King County
ABT PROGRAM
Accountable Business Transformation

ABT Program
Post Implementation Support Plan

June, 2008

Revision History

Version	Prepared by	Date	Reviewed by	Approved by	Note
Original v.1	Mary Myhre-CIBER	June, 2008	All	Manny Ovena	
V.2	Cindy C-Wilson	June 30, 2008	Fay Lim	Manny Ovena, Keith Pace-CIBER	OCM and EAC requested changes, Phasing modification

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1.0   Goals and Objectives

The purpose of the Post Implementation Support Plan is to provide a description of the overall strategy for management of the enterprise applications post implementation. This recommendation includes a staffing model to support the end users and a list of tools and technology needed by the support staff. This document is focused on the long term Post Implementation Support goals. To see the short term transition support strategy, see the Transition Support Plan which describes the procedures by which these groups will operate during the Stabilization phase shortly after "Go Live."

2.0   Post Implementation Support Objectives

The goals and objectives of establishing Post Implementation Support is to address the following:

- Establish a methodology and structure to manage and support the production environments with the appropriately skilled people, tools and procedures

- Establish a strong governance program to manage the shared applications

- Balance the business requirements between all groups and ensure the systems are operating effectively and efficiently

- Ensure a periodic comparison of business needs with new functionality available

- Establish a comprehensive, scalable support team to support the day to day support needs of diverse business applications (human resources, payroll, finance and budget) and business requirements

- Establish a work environment that fosters the sharing of knowledge and resources across all applications and leverages understanding of technical, functional and integration knowledge

- Establish and maintain end user system knowledge by providing ongoing training and Help Desk support.

A well managed production environment can provide cost-effective long term use of systems and realize higher rate of return on investment.

3.0   Post Implementation Support Scope

The Post Implementation Support Organization as defined in this document will provide support services for Oracle, PeopleSoft and Budget applications. It does not support the hardware and technical infrastructure management; the Office of Information Resource Management (OIRM) will continue to manage the technical infrastructure and hardware.

3.1 Enterprise Resource Planning (ERP) Support Tasks versus Operational Tasks

The Enterprise Resource Planning (ERP) Support Tasks are the responsibility of the recommended Post Implementation Support Team. Operational tasks will continue to be the responsibility of the business owner(s). The detailed 'to be' solution will aide in the delineation of who is responsible for what specific task. The following are examples of the differences between support and operational tasks:

3.1.1 ERP Support Tasks

Manage Application Service Requests (application problem resolution, functionality, new structures)
- Document
- Prioritize
- Execute
- Collaborate with operations
- Help Desk

Training Development & Delivery
- Advanced topics
- Query

User Account set up and Management

Power User Support
- Applications
- Reports
- Rules & Structures
- Help Desk Support

Report & Forms Development

Application Monitoring & Maintenance
- Schedule and monitor automated processes

- Application Patching (including testing)
- iProcurement punch outs
- Internal controls set up and monitoring

Instance Management
- Reporting instance

Database Monitoring & Maintenance

Interface Maintenance
- Time Capture side systems
- Labor distribution

Application and Database upgrades
- Continuous analysis and improvement
- Minor Upgrades (done in house)
    o Development
    o Impact Analysis
    o Testing (script development and execution)
    o Execution

- Major Upgrades (done with third party partner support)
    o Planning and Scoping
    o Partner Selection
    o Execution

Application License Management

Maintain Application System Documentation

3.1.2 Financial Operating Tasks
Cross Functional
- User support
- Perform reviews
- Approve transactions
- Public disclosure requests

General Ledger
- Set up new segment values
- Set up new cross validation rules
- Open close periods
- Process journal entries
    o accounting

- o budget
- Maintain journal entry approval rules
- Perform Reconciliations
  - o Payroll
  - o Key Accounts
  - o Encumbrances
- Prepare Annual Financial and state BARS reports

Project/Grants
- Set up Project Templates
- Set up Expenditure Types
- Process project billing invoices
- Manage Asset capitalization process
- Manage general ledger account generator (mapping rules and look up sets)

Procurement
- Maintain requisition approval rules
- Set up and maintain vendor records
- Manage competitive procurements
- Create purchase orders
- Update online catalogs
- Manage workload (use procurement DBI)

Accounts Payable
- Process Vendor Payment
- Enter Invoices
- Approve & process employee expense reimbursements
- Manage ad hoc p-card payment process
- Year end 1099 reporting
- Unclaimed Property reporting

Accounts Receivable
- Set up and Maintain customer Records
- Process Payments
- Review Approved Adjustments
- Generate and send out Invoices
- Review past due accounts and refer for collection
- Manage accounts with collection agency

Fixed Assets
- Set up and maintain asset flexfield values
- Manage asset workbench

Cash Management
- Reconcile bank account(s)

3.1.3 Human Resources (HR)/Payroll/Benefits Operating Tasks

Human Resources (HR) manages

- Establishing HR Policies and Procedures
- Workforce Management and Succession HR Planning
- Job Code Review and Creation
- Position Management
- Recruitment and Selection Strategy
- Classification System Development
- Compensation Planning and Development
- Classification/Compensation Administration
- Pay Implementation Development and Administration
- Establishing Employee Leave Administration Polices and Procedures
- Employee Exit Administration
- Employee Development
- Organizational Development and Related Consulting Services
- Safety and Claims Administration
- Disability Accommodations and Employment
- Labor Contract Administration and Negotiations
- Grievance and Disciplinary Administration
- Performance Appraisal and Merit Pay Policies and Procedures

Payroll and Time Capture Operating Tasks

- Collecting and processing employee time
- Paying employees
- Deducting, withholding, and depositing taxes
- Reporting to federal and state agencies
- Deducting, withholding, and paying child support and garnishments
- Deducting and withholding employees' benefit contributions
- Providing payroll information to other areas of the county including Accounting, Benefits, Budgeting and HR
- Maintaining payroll records in compliance with federal and state laws and regulations.
- Establishing pay rules in the system for time collection (all systems)
- Correcting Payroll Errors to employee's pay checks
- Defining deduction codes at company level
- Applying deductions codes at employee level

