



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

- **Engagement Background**
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  - Approach: Integrated or Stand-Alone?
  - Scope
  - Assumptions
  - Methodology
- **Major Changes since Business Case Study**
- **Financial Module Value Propositions**
- **Solution Overview**
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  - Replacement System Functionality
  - Integration with External Systems
- **Estimates**
  - Cost
  - Schedule
  - Resource Requirements
- **Marketplace Experiences**
- **Critical Success Factors and Risks**
- **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**

## ■ 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
<b>Total</b>	<b>36,696,000</b>	<b>23,691,000</b>	<b>3,196,000</b>	<b>1,707,000</b>	<b>65,290,000</b>

## **...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
<b>Total</b>	<b>110</b>	<b>160</b>	<b>270</b>

## ■ 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
<b>Total</b>		<b>274</b>	<b>1740</b>

## ■ Notes

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

## ■ 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
<b>Totals</b>	<b>\$72,191</b>	<b>\$72,191</b>	<b>\$72,191</b>

## ■ Operating Costs Assumptions

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

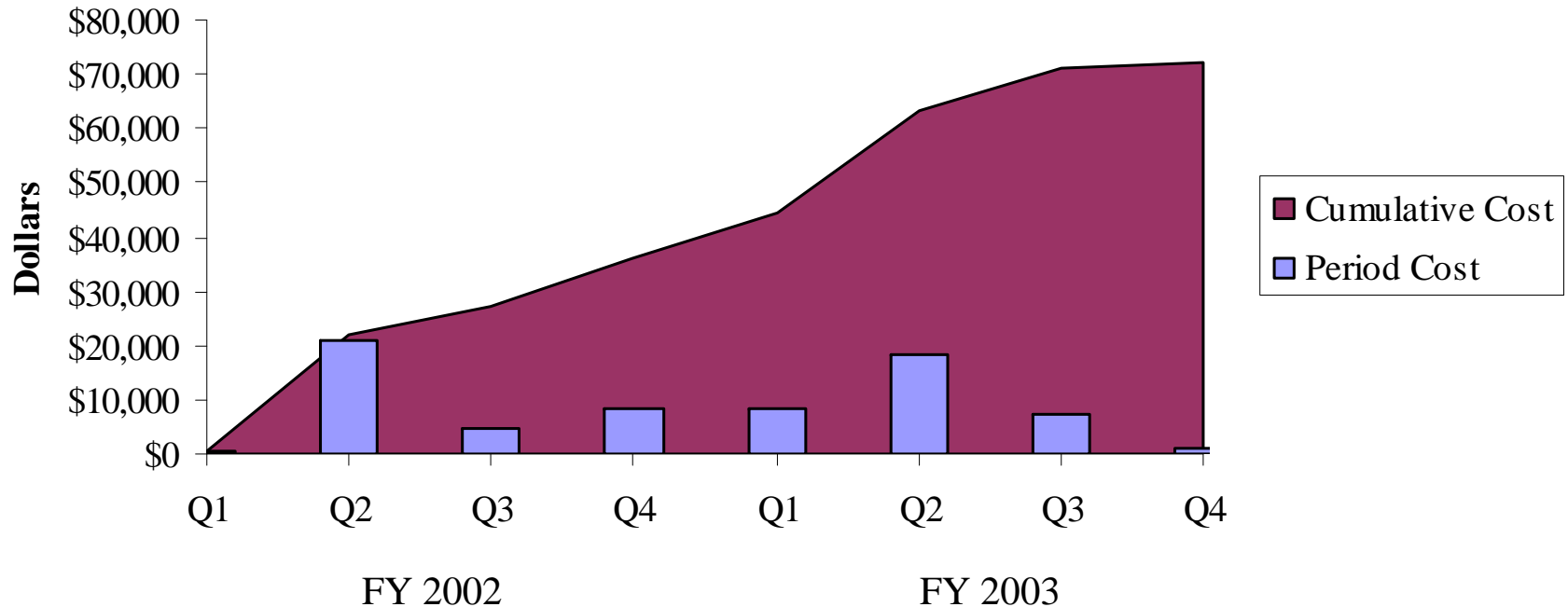
<b>Component</b>	<b>Estimated Costs (000)</b>	
	<b>Yearly</b>	<b>Every 3rd Year</b>
Software maintenance fees	\$2,125	\$2,125
Hardware maintenance fees	\$450	\$450
Consulting (upgrade support)		\$2,000
<b>Total</b>	<b>\$2,575</b>	<b>\$4,575</b>

