

**SCEIS – An Analysis of an Unknown Moving Target:**

*As it Relates to*

*The Department of Health and Environmental Control – AP Processes*

**Mary B. Long**

**SC Department of Health and Environmental Control**

**March 17, 2009**

With a vision to help manage and maintain its core finance, procurement, human resources and payroll functions more efficiently and effectively, the State of South Carolina began researching a possible move to a single information system. Research showed that by moving towards this single system, the State would greatly improve processes and efficiencies, as well as save on costs, across the board. Based on this research, in 2005, the SC Legislature mandated that all State Agencies would move to a single enterprise system. The SC Enterprise Information System (SCEIS), a SAP product to be developed and modified specifically for South Carolina, was selected as the State's new system. The mandate is outlined in Act 151 of 2005.

This plan to move towards a new information system was adopted in hopes of ultimately streamlining and standardizing the business processes of virtually all state agencies into a single system, based on SAP software. The functional scope of the SCEIS initiative involves the replacement of many of the core business systems found throughout South Carolina's state government. Applications to be replaced by SCEIS include financial, procurement (material management), budgeting, human resources/payroll, and customer service functions.

The principal objectives of this strategy are to reduce the State's administrative costs; improve the accuracy, timeliness and security of financial transactions and information; and improve customer service through easy access

to public information and service. The SCEIS strategy also includes the objective of reducing the State's reliance on paper forms and documents by integrating document imaging software and services into the SCEIS application, improving data accuracy, and eliminating unnecessary processes and duplicate data.

With the mandate set, the Oversight Committee for SCEIS developed an implementation schedule for the State. This implementation schedule has been modified several times, however, the original completion date has held at July 2010. The implementation plan encompasses two major module rollouts: 1) Procurement and Financials and 2) Human Resources and Payroll. These two major modules are being rolled out in 4 separate phases. As of November 2008, 13 agencies have gone live with Module 1 and are awaiting implementation of the HR/Payroll module to begin rollout in October 2009. Approximately 30 additional agencies will go live with Module 1 in November 2009, with the last 4 agencies completing the initial implementation in May 2010.

Note: In March 2009, DOT petitioned the SCEIS Oversight Committee and has been approved to opt out of the initial implementation plan (phase 4). They will interface with SCEIS until the gaps associated with this Agency have been satisfied.

### **SCEIS as it Effects DHEC**

The Department of Health and Environmental Control is scheduled to go live on May 3, 2010. DHEC will be part of the 4<sup>th</sup> and final phase of the first

module implementation rollout of the statewide system. The 2<sup>nd</sup> module, HR/Payroll, is scheduled to be implemented 3 months later in August 2010. In preparation of the implementation, DHEC has identified Agency Leads and Subject Area Experts to work with the SCEIS Team. It is the responsibility of these individuals to attend all meetings/training related to their areas of expertise. The goal of these meetings is to identify any gaps that may exist between what exists in the SCEIS/SAP Application today versus what is needed to make it work for the Agency prior to going live. To date, approximately 70 gaps will need to be addressed prior to implementation of the phase 3 agencies with a remaining 69 gaps to be addressed before the phase 4 agencies are implemented. These gaps are being addressed one-by-one by the SCEIS Oversight Committee to determine whether they are business practice gaps or agency practice gaps. All agency practice gaps will be cross-walked over to business practices within SCEIS, eliminated, or a work-around will be developed to accommodate the need.

Implementation of this new accounting system at DHEC will affect the Agency on many levels.

- The legacy system, AIMS, will be replaced by SCEIS.
- DHEC currently has approximately 500 users in AIMS at different levels of authority. Training will need to be provided to these 500 users.

- Additional equipment needs based on the functionality of SCEIS will be needed. (i.e. need for scanners, dual monitors to be able to view and enter documents simultaneously, etc.)
- All subsystems/feeder systems will need to be interfaced with SCEIS. At present, DHEC has over one dozen interfaces into AIMS that will need to be addressed.
- The overall policy and procedures used in AIMS will remain the same, however, workflow will need to be modified to accommodate the new system requirements.
- Staffing requirements will need to be addressed with the creation and elimination of positions/job responsibilities.