- Defining earnings codes at company level
- Applying earnings codes at employee level
- Union dues setups and deduction amounts
- Garnishments
- Savings Bonds setups and monitoring
- Warrant reconciliation
- Employee Deductions
- W-4 process for new hire
- Direct deposit setup
- W-2 process
- Implement Collective Bargaining Agreements

Benefits and Retirement Operations Operating Tasks

- Countywide set up of benefit programs, deductions and payment of benefits vendors
- Enrollment in health and insurance benefits for active employees, employees on leave and employees who leave county employment (COBRA and retiree benefits)
- Manage annual Open Enrollment
- Flexible spending accounts
- Retirement system enrollment and information
- Deferred compensation plan enrollment and education
- The Law Enforcement Officers and Firefighters (LEOFF-1) Disability Board
- New employee orientation, exit classes, and deferred compensation seminars
- Benefits and retirement information and referrals
- Direct assistance with everything from benefits, flexible spending account and retirement system enrollment to life, accidental death and dismemberment, and disability claims processing

4.0 Critical Success Factors

To ensure the success of the long term Post Implementation Support environment the following critical success factors must be achieved:

- An efficient support model developed and established prior to turnover to operational status
- Comprehensive documentation

- Shared understanding of roles and responsibilities of all support staff members with operating business units and collaboration with business owners and power users
- Knowledge transfer from ABT Program Team to Post Implementation Support Staff
- Training of all users and Post Implementation Support Staff to an appropriate competency level
- Acceptance of the new business processes and processing environments by end users and business owners
- Adequate post implementation support resources and ongoing funding to support the long term enterprise application support needs of the organization.

5.0   ERP Management Best Practice Approach

"Business Application Competence Centers (BACCs) are becoming the more frequently used support model for ERP systems. Having a coordinated group of resources that understands the business processes and how they've been enabled via the application will be a key contributor to long-term success with ERP. More than half of the companies that have implemented ERPs are expected to migrate to the BACC support approach by 2009." *Gartner BACC Toolkit, April 2007*

Managing ERP environments can be accomplished by a variety of approaches. Organizations of different size, complexity and maturity require different levels of support. Examples of research and experience with Competency Center Support models are found in their entirety in Appendix A and B.

6.0   Current Application Support Model

The current application support model is made up of many parts. There are multiple applications, implemented at various times; each having their own support infrastructure resulting in a piece-meal approach. The recommendation in this document will replace the current multiple structure of support.

In the current support model; resources in each group perform many operational tasks as well as application support tasks. In the new recommended competency center, the new support team will NOT perform operational activities. The support team will be focused on providing application support only. Support and operations will work collaboratively to ensure the best support of the systems and users.

7.0   Recommended Future Enterprise Application Support Model

Using research and CIBER's experience and because the ABT Program vision and goals explicitly state that implementing best practice approaches are the overarching goal, careful consideration of best practice approaches were considered in developing the recommendation provided within this document. Rather than list a wide range of options and models, the recommendation focused on is one developed on the premise that the Business Application Competency Center Model will best support the county's business applications. This competency model was shared with a number of county key stakeholders and was widely accepted.

7.1 Factors to Consider

Important factors to consider for the county's Post Implementation Support requirements include the following:

- County's objective to achieve, where possible, common systems, processes and reporting. The long term goal to minimize the changes to the overall application to better manage the cost of upgrading to future releases.
- Each agency may have a different level of need and unique business requirements therefore requiring different levels of support at different times of the year
- The majority of agencies will initially be new to the applications and the users new in their knowledge of the applications and require additional training and functional support
- The agencies need to play a strong and active role in the decisions made regarding the management of the finance, HR. payroll and budget applications
- To the extent possible, standardize business processes, systems, training and support.

7.2   Model Assumptions

The following organizational structure for post implementation is based on the best practice competency model and the following assumptions apply:

- Post implementation support objectives provided within this document are accepted and will be implemented by the Enterprise Support Model management
- Staffing is based on the implementation deployment schedule and each subsequent deployment builds upon the previous deployments' support phase
- Staffing is based on the application complexity, number of side systems and interfaces involved and the number of end users to be supported at the conclusion of each deployment, building to the Final State
- The Final State staffing model does not include support of the program completion implementations in year four and five
- Enterprise Application Management will work together to develop annual strategic plans for the management of the applications including ongoing maintenance, and release upgrades
- Roles contained within the Post Implementation Support Team are focused on application support only and NOT operational activities, those tasks will be performed by the Operations staff
- Resources assigned to the Post Implementation Support staff will have the appropriate training and experience to perform the functions defined within the roles and responsibility described by position
- Roles and responsibilities for each position are defined within this document
- Patches and fixes will be applied as delivered by vendor to maintain the software in current state
- Future software releases will be implemented in a reasonable timeframe to maintain vendor support
- Future upgrades may require additional staff to accomplish
- ARMS and MSA are retired
- All functional analysts and technical developers are well trained in the application and understand the county business environment.
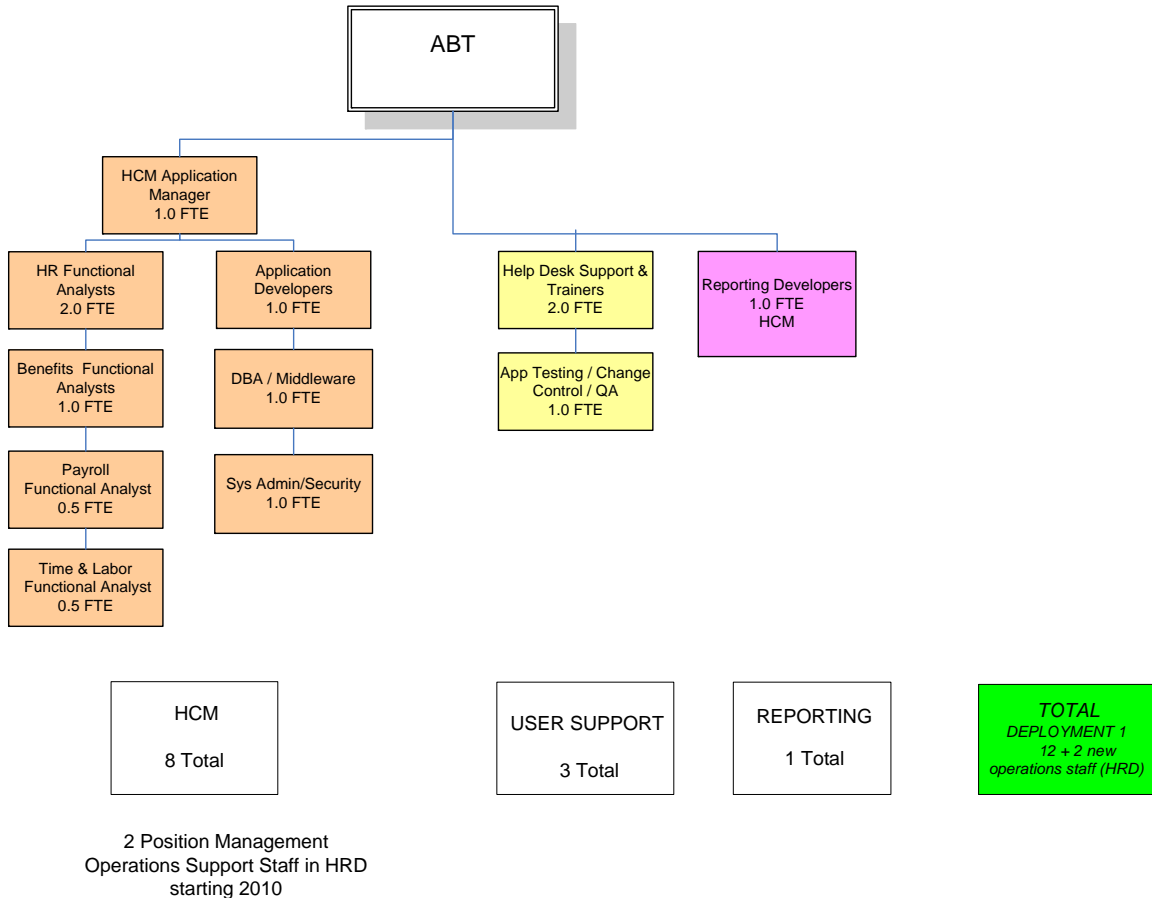
Base Applications include the following modules:

- PeopleSoft Human Capital Management (HCM)
    - Human Resources with Position Management
    - Benefits Administration
    - Payroll
    - Time and Labor
    - Leave Administration with Absence Management 'lite'

- Oracle E-Business Suite (EBS) Financials
    - General Ledger
    - Accounts Payable
    - Assets
    - Purchasing

- Accounts Receivable
- Order Management
- Project Costing
- Grants Management
- Cash Management
- Advanced Collections
- iExpenses
- iProcurement
- iSupplier
- Inventory
- Procurement Intelligence

Below is a series of organizational charts that depict the structure recommended for the Post Implementation Support Team, starting with the first deployment and ending with the Final State:

Post Implementation Support Staffing Deployment 1
Countywide HR/Benefits/Position Management + Biweekly time & labor and payroll

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                          ┌──────────────┐
                          │     ABT      │
                          └──────┬───────┘
        ┌────────────────────────┴────────────────────┐
┌───────┴────────┐                                     │
│ HCM Application │                                     │
│    Manager      │                                     │
│    1.0 FTE      │                                     │
└──┬──────────┬──┘                          ┌───────────┴───────────┐
┌──┴────────┐ ┌┴────────────┐      ┌─────────┴─────────┐  ┌──────────┴────────┐
│ HR Functional│ │ Application │    │ Help Desk Support │  │ Reporting Developers│
│   Analysts   │ │ Developers  │    │    & Trainers     │  │      1.0 FTE        │
│   2.0 FTE    │ │  1.0 FTE    │    │     2.0 FTE       │  │       HCM           │
└──────┬───────┘ └──────┬──────┘    └─────────┬─────────┘  └─────────────────────┘
┌──────┴───────┐ ┌──────┴──────┐    ┌─────────┴─────────┐
│  Benefits    │ │ DBA /       │    │ App Testing /     │
│  Functional  │ │ Middleware  │    │ Change Control/QA │
│  Analysts    │ │  1.0 FTE    │    │     1.0 FTE       │
│  1.0 FTE     │ └──────┬──────┘    └───────────────────┘
└──────┬───────┘ ┌──────┴──────┐
┌──────┴───────┐ │ Sys Admin/  │
│  Payroll     │ │ Security    │
│  Functional  │ │  1.0 FTE    │
│  Analyst     │ └─────────────┘
│  0.5 FTE     │
└──────┬───────┘
┌──────┴───────┐
│ Time & Labor │
│ Functional   │
│ Analyst      │
│  0.5 FTE     │
└──────────────┘
```

HCM	USER SUPPORT	REPORTING	TOTAL DEPLOYMENT 1
8 Total	3 Total	1 Total	12 + 2 new operations staff (HRD)

2 Position Management
Operations Support Staff in HRD
starting 2010

Post Implementation Support Staffing Deployment 2
Countywide EBS and Group 1 to Biweekly payroll

ERP Systems Director
1.0 FTE

HCM Application Manager
1.0 FTE

HR Functional Analysts
2.0 FTE

Benefits Functional Analysts
1.0 FTE

Payroll Functional Analyst
0.5 FTE

Time & Labor Functional Analyst
0.5 FTE

Application Developers
2.0 FTE

DBA / Middleware
1.0 FTE

Sys Admin/Security
1.0 FTE

Finance/Budget Application Manager
1.0 FTE

General Ledger & Assets Analysts
2.0 FTE

Purchasing/AP/INV Analysts
2.0 FTE

AR/OM Analyst
1.0 FTE

Project Costing Grant Accounting
2.0 FTE

Application Developers
3.0 FTE

DBA
1.0 FTE

Budget Functional Analyst
1.0 FTE

Budget Application Developer
1.0 FTE

Budget Sys Admin/DBA
1.0 FTE

User Support / Training Manager
1.0 FTE

Help Desk Support & Trainers
4.0 FTE

Training Development & Delivery
1.0 FTE

App Testing / Change Control / QA
1.0 FTE

Reporting Developers
3.0 FTE

HCM	FINANCE	BUDGET	USER SUPPORT	REPORTING
9 Total	12 Total	3 Total	7 Total	3 Total

TOTAL
DEPLOYMENT 2
34 total

Post Implementation Support Staffing Deployment 3
Group 2 to Biweekly payroll

