

# State ERP Program Progress Report



## **Joint Legislative Oversight Committee on Information Technology and the Fiscal Research Division**

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# Legislative Request

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This report is submitted pursuant to Section 7.10 of S.L. 2015-241, which directed the State CIO to provide a report to the Joint Legislative Oversight Committee on Information Technology on the development and implementation of the State ERP Program (“ERP Program”).

## Session Law 2015-241 Sec. 7.10

### ENTERPRISE RESOURCE PLANNING DESIGN AND IMPLEMENTATION

**SECTION 7.10.(a)** The Department of Information Technology, in coordination with the Office of the State Controller and the Office of State Budget and Management, shall conduct the planning and design of an enterprise resource planning system (ERP) for State agencies by utilizing business process reengineering to identify and organize processes and workflow in order to prioritize and link work activities to realize efficiencies and organize around outcomes. The ERP system shall address, at a minimum, core financial management, grants, assets and inventory, fleet management, and human resource management. A request for proposal for a replacement system implementation shall be prepared for release no later than July 1, 2017. The Department may use savings generated through efficiencies gained from transition of participating agencies to the Department and overall Department operations, including procurement, to fund the project.

**SECTION 7.10.(b)** The Department of Information Technology shall submit a report to the Joint Legislative Oversight Committee on Information Technology on or before January 15, 2017. The report shall identify results from the business process reengineering efforts for State agencies and shall include at least the following:

- (1) Proposed sequence of functional and site implementation
- (2) A phased-in contracting plan with checkpoints to facilitate budgeting and program management.
- (3) The feasibility of a cloud-based component.
- (4) Cost estimate for full implementation.
- (5) Detailed information relating to project funding from the savings generated through efficiencies gained from agency transition and overall Department operations.

# Executive Summary

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Enterprise Resource Planning (ERP)<sup>1</sup> applications have been in use within State of North Carolina agencies and departments for more than 15 years. Recognizing that there is great value to be generated by leveraging a standard ERP platform as broadly as possible, the Legislature has enabled the upfront planning, prioritization, and alignment upon which a successful ERP program is dependent.

In 2014 and 2015, the State Budget Director, State Controller and State CIO established a governing committee to manage the creation of an “ERP Implementation Plan and Budget Estimate”, aligned with the NC GEAR initiative, and collaborated with the 26 agencies and boards currently using NCAS (North Carolina Accounting System). An analysis of requirements, priorities, value levers and technology options was conducted, and a bottom-up estimate and deployment plan was developed, with the assistance of Deloitte consultants. The deployment plan laid out seven phases and eleven deployments over a seven-year timeframe at a total estimated cost of \$301 million.

Subsequently, the State CIO, State Controller and State Budget Director worked with the multi-agency Steering Committee to refine the scoping and planning process. Seventeen responses to a Request for Information for financial functions only were received and analyzed, and key content incorporated into the ERP planning process. Results of the RFI, and additional analysis of prior estimates and analyses, were reported to the Joint Legislative Oversight Committee on Information Technology in June and July 2015.

Based on the information gathered from the RFI and related analysis, the ERP Steering Committee refined its project scope and objectives, and searched for and selected an ERP Program Director to focus on the effort full-time beginning mid-November 2016.

In its December 15, 2016 meeting, the ERP Steering Committee agreed to sharing an ERP platform as a long-term strategy for generating value for the State and its agencies, departments, citizens, and stakeholders. It recognized the scale and risk entailed in executing such a strategy rapidly, and recommended a slower, more careful and precise approach to reaching the same end. The

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<sup>1</sup> ERP has become short-hand for enterprise-wide, deeply functional business applications and data. Originally short for Enterprise Resource Planning, the third evolution in computer systems to help optimize business processes in manufacturing, it now refers to a category of software that can scale volumetrically and functionally to provide most of the business transaction processing and reporting requirements of an entire enterprise.

meeting materials for the ERP Steering Committee December 15, 2016, are provided in Appendix A.

Given the current environment of ever-increasing cyber risk, and ever-louder calls for government transparency and stewardship, the risks created by the 30-year old NCAS and CMCS technology that manages the State's finances, and enables our accountability, are difficult to ignore, so the ERP Steering Committee agreed that the best place for the State to begin the work is in laying the core financial foundation for the ERP platform. Other key points that support this decision follow:

- The State's core financial system (North Carolina Accounting System – NCAS) is the oldest in the State's application portfolio, presents potential security risks and significant maintenance risks and costs, and is least able to meet current and future requirements.
- Core financial functionality, especially general ledger (GL), is commonly implemented as the first step in an ERP program. Since the GL is the end point of almost all ERP financial transactions, implementing GL first makes subsequent functionality easier to deploy.
- Enhancing and expanding financial reporting capabilities requires enhancements to the chart of accounts and other components of the financial architecture, many of which reside in the GL.
- Data dependencies within the ERP application suite typically require at least a skeleton GL be established in the deployment of any other ERP financial functionality.

The members of the Steering Committee have evaluated and validated this first step, which had been recommended by Deloitte in their extensive study.

# ERP Financials Strategy

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This ERP Financials Strategy is based on the same fundamental principles that have driven efficiency and effectiveness at large businesses and other organizations for fifteen or more years. As a means of articulating these principles, the White House Digital Strategy<sup>2</sup> captures the core tenets:

