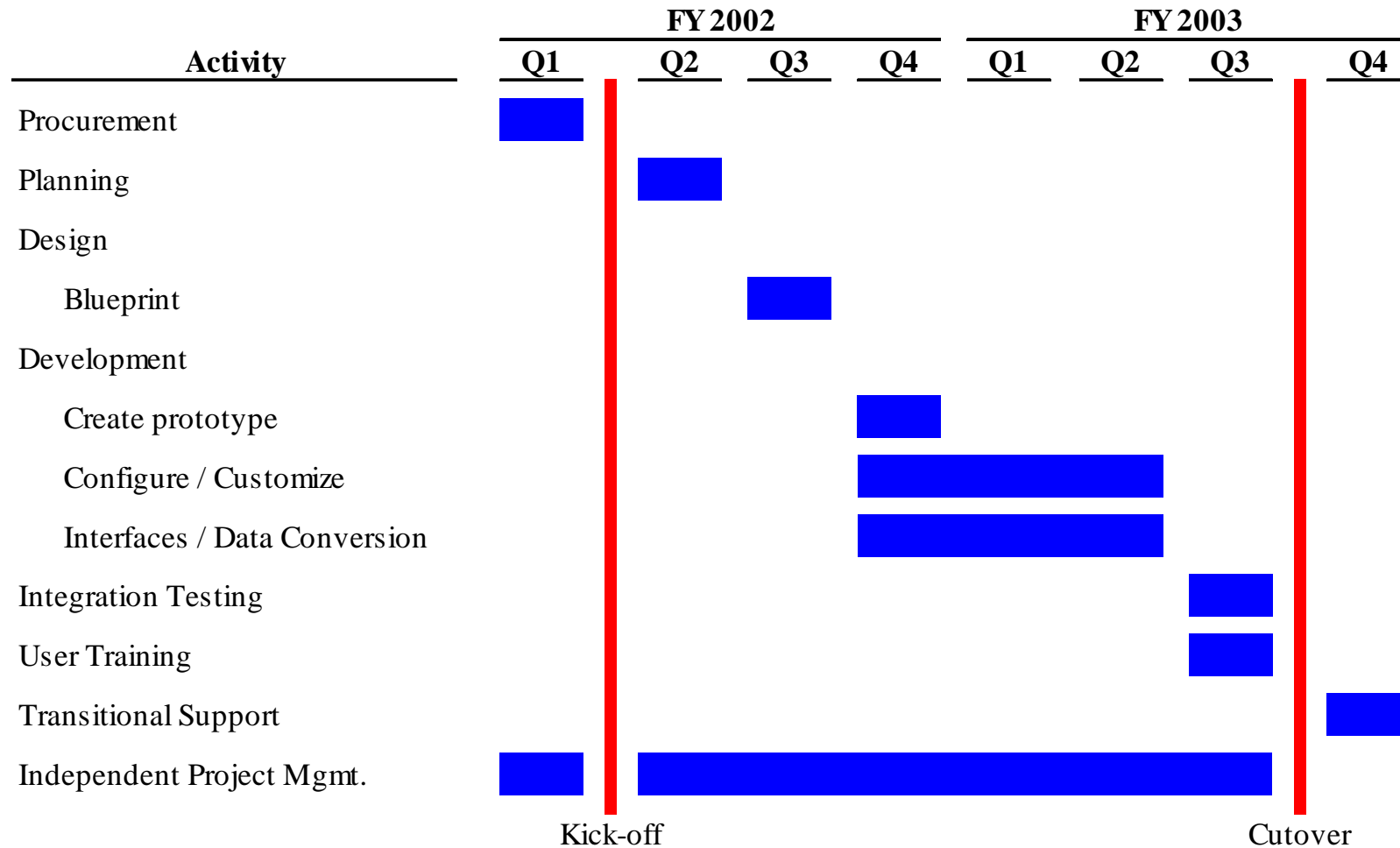
Implementation Costs (000) by Quarter



Notes:

1. Planning phase (Q2, FY 02) includes software licensing and infrastructure setup activities and expenses.

Schedule Estimate



Notes: 1. Implementation of replacement system on July 1, 2003
 2. Schedule provides for a one quarter contingency for transition

■ **Steering Committee**

- Establish visionary goals, strategic direction, and success criteria
- Obtain support from the legislature and other stake holders
- Empowered to make key decisions in a timely, effective, and responsive manner to keep the project moving forward
- Ensure various agency heads are briefed and supportive

■ **Consulting Services**

- Manage Change, Quality, Schedule, and Budget
- Provide experienced Functional and Technical ERP implementation teams
- Recommend best practices
- Train end users and transfer knowledge to IT staff