```
                              ERP Systems Director
                                    1.0 FTE
```

HCM Application Manager 1.0 FTE
- HR Functional Analysts 2.0 FTE
  - Benefits Functional Analysts 1.0 FTE
  - Payroll Functional Analyst 1.0 FTE
  - Time & Labor Functional Analyst 1.0 FTE
- Application Developers 3.0 FTE
  - DBA / Middleware 1.0 FTE
  - Sys Admin/Security 1.0 FTE

Finance/Budget Application Manager 1.0 FTE
- General Ledger & Assets Analysts 2.0 FTE
  - Purchasing/AP/INV Analysts 2.0 FTE
  - AR/OM Analyst 1.0 FTE
  - Project Costing Grant Accounting 2.0 FTE
- Application Developers 3.0 FTE
  - DBA 1.0 FTE
- Budget Functional Analyst 1.0 FTE
  - Budget Application Developer 1.0 FTE
  - Budget Sys Admin/DBA 1.0 FTE

User Support / Training Manager 1.0 FTE
- Help Desk Support & Trainers 4.0 FTE
- Training Development & Delivery 1.0 FTE
- App Testing / Change Control / QA 1.0 FTE

Reporting Developers 4.0 FTE

HCM	FINANCE	BUDGET	USER SUPPORT	REPORTING
11 Total	12 Total	3 Total	7 Total	4 Total

TOTAL DEPLOYMENT 3 37

Post Implementation Support Staffing Deployment 4 – FINAL STATE
All employees moved to Biweekly payroll

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                              ERP Systems Director
                                   1.0 FTE
```

ERP Systems Director — 1.0 FTE

HCM Application Manager — 1.0 FTE
- HR Functional Analysts — 2.0 FTE
  - Benefits Functional Analysts — 1.0 FTE
  - Payroll Functional Analyst — 1.5 FTE
  - Time & Labor Functional Analyst — 1.5 FTE
- Application Developers — 3.0
  - DBA / Middleware — 1.0 FTE
  - Sys Admin/Security — 1.0 FTE (shared w/Finance)

Finance/Budget Application Manager — 1.0 FTE
- General Ledger & Assets Analysts — 2.0 FTE
  - Purchasing/AP/INV Analysts — 2.0 FTE
  - AR/OM Analyst — 1.0 FTE
  - Project Costing Grant Accounting — 2.0 FTE
- Application Developers — 3.0 FTE
  - DBA — 1.0 FTE
- Budget Functional Analyst — 1.0 FTE
  - Budget Application Developer — 1.0 FTE
  - Budget Sys Admin/DBA — 1.0 FTE

User Support / Training Manager — 1.0 FTE
- Help Desk Support & Trainers — 5.0 FTE
- Training Development & Delivery — 2.0 FTE
- App Testing / Change Control / QA — 1.0 FTE

Reporting Developers — 4.0 FTE HCM, Finance, Budget, Metrics Reporting

HCM	FINANCE	BUDGET	USER SUPPORT	REPORTING
12 Total	12 Total	3 Total	9 Total	4 Total

TOTAL DEPLOYMENT 41
+ 2 new operations staff (HRD)

7.3 Roles and Responsibilities

Below is a high level description of the roles and responsibilities of the Post Implementation Support Team:

Enterprise Application Support Roles	
Role	**Responsibilities**
Enterprise Systems Director	- Manages Enterprise Applications Support Team - Works with county leadership and departments to define overall application vision and strategy - Builds and communicates the governance process for the Post Implementation Support organization - Develops organization's policies and procedures - Recruits and manages Enterprise Applications Support Team - Works with application managers to develop overall enterprise application management plans - Establishes the application development standards
Application Manager	- Manages all aspects of management of the application software including maintenance and development and functional and technical team user support - Manages the application change request and problem resolution process - Works with team to develop application development plans including minor upgrades, patches and fixes, problem resolution, change requests and enhancements - Develops training plans to ensure ongoing development of application team - Works collaboratively with Org Change/Training Team to develop communication and training to support end user readiness

Enterprise Application Support Roles	
Role	**Responsibilities**
Functional Analyst	- Provides options for issue resolution and identifies business process improvement opportunities - Provides functional application and business expertise to support end users - Manages application service requests (problem resolution, new functionality, new structures) - Delivers training to end users in support of upgrades, enhancements and refresher courses - Recommends work-arounds and process improvements or modifications to meet business requirements - Assists with setting up system tables - Assists with testing to ensure the implemented system meets requirements - Assists with data mapping and validation for conversion activities - Documents functional requirements to support application service requests - Provides Help Desk Level 2 support as needed - Works collaboratively with Org Change/Training Team to develop communication and training to support end user readiness

Enterprise Application Support Roles	
Role	**Responsibilities**
Application Developer	- Designs, develops and tests application customizations to meet business requirements using established development standards - Analyzes system problems to determine cause and make required software changes to resolve problem - Understands underlying database structures to apply customizations using vendor recommended approach to customizations - Analyzes, reviews, and alters program to increase operating efficiency or adapt to new requirements - Designs conversion programs and assists client with data mapping - Supports interface/report developers with interface and report design - Designs, develops, tests and modifies reports as required to support customization - Designs and develops modifications to the system, based on business requirements
Report Development Group HCM, Finance, Budget & Metrics reporting	- Designs, develops and tests reports to meet business requirements using established development standards - Assists users with report development - Provides ongoing report development training - Builds report development training program - Assists development team with report development as required
System Admin/ Security	- Manages security administration for end users - Develops security profiles as necessary - Ensures proper security approvals and process used - Tests all security enhancements, patches, and fixes to the system - Creates adequate system documentation