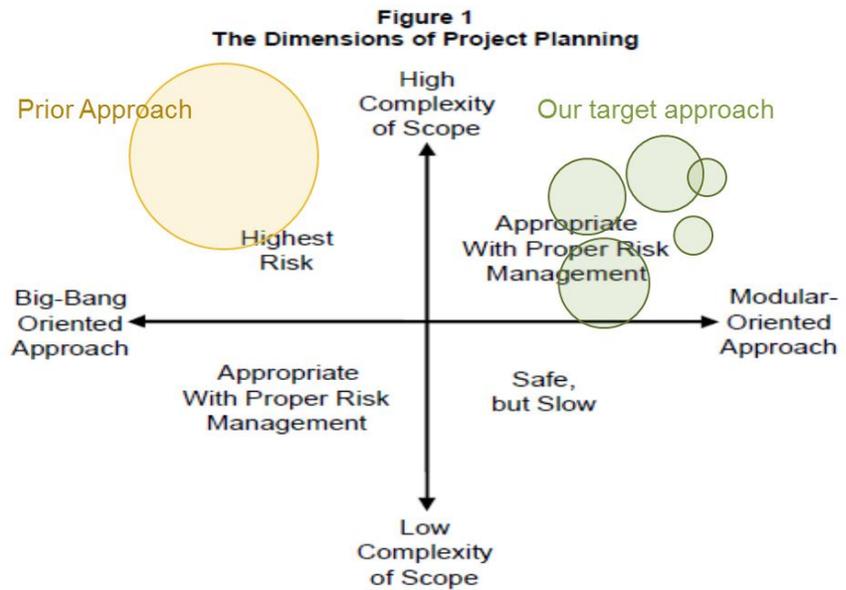
- An **“Information-Centric”** approach – Moves us from managing “documents” to managing discrete pieces of open data and content which can be tagged, shared, secured, mashed up and presented in the way that is most useful for the consumer of that information.
- A **“Shared Platform”** approach – Helps us work together, both within and across agencies, to reduce costs, streamline development, apply consistent standards, and ensure consistency in how we create and deliver information.
- A **“Customer-Centric”** approach – Influences how we create, manage, and present data through websites, mobile applications, raw data sets, and other modes of delivery, and allows customers to shape, share and consume information, whenever and however they want it.
- A platform of **“Security and Privacy”** – Ensures this innovation happens in a way that ensures the safe and secure delivery and use of digital services to protect information and privacy.

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<sup>2</sup> White House Digital Strategy. Retrieved from [White House Digital Strategy link](#).

## Program Pace

The ERP Steering Committee has expressed their preference for a slow-spend, methodical, risk averse approach to the gradual deployment of a shared ERP platform. This approach is in concert with leading thinking in transformation strategy. Rather than attempt to deploy an ERP solution at once, deploying smaller chunks of functionality reduces implementation risk, spreads costs over a longer period of time, and allows the value of each chunk to be evaluated and managed



Source: Gartner Research

## Near-Term Plan - Core Financials

Following is a summary of the four phases of work planned to be completed prior to the start of Design for the Core Financials<sup>3</sup> Project. This plan is supported by preliminary task lists, but durations, schedules, and resource requirements are still being estimated.

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<sup>3</sup> Refers to the ERP functionality required to support the principal financial management functions performed by OSC. The principal technology currently supporting these functions at present are North Carolina Accounting System (NCAS) and Cash Management Control System (CMCS).

## 1. Develop Future State Vision

The better you can see a target, the easier it is to hit. Developing a clear and compelling vision for leveraging process redesign and modern ERP Financial<sup>4</sup> capabilities is our first step. The Case for Action describes the future state Financial processes as they will be, and the value the change creates. Developing our new Financial Architecture, including chart of accounts redesign, lays the foundation for improved information sharing and optimizing. And the Technology Strategy documents the guidelines for the technical infrastructure that will support the new capabilities.

### *Case for Action*

Based on a method used successfully in the past, the Case for Action process has close parallels to other process redesign techniques like Lean Six Sigma, Ishikawa Analysis, Five Whys, and others. Where it may differ is in the integration of vision creation and value definition.

In a series of three workshops for each process area, Pain and Priorities, ERP Capabilities and Leading Practice, and Future State Visioning, process teams capture not only the new process design, but the metrics that will be used to measure the value it generates. More detailed information about the Case for Action process is provided in Appendix B.

### *Financial Architecture*

Perhaps the most important value proposition of ERP applications is a pre-defined, pre-integrated data model across the breadth of business process functionality. Financial Architecture development is an approach to documenting how financial entities, things like agencies, departments, projects, assets, invoices, about which we care for financial purposes, are related to each other. The ability of an ERP application suite to support that model well will be crucial to its ability to support enhanced information and reporting capabilities.

### *Technology Strategy*

Operating and cost models for business application infrastructure are changing as fast as the servers and switches. The Deloitte report of 2014 provided analysis of on premise and various cloud alternatives. That analysis must be updated for current offerings. Existing State technology strategies, including platforms, solutions, and security, will provide important guidance in the definition of the ERP Financials Technology Strategy.

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<sup>4</sup> *ERP Financials*: Refers to the ERP functionality described in H1030. which includes ERP Core Financials and adds Grants, Fleet Management, HR, and other domains. See H1030 for specific definition.

## 2. Select ERP Financials Platform

We expect to conduct a thorough evaluation of ERP software options for the ERP Financials platform. The Future State Vision deliverables will provide much of the basis for the functional selection criteria. Other selection criteria, including developer company size, market presence, breadth of solution, and the like, will be determined by the Steering Committee.

## 3. Develop Core Financials Implementation Support Strategy

Once the ERP software has been selected and our technology strategy established, we will decide what support we'll need to design, build, test, and deploy the ERP Core Financials. We expect to evaluate various delivery models, including prime integrator, individual contractor, and mixed.

## 4. Select Core Financials Implementation Support Partner(s)

At present we expect to conduct a thorough evaluation of prime integrator and contractor options. We expect contracts for deployment support will be chunked, perhaps by project phase.

## Begin Design

Design is the phase where the Future State Vision starts to become reality. Each process team is armed with a clear picture of the target, the key changes in process and technology needed to realize it, and the measures by which we define success.

# Rough Order of Magnitude Cost Estimates and High Level Schedule for Core Financials

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As noted elsewhere in this report, cost estimates and schedules are highly dependent on work that has yet to be completed, especially the development of the Future State Vision, and the selection of ERP software platform. Our current estimates and schedule are based largely on work performed in 2014-2015 by DIT and Deloitte, with top level adjustments to more closely match the expected scope of the Core Financials project.

## High Level Schedule

Based on an assumed March 1, 2017 start date, our current schedule expectations are that the four steps outlined in the above section Near-Term Plan – Core Financials can be completed in approximately 16 months, as depicted below.

	2017												2018							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Case for Action and Process Rationalization																				
Solution Evaluation and Selection																				
Implementation Support Partner Strategy and Selection																				

## Rough Order of Magnitude Costs Estimates

Based on the high level schedule presented above and prior estimates developed by DIT and Deloitte, we estimate costs for the Core Financials project as follows:

Current Fiscal Year (FY16/17)	\$931K
2017-19 Biennium	
• FY17/18	\$3.3M
• FY18/19	\$37M
Following Biennium	\$70M

Additional detail of cost estimating method and components are provided in Appendix C.