■ State Personnel

→ Functional Experts

- ◆ Leaders / Liaisons (1 per agency; part-time) to serve as champions within the agency and support project issue resolution
- ◆ Power users (1 per agency + 1 per function; significant part-time) to define and validate specific functional requirements and augment user-specific training

→ End Users (as required; part-time until deployment)

- ◆ Test new applications
- ◆ Get trained

→ IT resources (1 per 11 functions listed on slides 10 & 11; full-time)

- ◆ Receive ERP training & transferred knowledge from consulting resources
- ◆ Augment the implementation team
- ◆ Provide technical project support

Note: Impact of new equipment, operating system, and database management system on data center support staff can be significant and is not reflected in analysis.

- **What is most common approach to implementing an ERP-based accounting system in the public sector?**
 - Typical approach is to implement accounting, payroll, HR, and procurement at the same time (allowing for phased deployment, starting with financial accounting modules)
 - Modular Implementation
 - ◆ Requires a consistent architectural approach
 - ◆ Business linkages should be clearly defined
 - ◆ Maximizes use of constrained resources

- **Are there any success stories following proposed approach of deploying accounting modules only?**
 - Several examples found to date of success stories for large organizations using this approach (Florida Department of Revenue, Freightliner – division of Daimler Chrysler; Pemex Refinancion – \$10B Mexican financial company; Thomasville Furniture Industries)

- **What other States or large public sector organizations have implemented or are implementing ERP-based solutions?**
 - Chicago Public Schools, US Department of Transportation, Government of British Columbia
 - Georgia, Montana, Indiana
 - New Jersey, Pennsylvania, Delaware, Louisiana
 - School Boards at Broward, Duval, Orange, and Polk Counties
 - USPS, US Customs
 - MIT, Univ. of Tennessee, Univ. of Mississippi, Duke

■ Sponsorship

- Formal commitment from all key stakeholders within the State
- Clearly defined and realistic goals, approach, and success criteria
- Appropriate levels of resources (funds and people)
- Mandate to use the new financial system in all agencies and branches of government statewide

■ People

- Experienced, knowledgeable integrators familiar with both the technology selected and the State of Florida governmental entities
- Unified project team incorporating both external consultants and experienced and empowered State resources
- Building and maintaining enthusiastic support of the user community
- Comprehensive change management and user training program

■ Technology

- Selection of an ERP package which has demonstrated the capability to meet the functional and technological requirements of the state

■ Process

- Clearly defined and effectively managed project scope
- Emphasis on adaptation of State processes to fit with ERP-based best practices (rather than implementation of package customizations)
- Effective (rapid and even-handed) identification and resolution of issues
- Early focus on interfaces, data conversions, enhancements, and reports
- Utilization of an independent project management consultant

■ Strategic Risks

- Development of, and stakeholder agreement on, Chart of Accounts and cost tracking mechanisms
- Obtaining formal buy-in & commitment from all agencies and branches of government
- Determining and leveraging a consistent architecture across various components (legacy, human resources, procurement, etc.)
- Acquiring and maintaining executive branch and legislative branch on-going support to fund the project until it is completed
- Proposed new structure for Department of Education and impact on services currently provided to universities

■ Project Risks

→ Schedule

- ◆ Procurement strategy – must support having an integrator under contract by the end of Q1 FY 2002
- ◆ Addition to scope of non-essential solution components
- ◆ Inadequate participation by State functional experts
- ◆ Coordination of efforts to implement ERP while simultaneously addressing GASB 34 requirements

→ Cost

- ◆ Attempt to replicate all existing functionality by excessive customization of ERP applications
- ◆ Handling of payroll function

→ Technology

- ◆ Selection of ERP package lacking proven track record of success

■ Continuation Risks

- Selection of a platform that is new to existing data center staff without provision for adequate training
- Ability of IT to hire, train, and retain staff with the skills required to support the new technology

Conclusions

- The financial, operational, and other benefits of implementing ERP-based accounting and treasury management modules will have a significant positive impact upon State government.
- These modules can be operational in 21 months, laying the groundwork for important future initiatives and catapulting the State of Florida into a leadership position among State governments.
- Failure to act will leave the State reliant on an aging IT system which will increasingly limit the ability of the State to implement and manage new programs.
- Garnering strong, continuing executive level support throughout state government is essential to ensure a successful implementation.
- Treasury Management is most effectively implemented as an integrated component of a larger financial accounting project.

There are compelling benefits and risk-mitigation reasons for the State to fund and begin implementing an ERP-based replacement system for FLAIR and CMS this legislative session.