Enterprise Application Support Roles	
Role	**Responsibilities**
User Support / Training Manager	▪ Manages Help Desk support, Communication and Training developers ▪ Develops an integrated change/risk management strategy and training program including refresher courses and new employee training ▪ Develops Communication Plan to support business process and application system changes ▪ Manages program communications across all stakeholder groups ▪ Ensures end users are prepared to adopt new ways of work ▪ Builds a repeatable change management process ▪ Develops role-based training program and documentation to support ongoing and refresher courses
DBA	▪ Installs new versions of DBMS software, application software, and other software related to DBMS administration ▪ Works closely with the system administrator to perform software installations, and to configure hardware and software ▪ Analyzes the data stored in the database and to make recommendations relating to performance and efficiency of that data storage ▪ Performs data modeling and ▪ Administration of existing enterprise databases and the analysis, design, and creation of new databases ▪ Data modeling, database optimization, understanding and implementation of schemas, and the ability to interpret and write complex SQL queries ▪ Proactively monitor systems for optimum performance and capacity constraints ▪ Establishes standards and best practices for SQL

Enterprise Application Support Roles	
Role	**Responsibilities**
Help Desk Support	▪ Receives telephone calls from users having problems using software and or inquiring how to use specific software, ▪ Investigates and resolves computer software and problems of users: ▪ Talks to user to learn procedures followed and source of error ▪ Answers questions, applying knowledge of computer software and procedures ▪ Asks user with problem to use telephone and participate in diagnostic procedures or by listening to and following instructions ▪ Talks with coworkers to research problem and find solution ▪ Talks to programmers to explain software errors or to recommend changes to programs ▪ May also assist in unit and user testing software ▪ Assists with delivering training
Training Development and Delivery	▪ Develops and delivers training plans and training materials to support new functionality or customizations ▪ Develops training communication pieces to support Web site updates, presentations, newsletters, bulletins, etc. ▪ Provides technical development of the online learning media (UPK). ▪ Delivers training courses to end users for refresher courses, new functionality training ▪ Develops supporting user documentation as required

Enterprise Application Support Roles	
Role	**Responsibilities**
Application Testing, Change Control and QA	▪ Ensures business requirements are current ▪ Coordinates testing through all cycles for new functionality and updates/fixes and upgrades ▪ Monitors system change requests and assists with prioritization ▪ Manages the Quality Assurance of new functionality and system enhancements ▪ Assists with documentation of system ▪ Collaborates with technical staff to monitor progress of requests ▪ Coordinates communication of changes to ensure the correct information is distributed

Enterprise Application Support – Department Roles	
Role	**Responsibilities**
Department Liaison	• Provides a point of contact to their department • Understands department business requirements • Provides feedback to the Post Implementation Support Team regarding service level quality • Has capability of assigning resources to accomplish assigned tasks in support of department assignments
Business Process Owner	• Has an in-depth understanding of the business processes, their value to the organization and how information technology is used to enable them • Has an ability to analyze the impact of change across department lines • Works with other departments to define countywide standard business processes • Identifies business process improvements on an ongoing basis • Assists in developing the applications to support the application priorities

Enterprise Application Support – Department Roles	
Role	**Responsibilities**
Department Power User	• First line of support in the department, answering navigational and basic system questions, escalating to the Help Desk when applicable • Provides functional business process expertise • Provides expert knowledge of their department's business including policies and procedures • Report/document user issues that need to be addressed in training and/or updated Frequently Asked Questions (FAQs) • Assists with troubleshooting application-related problems • Supports configurators and helps translate functional business requirements into technical requirements/specifications • Assists with performing unit and integration tests • Trains new end users or coordinates the training with the support team • Contributes to the ongoing process development

7.4 Governance Overview

Currently, future system development for Oracle (IBIS) financials is based on change requests that are submitted and prioritized by the following:

- IBIS Technical Team meets weekly to review status of projects and prioritize the current change requests. A functional representative attends these weekly meetings.
- IBIS financial functional users meet to prioritize their change requests with a technical team representative. Through this process, each representative and the technical team gains a good understanding of the change requests and why specific priorities have been assigned.

The Change Management Team meets monthly with representatives from MSA and PeopleSoft. They review the change requests from each application area, make group decisions about the change requests and reprioritize them based on the entire county's business needs. The change requests are addressed based on their final priority assigned by the Change Management Team and available resources.

These current processes form the basis for ongoing governance. Representatives of the business owners, business power users, technical staff and support staff should be part of this Change Management Team to ensure all interests have input and feedback. . Business process owners will continue their

responsibility to develop policy & procedures as delineated in KCC 2.16.035. Change requests will need to be tracked, discusses, prioritized and closed. A standing meeting will be scheduled to review requests, discuss resources and priorities and gain a better understanding of the big picture – both business process and the system perspective. A Change Management Advisory Board should be used to determine priorities of requests that are unable to be determined at the team level.

8.0   Problem Resolution and Service Level Support

Application support is provided at a variety of levels. When questions or problems arise, the first line of support should be focused on the department's Power User. Once the Power User has exhausted their ability to help the end user, then the Help Desk should be called to report the problem or question. The Help Desk Support will assess the situation and determine if they can resolve the issue. If necessary, the problem or question will be forwarded to the next level of support for resolution. At each step of the process, the problem or question is being tracked and steps taken are being document and forwarded on to the next level of support.

8.1   Service Level Support Model

The diagram below demonstrates at a very high level the support model that is recommended to support system problem resolution as well as end user support with system questions. This model focuses on a single point of contact for all users, after determining that the department/division power user is unable to answer the question. The benefit of this approach is that the Help Desk can track all questions and system problems that are reported to the Post Implementation Support Organization. This reporting will allow the organization to capture metrics on specific types of calls and system problems and report these metrics to management and others.

```
General Business Users:
HR, PAY, BEN, GL, AP, AR, PC, Budget etc.
Power Users

                                              Governance
                                              Process

Level 1        Functional Help Desk
               How to Questions / System Problems / Password Resets

                                              Change Requests

Level 2        Functional Business Analyst
               Configuration / Security / Training        Authorized,
               Tech Services / Reporting                  Prioritized Change
                                                          Requests

Level 3        Technical Analyst
               Configuration / Security / Training
               Tech Services / Reporting
```

8.1.1 Level 1- Functional Help Desk Support

Level 1 – Function Help Desk support will provide the following:

- Answer calls or messages received from users via a phone number to be established or the Post Implementation Support email box, also to be established, from the hours of 6:00 a.m. to 6:00 p.m., Monday through Friday
- Special extended hours of coverage may be provided for critical periods, such as the month end closing, Open Enrollment, etc.
- Enter and track tickets for calls in a system to be determined
- Provide on-call escalation services for critical problem resolution after regular working hours
- Answer "how to" questions, reset passwords, and be able to explain business processes associated with implemented application functionality.
- Work with the Level 2 or Applications Production Support Senior Analyst, to resolve interface errors
- Escalate problems they cannot solve to the Level 2 Analysts

- Escalate technical problems to Technical Support or Technical Services, and re-route problems to other Help Desks as needed
- Monitor the phone system and Issue Database for recurring problems to identify areas requiring additional training or changes to business processes.