## Risk Management Approach

Risk management is fundamental to project management, yet is frequently the source of significant project issues, including budget and schedule overruns. Following are key components of our approach to risk management.

### Manage Work in Chunks

Each of the phases listed above are natural check points for progress, and approval or release of additional funding. Each phase has entry and exit criteria, which define when we're ready to start, and how we know when we're done.

### Follow The Rules

Effective risk management isn't a mystery; the rules are well known. Like a fitness regimen, the crucial ingredient is discipline. We expect to use metric-based status reporting, Earned Value

Management, industry-standard methods, and project management best practices to maintain a high degree of discipline in planning and executing the project.

## Pay Attention to People

Many of the most significant risks created by transformation programs come from the people who must change what they do or how they do it to realize the benefits of the transformation. Adequate investment in organizational impact assessment, role re-design, education and learning are proven success factors, and often under-funded.

## Admit What We Don't Know

When the Hubble Space Telescope was launched, some of the computers in it were ten-year-old technology, because the engineers had to commit to the computer design early in the telescope design process. Best practice in ERP implementation is to avoid this trap by creating a progressively more detailed design, like peeling an onion. While this approach has been shown to create an end result better, faster, and more cheaply, the precision of effort and cost estimates of down-stream phases decreases substantially beyond the immediately following phase. We won't have all the answers we need to accurately estimate and plan the entire project at the beginning; we need to admit that and plan contingency for it.

## Transparent Decision-Making

We expect to make the decision-making process, and the decisions being made, highly transparent, so that all interested stakeholders are aware of progress toward each decision, and the people to contact to provide input to it. Using a SharePoint list serve, teams will publish decisions that will be made, before they are made. The decision list entry will include information about the decision, including who is responsible for making it, and its timing. When decisions have been made and documented, links to the document are included in the decision list.

## Earned Value Management

Earned Value Management (EVM) is a best practice project management technique that allows us to compare costs to both time-based and work-based budgets, providing greater insight into the project's performance.

## Robust Quality Assurance

Consistent quality results are the outcome of sound quality processes. Work product quality assurance is a multi-step process that must be documented, measured, and reported. Work product quality assurance steps are the basis for many EVM evaluations.

# Guiding the ERP Program

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The purpose of the ERP Program is to allow the State to realize the benefits of a shared ERP platform in an efficient, effective, and value-driven way, in meaningful, manageable chunks. Its objective is to create value for the State of North Carolina by leveraging a shared ERP platform across the enterprise, by:

- Recognizing that although each Agency and Department may have different stakeholders and a unique mission, many of the things Agencies and Departments must do to complete that mission are the same
- Realizing economies of scale by gradually building shared technology and consistent processes to enable these common functions to be as efficient, effective, and transparent as possible
- Enhancing the value of the information we create by allowing it to be integrated and shared to best serve the needs of our information customers
- Enhancing the security and privacy of the information we use and create by modernizing and simplifying the technology landscape
- Being accountable for delivering value by designing, building and deploying performance measurement into every solution

## Business, IT, and Oversight Partnership

Industry experts like Gartner, Forrester, and global consulting organizations, as well as the practical experience of hundreds of organizations, make it clear that ERP programs are most successful when they are the output of a partnership between business and IT organizations, combined with a value-driven governance structure and oversight.

Within the ERP Program for the State of North Carolina, we expect each project to be a joint effort between the business owner, IT, and OSBM. For Core Financials, OSC will drive the requirements, functional design, solution definition, deployment plan and schedule, while DIT will provide the enabling technology, and OSBM will provide financial oversight. We have seen this governance structure successful in private industry, at the federal level, and in other projects completed by the State.

## Value-driven Governance

Value-driven Governance integrates program governance with the benefit realization objectives. The foundation of Value-driven Governance is a rigorous understanding of how, where, when and by whom the value and benefits of a business case or Case for Action will be achieved.

- It provides measurable process and organizational efficiency objectives for the future state solution design, and measures progress toward them.

- It guides program prioritization of ERP value opportunities across processes and organizations, solution alternatives and technical platforms, and manages the data and processes to support program decisions.
- Within projects, it guides the prioritization of functionality gaps, solution alternatives and resource allocation, and manages the data and processes to support project decisions and issue resolution.

Value-driven Governance drives all program and project activities in the achievement of the benefit objectives. It does so through three primary deliverables:

- Benefit Realization Model: Translates the objectives of the business case or Case for Action into Process Performance and Organization Design Targets. Process-level targets are set in terms of Time, Cost and Quality. Organization Design Targets are typically set in terms of effort and costs.
- Program Value Management: Defines, captures and monitors progress toward all benefits and targets. Supports Governance decision-making, Alternative Assessment and Solution Priorities.
- ERP Opportunity Funnel: Supports the identification and inevitable prioritization of value realization opportunities and solution design alternatives on a net-benefit realization basis.

## Programs, Projects, and Sprints

The objective of a project is to deliver specified changes to the business on budget and on time.

- Includes people, process, and technology components.
- The specified changes are designed to generate measureable value to the enterprise.
- The project ends when the changes are delivered and transferred to routine operating status.

The objective of a program is to continually create value for the enterprise over time.

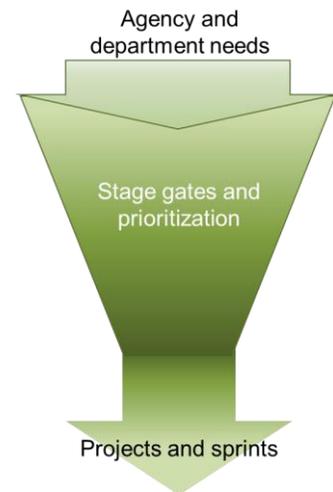
- The program creates and maintains organizational, application, technology, and value roadmaps that plan how value will be created by the program.
- The program defines the value realization model and charter for each project.

A sprint is a very small project that can be completed in a short period of time, commonly less than 16 weeks.

## The ERP Opportunity Funnel

Once the Core Financials foundation has been established, Value-driven Governance uses the ERP Opportunity Funnel to prioritize and schedule the work to further leverage the shared ERP Financial platform. Stage gates provide quality assurance and standards check points, and Benefit Realization Models help governance prioritize opportunities.