The overall cost of the SCEIS project has been proportionally allocated to all agencies to implement the system. The initial implementation cost applied to DHEC for program development is \$4,609,490.00.

Included in this cost will be:

- SAP licenses
- Central licenses (including Citrix licenses)
- Imaging software (one per agency)
- Scanning-station computers (one per agency)
- Scanner (one per agency)
- End-user training courses and training materials
- Help Desk support

Not included in this cost will be:

- Any necessary upgrades to existing agency hardware and connectivity
- Basic computer-literacy training for end-users
- Additional Scanners
- Additional Workstation computers
- Incidental costs, such as employees' travel expenses for training
- Additional software or equipment for non-SCEIS uses of scanners/other equipment.

Costs incurred to date are currently being tracked by DHEC, however, due to the many "unknowns" associated with SCEIS at this point in time, a total cost to implement remains undeterminable at this time.

### **SCEIS as it Effects the Bureau of Financial Management –**

#### **Accounts Payable Division:**

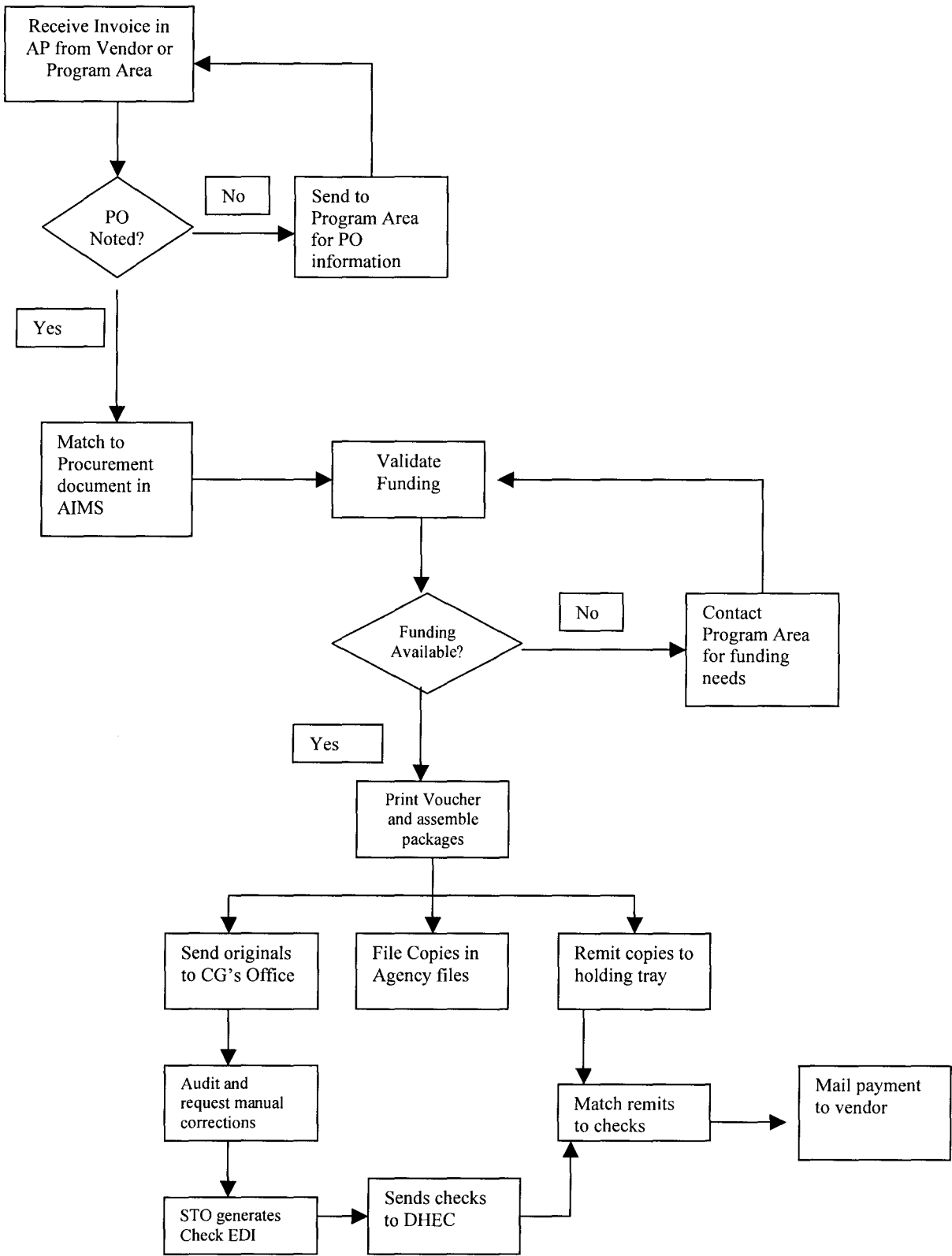
The Accounts Payable Division is currently staffed by 6 full time positions and one part time position. The positions are:

- Division Director
- 2.5 positions - Fiscal Analyst II - process invoices into AIMS
- .5 positions- Fiscal Analyst II – prepare vouchers for C.G. and Agency files
- 1 position – Fiscal Analyst II – Vendor Table Maintenance – AIMS, FMS, SCEIS
- 1 position – Fiscal Analyst II – Use Tax Audit
- .5 position – Fiscal Analyst I – process invoices into AIMS
- NOTE: AP currently has 2 vacancies due FY09 budget cuts both of which are Fiscal Analyst I positions.

The current (basic) workflow is outlined in flowchart #1 – AIMS Basic Workflow:

AP Division.

### Flowchart #1 – AIMS Basic Workflow: AP Division



The implementation of SCEIS will create a need to readdress the basic workflow for the Accounts Payable Division as well as staffing needs. DHEC currently has a decentralized paper workflow with the Program Areas in Central Office and the 8 Regions processing their procurement documents prior to entry into the AP module of AIMS. SCEIS will introduce scanning of all invoices and electronic transmission of these documents to the CG and file vs. paper workflow. Due to scanning requirements, DHEC will need to first need to determine whether the scanning of invoices will be handled in the existing decentralized workflow or if scanning will create the need to change to a centralized workflow by having AP perform all scanning:

**Basic Equipment Needs to be considered:**

- Scanners that are compatible with the SCEIS software range in cost from \$400 - \$80,000. The scanner of choice for the typical user is \$1,200 which includes a 3 year full replacement warranty. The life expectancy of this scanner is 3 years.
- Scanner licenses to enable interfacing with the SCEIS program are \$800 for each scanner. It is not known at this time whether this is a one time license or if it is renewal after a period of time.
- Dual monitor setups: Employees requiring the need to see the invoice image and be able to enter data into a system from this scanned image will require a dual monitor system. Monitors are approximately \$200 each.
- Video cards to run a dual monitor set up are approximately \$100.



- Additional USB lines to run a dual monitor set up are approximated \$20 per set up.

**Basic Staffing Needs to be considered:**

- Staffing needs in regards to scanning of invoices
- Elimination of AIMS and FMS Vendor Tables Maintenance needs
- Elimination of need for a full Use Tax Audit position
- Elimination of Voucher Desk needs.