8.1.2 Level 2 - Functional Analysts

Level 2 – Functional Analyst will provide the following:

- Respond to Issue Database tickets entered by the providers of Level 1 support
- Escalate tickets to Level 3 Senior Technical Analyst or re-route as required
- Perform configuration changes required as a result of system problem or changes in process or procedures
- Send messages to application vendor if required
- Participate in testing for system problem fix, support packs, upgrades, or new functionality
- Provide on-call escalation services for critical problem resolution after regular working hours
- Create specifications for Development Requests
- Participate with the Governance Board to evaluate change requests for existing functionality or requests for new functionality
- Work with Integration Manager on interface error correction
- Meet regularly with Business Process Owners to evaluate and/or suggest changes in processes that will enhance the use of Applications
- Attend training for new functionality being implemented
- Attend application vendor user group meetings and other user group events to network with other similar companies and keep up on new developments around the use of vendor applications
- Work with Security Administrators to clarify, process and test any security maintenance

8.1.3 Level 3 - Technical Analysts

Level 3 –Technical Analyst will provide the following:

- Respond to Issue Database tickets entered by the providers of level 1 support
- Send messages to application vendor if required
- Make necessary application changes as required, schedule and approve update migration to resolve system problem
- Participate in testing for system problem fix, support packs, upgrades, or new functionality

- Provide on-call escalation services for critical problem resolution after regular working hours
- Create specifications for Development Requests
- Participate with the Governance Board to evaluate change requests for existing functionality or requests for new functionality
- Meet regularly with Business Process Owners to evaluate and/or suggest changes in processes that will enhance the use of Applications
- Attend training for new functionality being implemented
- Attend application vendor user group meetings and other user group events to network with other similar companies and keep up on new developments around the use of vendor applications
- Work with Security Administrators to clarify, process and test any security maintenance

9.0   Post Implementation Support Performance Reporting

During the Transition Support Phase of the Program, the team will define critical metrics that will be reported to management on a regular basis. These reports will provide the basis for ongoing metrics to be used by Post Implementation Support staff to help the organization assess the volume and type of questions and problems addressed on a monthly basis.

9.1.1   Tools and Technologies Required

CIBER is recommending the use of the following tools:

9.1.2   Oracle Maintenance Wizard

Maintenance Wizard will guide the county through the Applications upgrade and code line maintenance process. It will also help reduce upgrade tasks by dynamically filtering the necessary steps based on criteria it obtains from the Applications environment. The result is a set of step-by-step instructions of exactly what the county needs to do to complete the upgrade, including any critical patches that the system may require. It can also automatically execute many of the tasks, so as to reduce the possibility of errors or accidental omission of vital tasks. Maintenance Wizard provides log files and timestamps for each execution so the county can determine who did what task, when the task was performed, and what the results were.

Maintenance Wizard is not just for the Upgrade process. It includes multiple products - Applications Database Upgrade Assistant: 8i, 9i to 10g [version 2.x], Maintenance Pack Assistant: 11i to 11.5.10 [version 1.x], and Upgrade Assistant: 10.7, 11.0.3 to 11.5.10 [version 1.x] it can be used for Patch application as well. The product will do the following:

- Automate analysis of patch levels and dynamic reconfiguration of required steps
- Automate determination of steps based on products installed, localizations, globalizations, languages, operating system, product versions, and more
- Enable creation and maintenance of customized categories, product families, tasks, and steps to accommodate specific project requirements
- Support multiple upgrade participants (users), each with its own responsibilities and capabilities
- Support use of multiple projects simultaneously such as Development Maintenance, Production Upgrade, and Test Patching
- Enable maintenance of your application and database services through provided utilities
- Generate reports that show progress, timing statistics, and responsibility assignments.

9.1.3 PeopleSoft Change Assistant

Similar to the Maintenance Wizard, the PeopleSoft Change Assistant helps automate the process of selecting and installing software updates, from the smallest patch to a complete system upgrade. The tool is designed to automate the process of installing software patches, updates, and upgrades. It knows what version of PeopleSoft software the county is using, the hardware profile, and the database version, and it uses this information to tell which patches to apply and what prerequisites are needed. PeopleSoft Change Assistant gets updates—including regulatory changes—from the PeopleSoft Customer Connection Web site, by using Web services. Once it has downloaded changes, it provides a wizard-style installation approach.

9.1.4 Conventional Tools

CIBER also recommends the use of the current tools that are used at King County. This is the same toolset recommended for use during the project:

- PSSD's RFW and/or OIRM's HEAT applications that currently exist at King County.
- VSS application (need to consider cost of adding licenses)
- Remedy/BMC, Computer Associates and other software vendors develop standard helpdesk type issue tracking tools that may be utilized in tracking test issues, but may be cumbersome in coordinating the use between the regular helpdesk and ABT Program Team.
- Shareware software, like Bugzilla, can be downloaded for the specific use of issue/defect tracking under the guidelines of the shareware with no

vendor support. Further evaluation is required to determine suitability and costs.

- SharePoint software can be easily adapted to develop a repository for test requirements and scripts, scheduling test activities, capturing/tracking fundamental issues/defects and integrating with common business applications and email systems.

10.0 Summary

CIBER recommends that the Post Implementation Support Staff consist of the number of people presented, 41, with the appropriate skill set to maintain the HCM, financial and budget systems. The focus of this team will be on application support, not operations. This team will work collaboratively with the operations staff throughout the county to ensure the best use of systems and resources to meet the needs of King County employees.