Based on team capacity and funding, ERP Opportunities are authorized as projects and sprints, the principal difference being time, with a close correlation to cost.



## Industrializing Value Delivery

Over time, our objective is to routinize the process of adding value by continuously leveraging a shared ERP platform. A robust program to continually deliver business solution value would include:

- Agile Team(s): Implements quick hits in 8-16 week Sprints
- Project Team(s): Plan, build and deploy larger chunks of functionality, upgrades
- Architecture Team: Maintains integrity of ERP platform across the enterprise for applications, data, processes, and technology
- Organizational Change Team: Change impact assessment and optimization, learning and training, communications
- Value Realization Team: Value realization model development, performance metric instantiation, value realization assessments

## Next Steps

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1. Maintain Steering Committee momentum; Onboard new Steering Committee members

The Steering Committee has laid the foundation for a successful program that will deliver great value to the State of North Carolina. Maintaining pace, awareness and mindshare are important elements in its success.

Beginning with the March meeting, the State Auditor will be joining the Steering Committee meetings, not as a voting member, but as counsel to the members.

2. Execute ERP Financials Project Plan, beginning with Case for Action, Financial Architecture, and Technology Strategy.

# Appendix A – Steering Committee Materials

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## *Enterprise Resource Planning (ERP) Strategy and Near-Term Tactics*

ERP Steering Committee

December 15, 2016



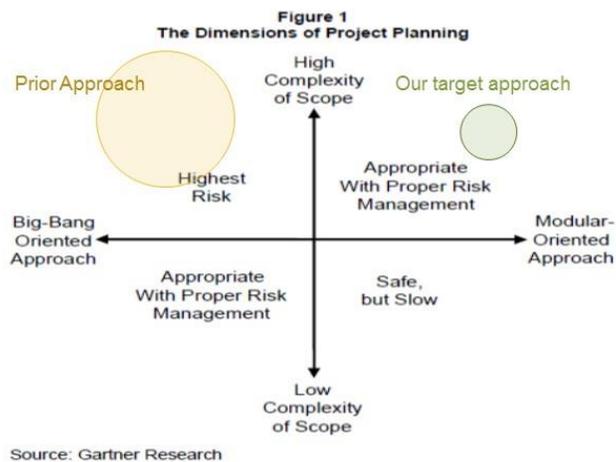
## *Topic Outline*

- ERP Planning and Estimating Work To Date
- Reduce Initial Cost and Deployment Risk by Taking Smaller Steps
- Why Financials First?
- Budgetary Timeline – Financials
- Proposal for this Committee

## *ERP Planning and Estimating Work To Date*

Year	Source	Scope	Cost Estimate (millions)
2008	Deloitte	State-wide, all processes	\$349 to \$387
2014	Deloitte	State-wide, all processes	\$301
2015 - 2016	Respondents to State RFI proposing an ERP solution and providing budgetary estimates	Refined scope to core financial processes	\$60 to \$104

## *Reduce Initial Cost and Deployment Risk by Taking Smaller Steps*



Rather than attempt to deploy an ERP solution State-wide, deploying smaller chunks of functionality reduces implementation risk, and spreads costs over a longer period of time.

A modular approach creates transition states that incorporate new application functionality and organizational dimensions in manageable chunks, and reduces the risk of each individual implementation.

## *Why Financials First?*

- The State's core financial system (North Carolina Accounting System – NCAS) is the oldest in the State's application portfolio.
  - Presents potential security risks
  - Presents significant maintenance risks and costs
  - Least able to meet current and future requirements
- Core financial functionality, especially general ledger (GL), is almost always implemented as the first step in an ERP program.
  - Since the GL is the end point of almost all ERP transactions, implementing GL first makes subsequent functionality easier to deploy.
  - Enhancing and expanding financial reporting capabilities requires enhancements to the chart of accounts and other components of the financial architecture, many of which reside in the GL.
  - Data dependencies within the ERP application suite require at least a skeleton GL be established in the deployment of any other ERP functionality.
- The Steering Committee has evaluated and validated this first step, which had been recommended by Deloitte.
- OSC has done significant pre-ERP preparation and has a high degree of readiness to begin the effort.

## *Proposal for this Committee*

1. Agreement with shared ERP platform strategy
2. Agreement to begin with financials, the final scope to be decided after completion of the Case for Action activities
3. Agreement on 2017-19 funding objectives

# Appendix B – Case for Action

The purpose of Case for Action is to define the future state vision and build organizational energy for change.

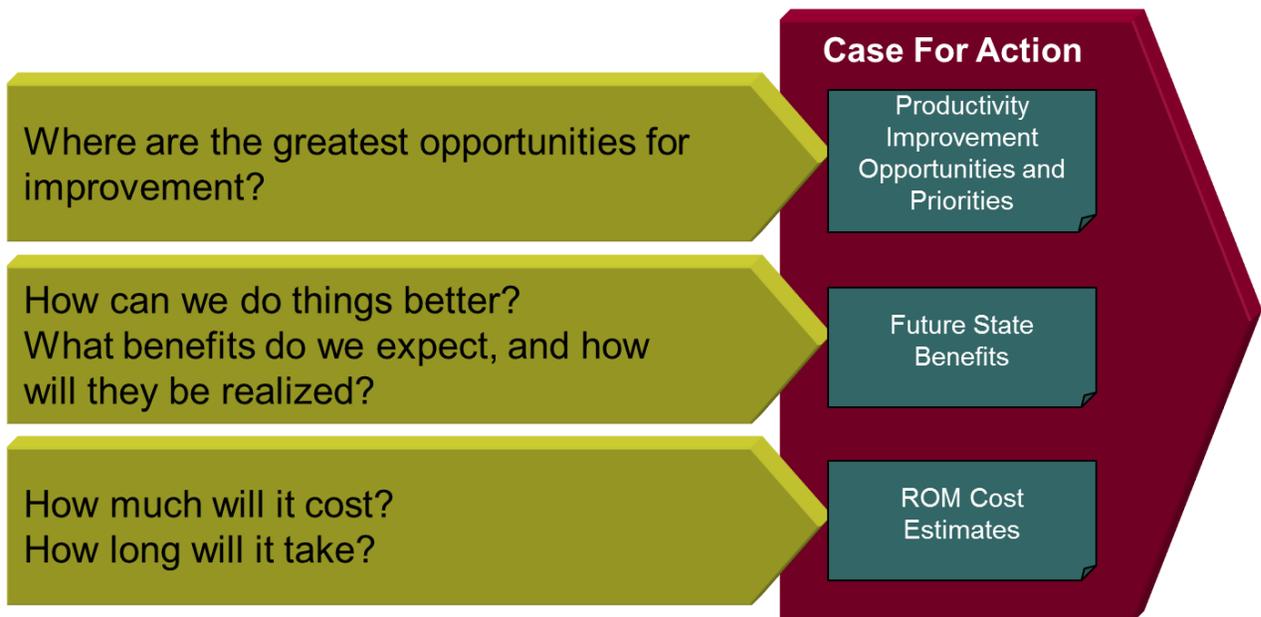
## Case for Action Addresses Common Questions