# 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
<b>Sub-Totals</b>	<b>\$35,884</b>	<b>\$36,307</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$72,191</b>
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
<b>Sub-Totals</b>	<b>\$0</b>	<b>\$2,275</b>	<b>\$2,575</b>	<b>\$2,575</b>	<b>\$4,575</b>	<b>\$12,000</b>
<b>Grand Total</b>	<b>\$35,884</b>	<b>\$38,582</b>	<b>\$2,575</b>	<b>\$2,575</b>	<b>\$4,575</b>	<b>\$84,191</b>

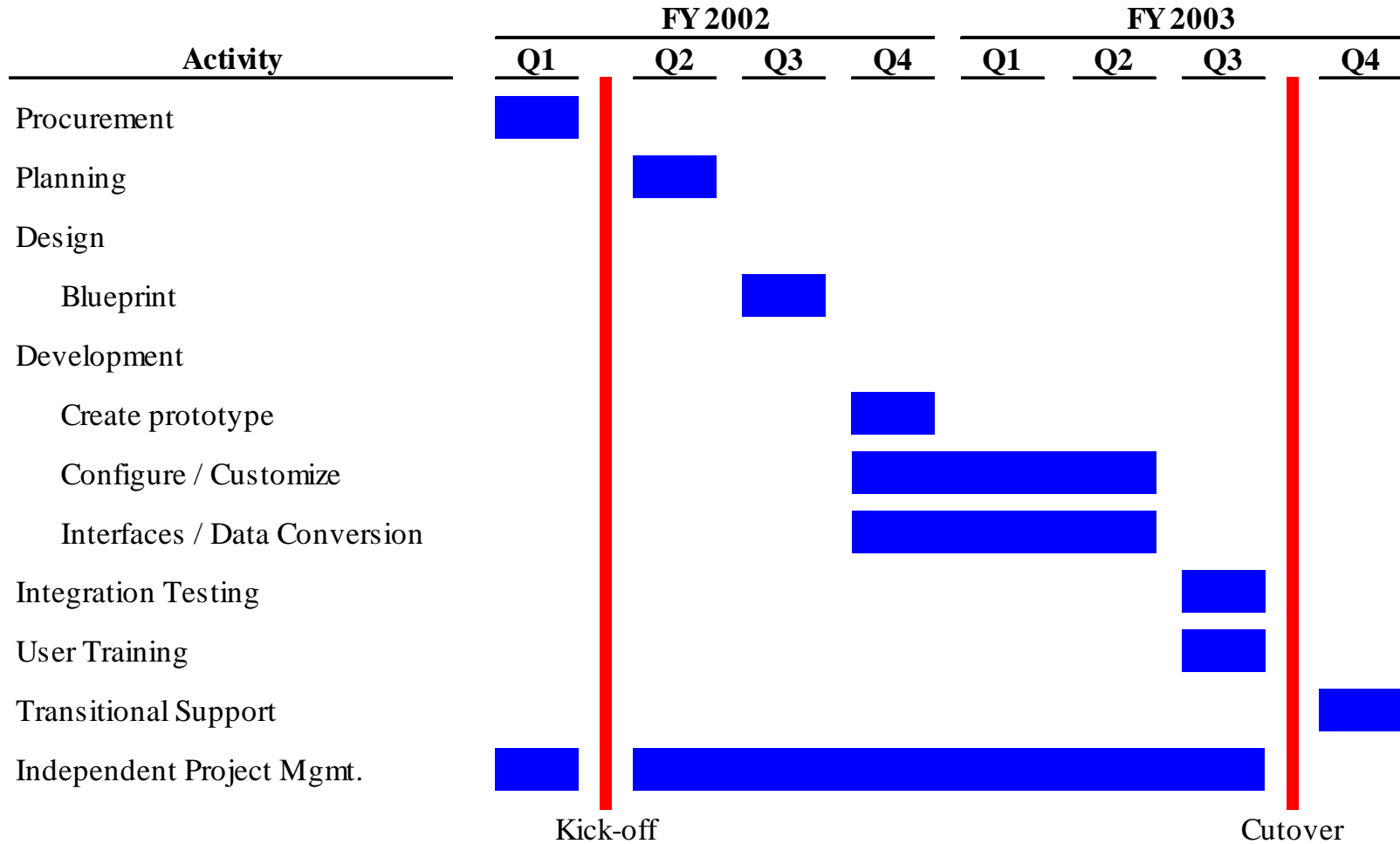
## Implementation Costs (000) by Quarter



### 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

- 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.**