Appendix A

This document offers a description of Garter's Best Practice Competence Center recommended approach and defined roles and responsibilities to manage a production environment. In addition, provided is an overview of Accenture's experience with their internal enterprise and the benefits they achieved. This guidance has been used to develop the recommended future Post Implementation Support model.

The following best practice model was developed using data from Gartner Leader's Toolkit, Business Application Competence Center Roles and Responsibilities Best Practices, April 2007.

"Post implementation support consists of two types of activities. **Sustainability** activities are those tasks necessary to keep the system running, "or run the business support." **Enhancement** activities are typically projects that change the system in some way or "change the business support." Best in class companies form post-implementation business application support organizations, or competency centers, to address both types of activities. Just as business applications spans the divisions and business functions of the organization, business application support must be addressed in a number of organization levels or domains:

- Enterprise Domain – Defines how program and processes are managed
- Enablement Domain – Defines how end users are prepared and supported
- Application Domain – Defines how applications are configured and integrated
- Support Domain – Defines how integrated applications are supported"

Business Application Competence Center Roles (Gartner, April 2007)

Enterprise Domain	Roles and Responsibilities		
	Enterprise Program Management	**Process Owners/Business Process Experts**	**End Users**
Defines how program and processes are managed	▪ Strategy, budget and prioritization for application management ▪ Manages enterprise applications portfolios, standards and measures ▪ Manages vendor relations	▪ Address implementation and process issues across lines of business ▪ Drive continual business process improvements targeting KPI (benefits) improvements ▪ Drive application agenda ▪ Monitor/drive user competency through help desk and continuous education	▪ Fulfill business processes ▪ Change the way they work to support improved processes ▪ Provide feedback to process owners ▪ Tap power users for support and first level problem resolution ▪ Receive continuous training from the user support
Enablement Domain	**Roles and Responsibilities**		
	Power Users	**Organizational Change Management**	**Continuous Education**
Defines how users are prepared and supported	▪ Serves as "go to" person to answer system functionality and business process questions ▪ Troubleshoots application-related problems and coaches colleagues on using the system ▪ Supports configurators and helps to translate functional business requirements into technical requirements/specifications ▪ Performs unit and integration tests ▪ Trains new end users ▪ Contributes to the ongoing process development	▪ Secures sponsorship across all stakeholder groups ▪ Develops an integrated change/risk management strategy and training program ▪ Ensures end users are prepared to adopt new ways of work ▪ Masters program communications across all stakeholder groups and externally ▪ Identifies and develops strategies for addressing key process and people risks	▪ Develops integrated, role-based training specific to your configuration ▪ Develops training channels ▪ Develops job aids to support new business application roles ▪ Delivers initial training ▪ Develops and delivers continuous training post going live

	Reports system problems/requests for enhancements to configurators	Builds a repeatable change management process	

Application Domain	Roles and Responsibilities		
	Software Configuration and Support	**Custom Applications**	**Integration Management**

Defines how applications are configured and integrated	▪ Effect non-customized changes to application software based on business process redesign
	▪ Provide functional specification to the custom application engineers
	▪ Integration/interfacing functional design
	▪ User acceptance testing
	▪ Integration testing
	▪ Hand over to production control
		▪ Fulfill functional design provided by the software configuration group:
		  o Customization of vendor software and/or
		  o External custom code
		▪ Assure vendor/software standards for all customizations
			▪ All interfaces
			▪ Integration testing
			▪ Stress testing
			▪ Production control

Support Domain	Roles and Responsibilities		
	Production/Change Management		
Defines how integrated applications are supported	▪ User authorities/security ▪ User/functional monitoring ▪ Web and portal support ▪ Error handling/technical help desk (via vendor) ▪ Production control ▪ Change management		

Gartner Leaders Toolkit, Business Application Competency Center Roles and Responsibilities Best Practices, April 2007

Appendix B

## *Competency Center Best Practice Support Models*

Accenture's Experience

Accenture implemented SAP to support human resources, finance and sales using a "single global instance on a uniform, cross-functional platform." They strategically decided to implement a competency based production "support capability that could rapidly build employee proficiency and drive collaboration across the diverse business functions."

Three components were included in the plan:

- The first was a robust methodology that ensured that the procedures, tools and people were ready to support users as soon as they went live for the first time.
- Second was a strong governance process to balance the challenging business needs between the three different groups which consisted of leaders from Accenture's' IT organization, Finance, Human Resources, Sales, Business Operations and Geographic Services. Additional representatives for IT and OSE (Operations Support for the Enterprise) focused on measuring effectiveness and benefits achieved.
- The final component was a comprehensive scalable support structure which included a three tier approach:
  - o Tier 1 - Super users that provide authoritative answers to their peers and the Help Desk which provides answers to technical questions day or night
  - o Tier2 – Functional analysts from their business teams work with IT to answer escalated questions
  - o Tier 3 – Collaboration between the IT organization and business teams answers the more difficult system issues. Also included in this group are a robust Change Management Team and OSE's Learning & Knowledge Management Team that improves and delivers ongoing training and communication.

Below is a graphic that demonstrates visually the support model and the three tier approach to providing support to the end users:

Figure 1: Accenture's Integrated, ERP Support Model
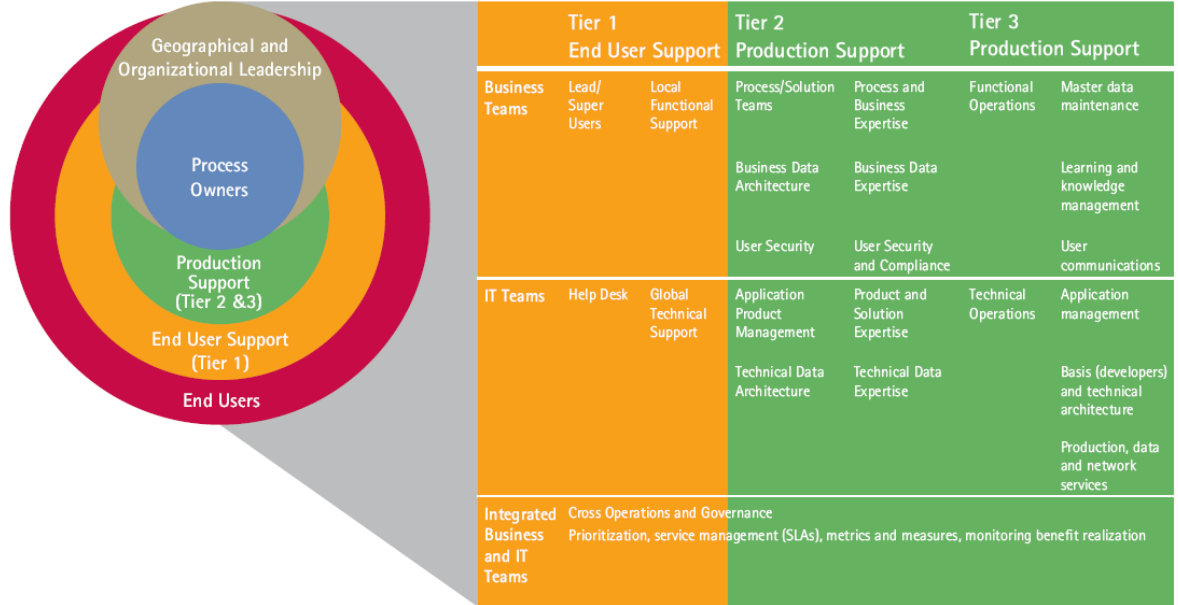
The details of Accenture's model are significant because they were able to add new capability and increase the number of users by 270% over a two year period without adding many resources to their production support team; as the graph below demonstrates:

Figure 2: User Growth vs Support Team Growth
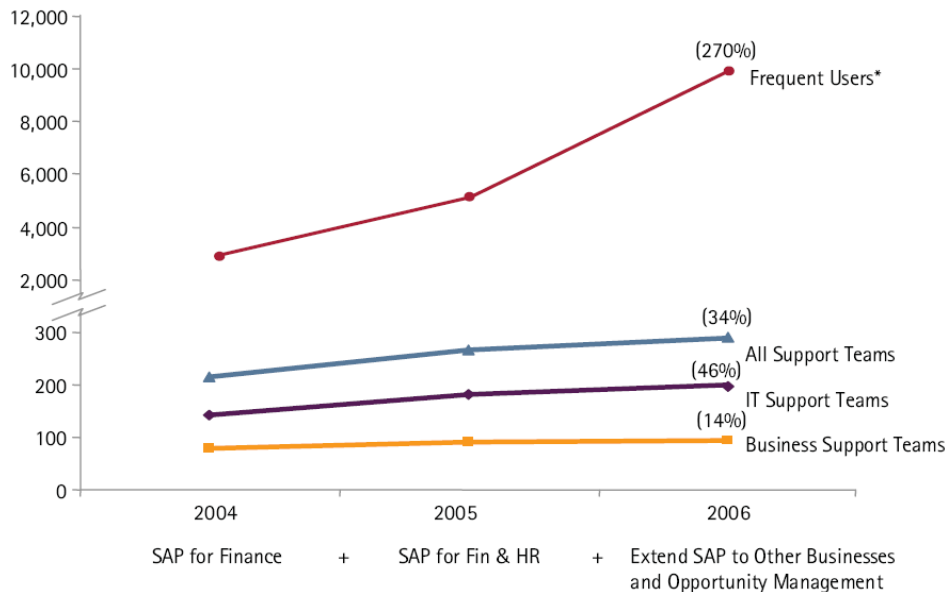
*Frequent users of SAP routinely access the system to perform their ongoing job responsibilities

Benefits achieved from this model include:
- Reduced the post production stabilization period, which translates into more rapid benefits achieved
- Created operation efficiency by reducing the slope of the learning curve for users and minimizing the productivity that is typically experienced
- Reduced internal costs by rationalizing the number of support teams, structures and tools and by leveraging common structures and toolsets across the functions
- Enabled the company to prioritize and deliver enhancements, which optimize benefits for and across multiple functions
- Established common scalable support processes that facilitate the quick integration of support for new capabilities, users and acquisitions.

Accenture's Own ERP Production Support Model, August 2007.

CIBER Client Experience

As part of this effort, CIBER interviewed one of their past clients with an established enterprise support model similar to the competency center recommended. This client has been using this model for more than ten years and has been able to implement a number of upgrades and capabilities with minimal help from consultants. The team has remained relatively stable and consistent in size since the end of their stabilization period. The organization has the following characteristics as it relates to the support model:

- Industry - Manufacturing
- PeopleSoft HCM 8.9 (originally 7.0) with HR, Payroll, Benefits Administration and eLabor (ADP time and labor)
- PeopleSoft Financials 8.8 (originally 5.1) with General Ledger, Accounts Payable, Accounts Receivable, Billing, Purchasing, eProcurement, Inventory, Treasury, Projects, and Assets
- In production for 10 years and applied HCM 8.0 and 8.9 & Finance 7.5 and 8.8 upgrades. 9.0 upgrade currently in process
- Four different lines of business each with different business needs
- Originally approximately 20,000 employees, now approximately 10,000 employees due to company split
- Approximately 300- 400 HCM users, 300-400 Finance users and 1200 – 1500 Purchasing and Inventory users

The team is co-located and the team composition has remained fairly consistent including the following resources:

HCM Team	Financials Team
▪ 10 Functional Analysts	▪ 12 Functional Analysts (4 support purchasing and inventory)
▪ 5 Technical developers including DBA and Sys Administrator	▪ 6 Technical developers, DBA and System Administrator

During the initial implementation and stabilization period, additional resources were needed to assist with the transition to the new environment. These resources diminished over time through normal attrition to the current staffing provided above.

While the number of employees has diminished over time, the organization was able to manage their own upgrades and remain current while supporting a very complex business model that puts great demand on the functionality offered by each application. Other organizations have not been as successful at providing the level of service provided by this model. The system is managed by the IT department and the Enterprise Application Manager said "IT is the enabler, but business owns the applications. It is important to remember that without the business need the system would not exist." This client offered to answer additional questions should the county have an interest in additional information. As the county develops the final support model, CIBER recommends that the county surveys other public sector clients who have a competency center model to capture their lessons learned.