- We in IT know we need to make changes, but how do we get the users involved and make them partners in the work?
- We in the user departments know we need to make changes, but how do we get IT involved and committed?
- We know we need to make changes, but where do we start?
- Isn't there a faster way than an exhaustive business case to assess the opportunity?

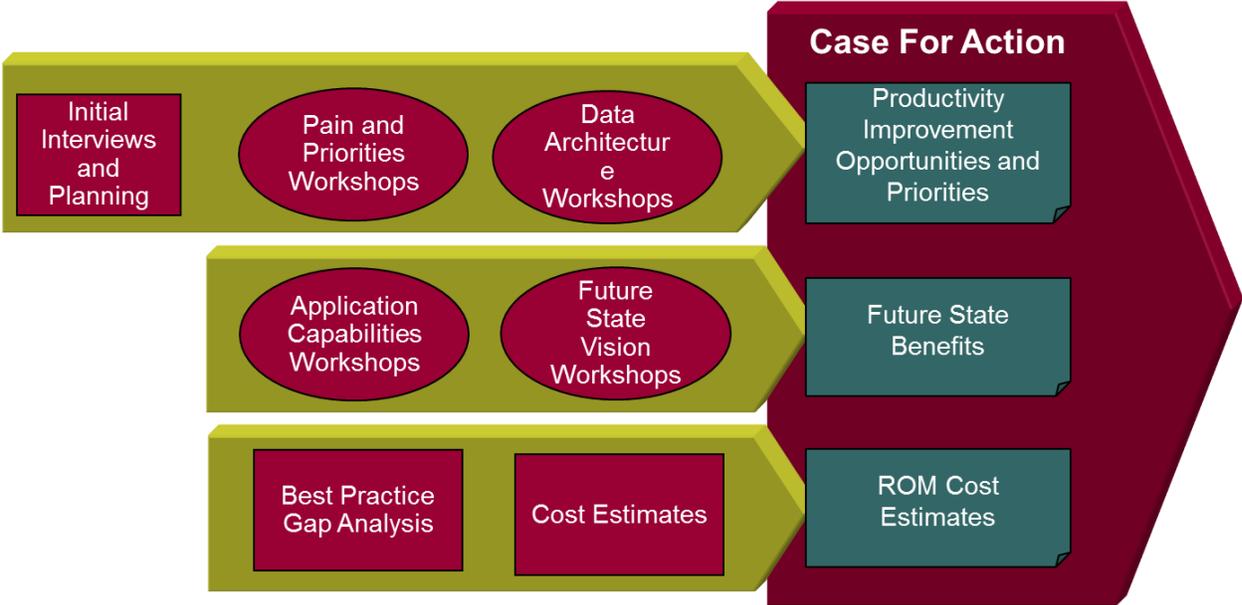
Case for Action is designed to answer these questions and:

- Describes and defines the goal
- Brings focus and clarity of purpose to the process
- Identifies the benchmarks for achievement and success.
- Creates a point of alignment for management and project leadership.
- Generates energy and organizational momentum to make the change.
- Helps to power us through the heavy lifting.

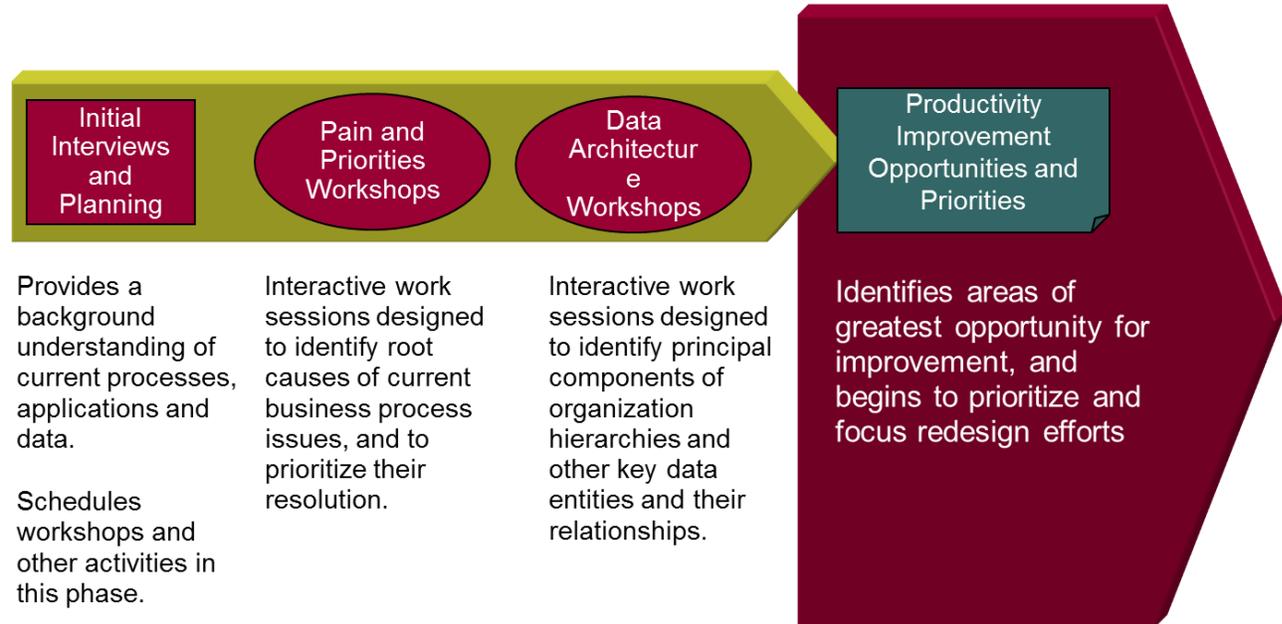
## Three Steps to Building a Compelling Case for Action



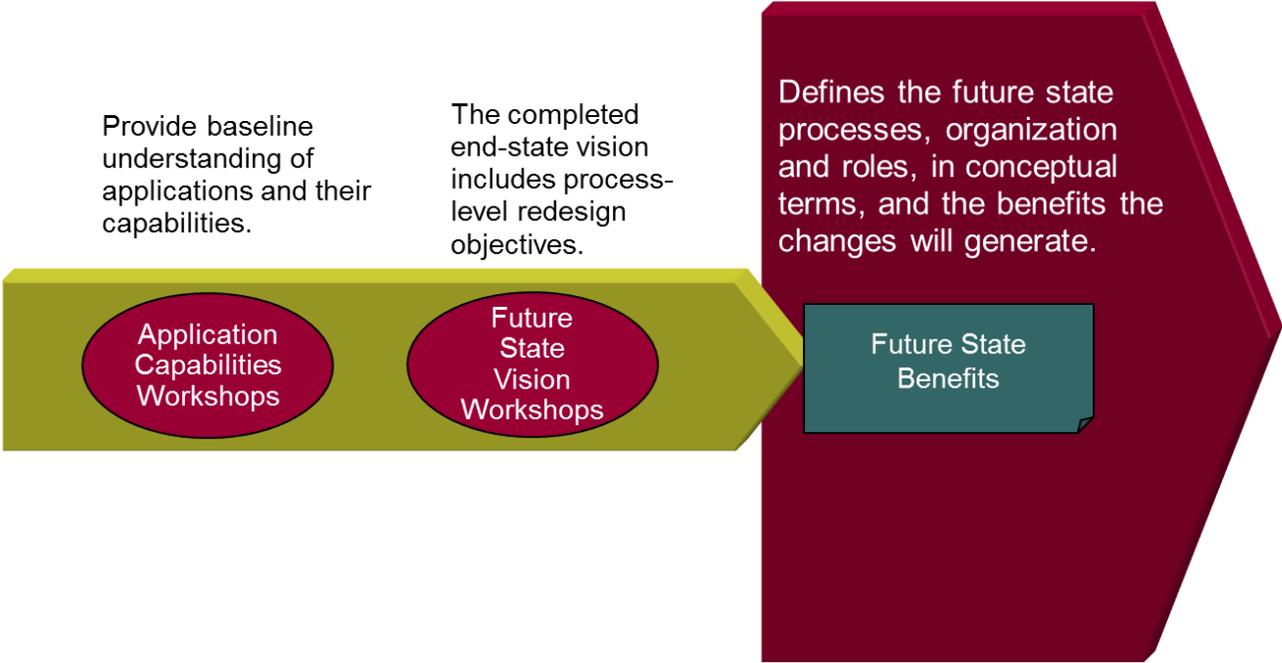
# Building a Case for Action



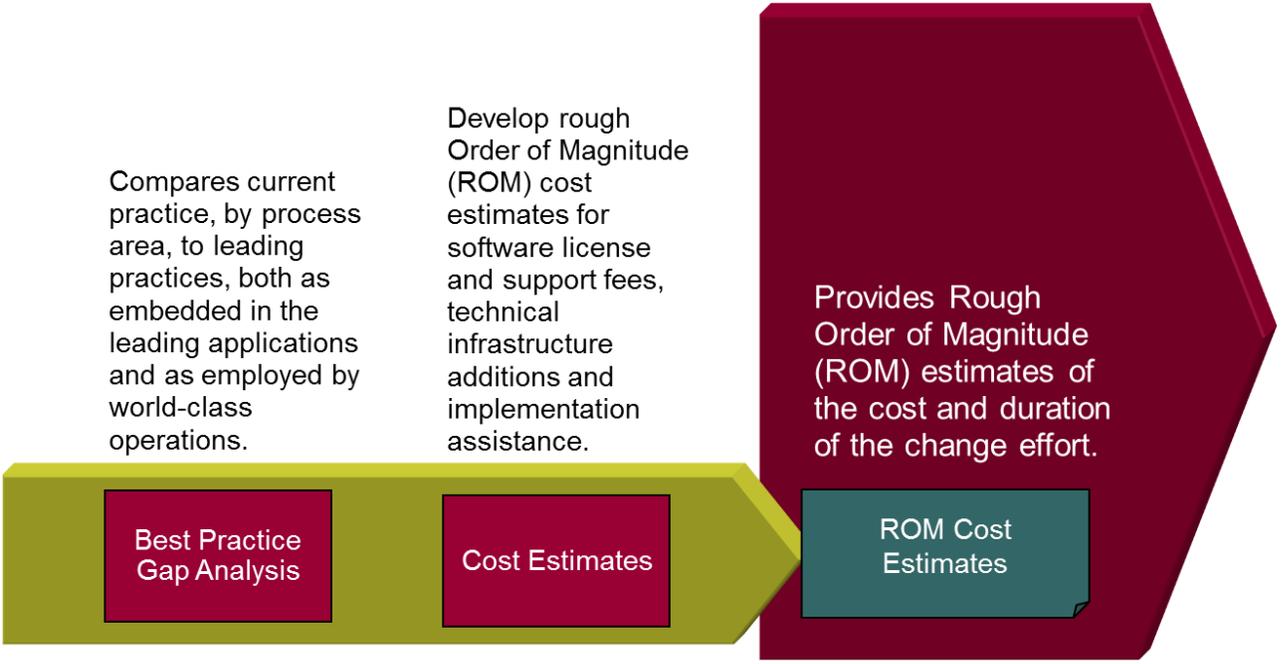
# Where are the Greatest Opportunities for Improvement?



# How Can We Do Things Better?

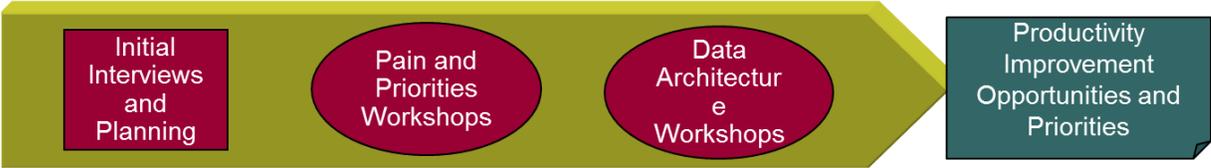


# How Much Will It Cost? How Long Will It Take?



# Work product stream for: Productivity Improvement Opportunities and Priorities

Answers the question: Where are the greatest opportunities for improvement?



<b>Work product outputs</b>	<ul style="list-style-type: none"> <li>• Interview guide(s) and questions</li> <li>• Questionnaire(s), individual responses and response tabulations</li> <li>• First-cut process hierarchy and rough process flows</li> <li>• Pain &amp; Priorities workshop delivery materials, including guidelines, sample pain points, etc.</li> <li>• Project plan and workshop schedule for Step 1</li> </ul>	<ul style="list-style-type: none"> <li>• Workshop output materials including notes, easel sheets, etc.</li> <li>• Summary of pain points and root cause findings from work shop, by process or functional area.</li> <li>• Plan and schedule for detailed follow-up work sessions.</li> </ul>	<ul style="list-style-type: none"> <li>• Logical entity model (first-cut) with mapping to current financial architecture.</li> <li>• List of data architecture principles, assumptions and constraints</li> <li>• Summary of data architecture challenges and leverage points</li> </ul>	<ul style="list-style-type: none"> <li>• Principles, Assumptions and Constraints for business improvement.</li> <li>• Annotated list of business rule, process, data, application, organization and other improvement opportunities, by functional area.</li> <li>• Logical financial entity model and summary of financial architecture challenges and leverage points.</li> </ul>
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# Work product stream for: Future State Vision Benefits

Answers the questions: How can we do things better?  
What benefits do we expect, and how will they be realized?



<b>Work product outputs</b>	<ul style="list-style-type: none"> <li>• Workshop delivery materials including briefing notes, prototype process flows</li> <li>• List of key business and IT strategies and their impact on this project</li> <li>• First-cut future state process flows, business and organizational rules</li> <li>• Annotated list of potential pain point remedies from prototypical application capabilities</li> <li>• Annotated list of application selection considerations</li> </ul>	<ul style="list-style-type: none"> <li>• Annotated list of differences between best/leading practice and current processes and business rules, by process or functional area</li> <li>• Summary assessment of impact of each gap on productivity, profitability, and the execution of business and IT strategies</li> </ul>	<ul style="list-style-type: none"> <li>• First-cut future state conceptual design – describes, in words and pictures, the way business process, technology and people will operate once the new applications have been implemented</li> <li>• Generally one or more business flow models by process area</li> <li>• List of benefits to be derived from the new model</li> <li>• Identification of the key business, technology and people changes required</li> </ul>
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# Work product stream for: ROM Cost Estimates

Answers the questions: How much will it cost? How long will it take?



**Work product outputs**

- Workshop delivery materials (primarily the Future State definition documents)
- Workshop participant feedback notes

Note: This workshop or series of workshops is designed primarily to communicate and rigorously examine the Future State Vision to develop broad-based support and enthusiasm.

- Annotated cost estimates based on knowledge of current market conditions, estimating templates and industry analyst guidance.

Costs are estimated separately for:

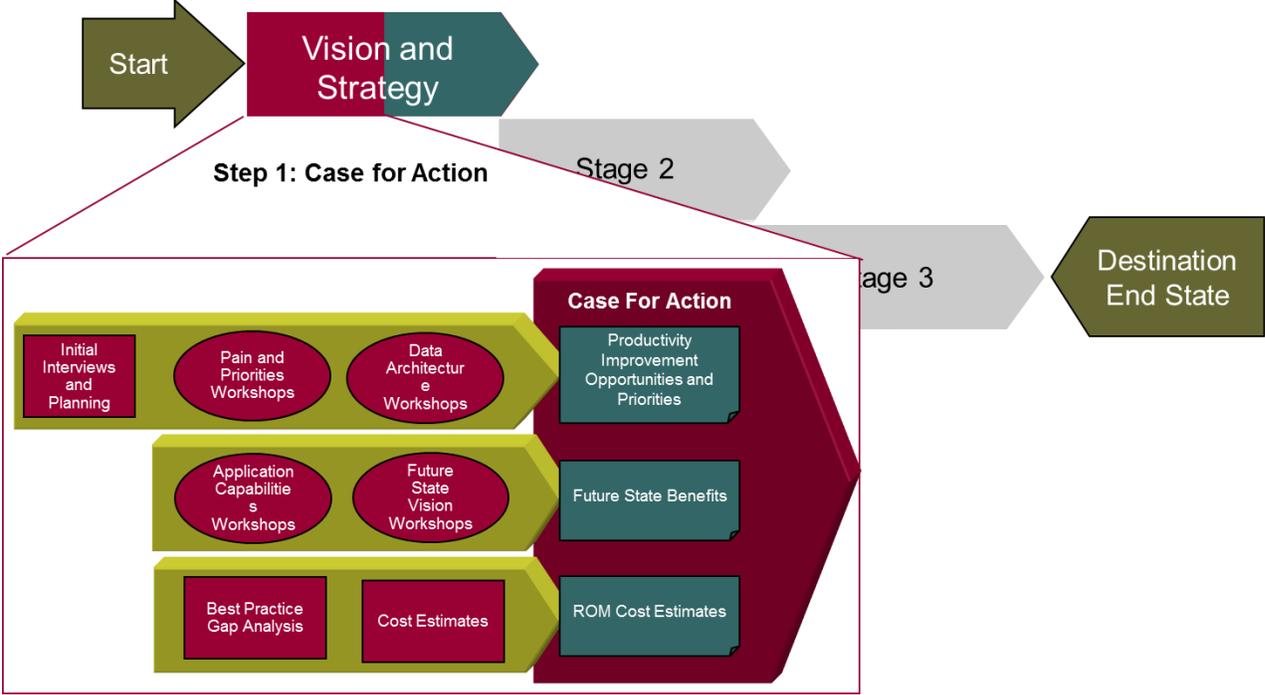
- Organization development, communications, training and deployment support
- Application configuration, integration and deployment.
- Application software licenses
- Application software support fees
- Hardware and technical infrastructure build-out

## Case for Action Deliverable

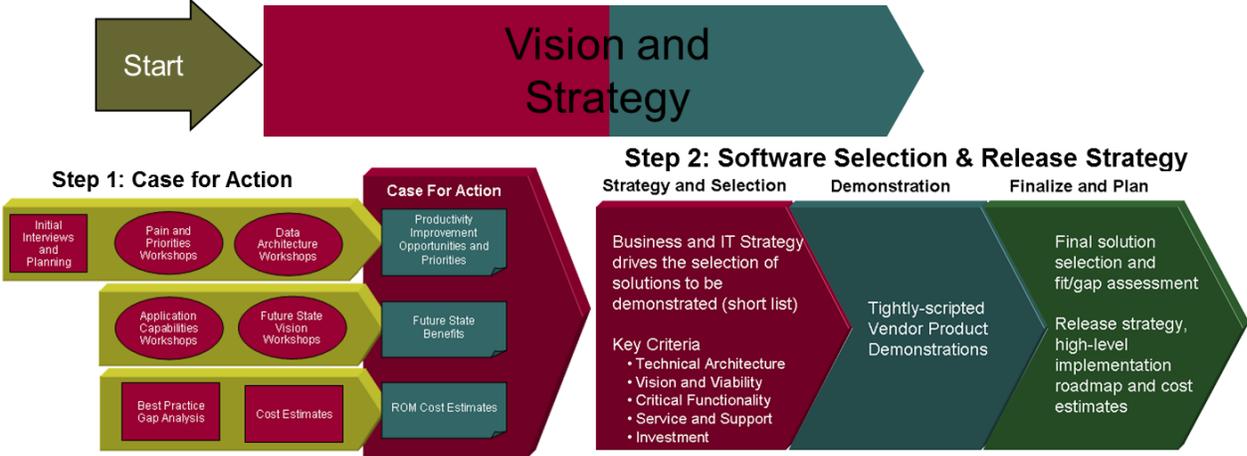
**Executive Summary**

<p><b>Productivity Improvement Opportunities and Priorities</b></p> <ul style="list-style-type: none"> <li>• Principles, Assumptions and Constraints for business improvement.</li> <li>• Annotated list of business rule, process, data, application, organization and other improvement opportunities, by functional area.</li> <li>• Logical financial entity model and summary of financial architecture challenges and leverage points.</li> </ul>	<p><b>Future State Vision and Benefits</b></p> <ul style="list-style-type: none"> <li>• First-cut future state conceptual design – describes, in words and pictures, the way business process, technology and people will operate once the new applications have been implemented</li> <li>• Generally one or more business flow models by process area</li> <li>• List of benefits to be derived from the new model</li> <li>• Identification of the key business, technology and people changes required</li> </ul>	<p><b>ROM Cost Estimates</b></p> <p>Cost estimates for:</p> <ul style="list-style-type: none"> <li>• Organization development, communications, training and deployment support</li> <li>• Application configuration, integration and deployment.</li> <li>• Application software licenses</li> <li>• Application software support fees</li> <li>• Hardware and technical infrastructure build-out</li> </ul>
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The Case for Action defines the Desired End State in measurable terms.



The Case for Action is the key input to solution selection and release strategy.



- Future state vision documents become the basis for software vendor evaluation and selection
- Cost estimates are updated and refined after software vendor selection
- Case For Action keeps us focused on the project's reason for being – to generate ongoing benefits

# Appendix C – Rough Order of Magnitude Costs Estimates

*NOTE: Estimates are based on Deloitte’s 2014 study, adjusted for reduced focus of only Financials. There will be a high degree of uncertainty to these estimates until the Case for Action is completed*

<b>Financial Backbone Estimated Project Costs *</b>						
* in \$1,000's						
* Based on 2014 Deloitte ERP Estimate, adjusted for smaller scope and 7/1/2018 System Integrator start date						
	2017-19 Biennial Budget					Totals
	FY16/17	FY17/18	FY18/19	FY19/20	FY20/21	
Consultants /Contractors	728	2419	12,702	21,307	5,564	42,720
State Personnel	203	870	4,336	6,042	2,114	13,565
Hardware			537	1,241	1,267	3,045
Software			11,557	2,265	2,265	16,087
IV&V			2,500	2,500	2,500	7,500
Facility			283	292	150	725
Network			551	-	-	551
PC			376	-	-	376
Security			700	700	700	2,100
O&M			49	5,342	9,041	14,432
Contingency			3,359	3,969	2,360	9,688
<b>Total</b>	<b>931</b>	<b>3,289</b>	<b>36,950</b>	<b>43,658</b>	<b>25,961</b>	<b>110,789</b>
	Pre-Project Costs		Project Costs			

**“Pre-Project” efforts (3/1/2017 to 6/30/2018):**

- Deliverables include:
  - Case for Action
  - Vision document
  - Agency communication
  - RFP’s for:
    - Software Solution
    - System integrator (SI)
    - Independent Verification and Validation (IV&V))

- Estimated at approximately \$211K/month for first two months, then seven months @ \$255K and seven months @ \$287K/month. Includes:
  - 7 consultants
  - Backfilling for approximately 12 state employees (9 FTE)
    - Assumes we need two months from approved budget to hire replacements, one month of overlap to train replacements
    - Estimated state employees backfills at \$50/hr.
    - Does not include time/cost for agency participants
- If starting **3/1/2017**, requires additional funding of:
  - **\$931K for FY16/17 (Current fiscal year)**
    - Does not include current financial consultant (covered by DIT's existing budget)
  - **\$3.3M for FY17/18 (Year 1 of biennium)**

**Financial Backbone Project (once SI on board):**

- If starting System Integration (SI) project **7/1/2018**:
  - Requires **\$37M for FY18/19 (Year 2 of biennium)**
  - Additional ~\$70M required in next biennium to complete project
  - After project completing, will still require recurring costs, including:
    - O&M
    - Software maintenance
    - Hardware hosting and refreshing, etc.

**Cost Summary:**

Current Fiscal Year (FY16/17)	\$931K
2017-19 Biennium	
<ul style="list-style-type: none"> <li>• FY17/18</li> <li>• FY18/19</li> </ul>	\$3.3M \$37M
Following Biennium	\$70M