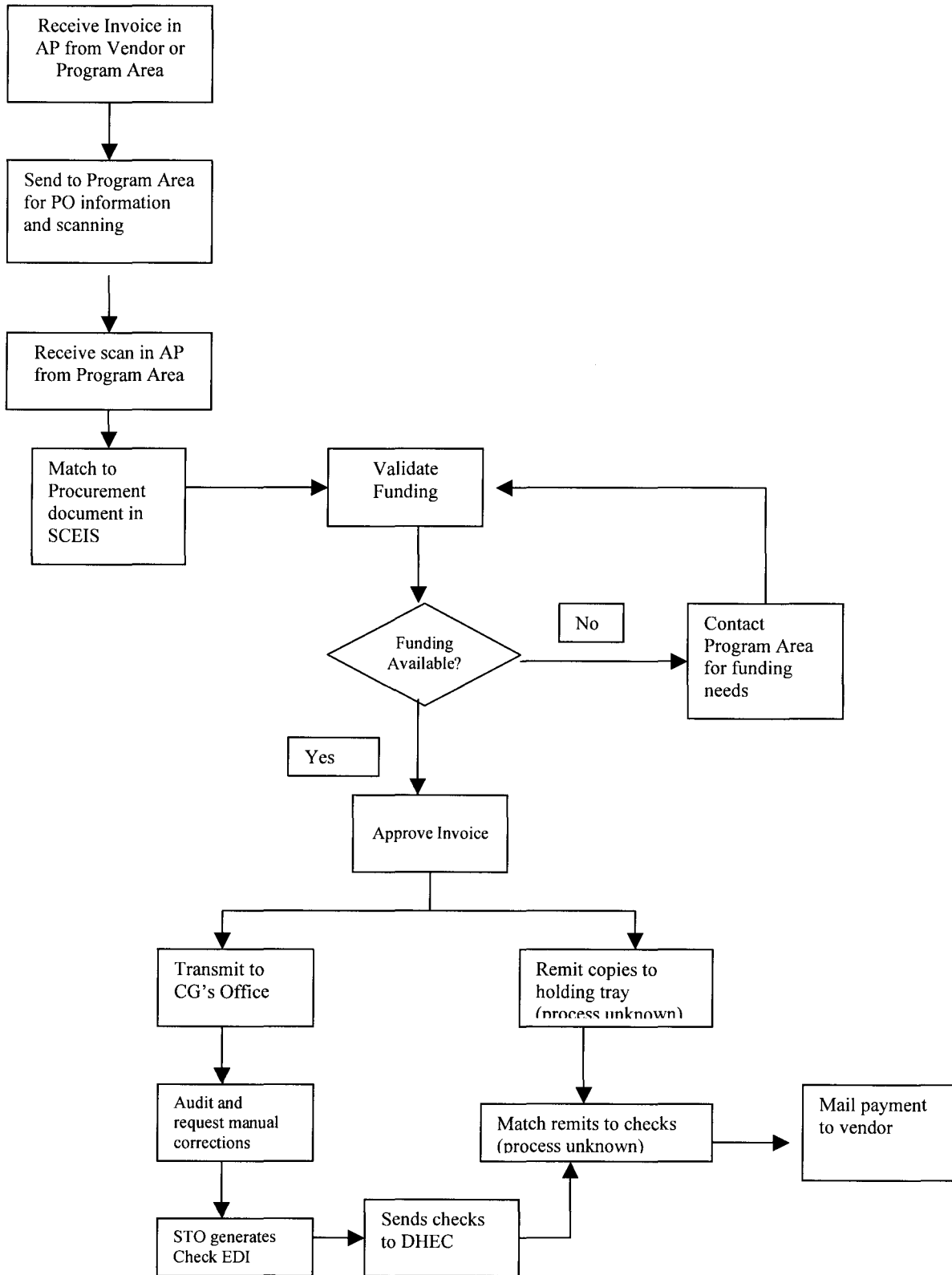
**Decentralized Analysis:**

Duplication of DHEC's current decentralized approach to workflow is outlined in Flowchart #2 – SCEIS Basic Workflow: AP Division – Decentralized. In this workflow, all invoices are sent to the program area for scanning and PO information prior to entry into SCEIS by the AP Division. The manner in which remittance advices are to be handled has not been addressed by the SCEIS Team and is currently on the GAP Analysis listing for implementation.

***Identified Additional Costs:***

- Decentralized scanning will require purchasing approximately 36 scanners and licenses @ a cost of approximate \$82,000.
- Approximately 40 dual monitor setups will be needed in the Bureau of Financial Management for processing @ a cost of \$12,800.

**Flowchart #2 – SCEIS Basic Workflow: AP Division - Decentralized**



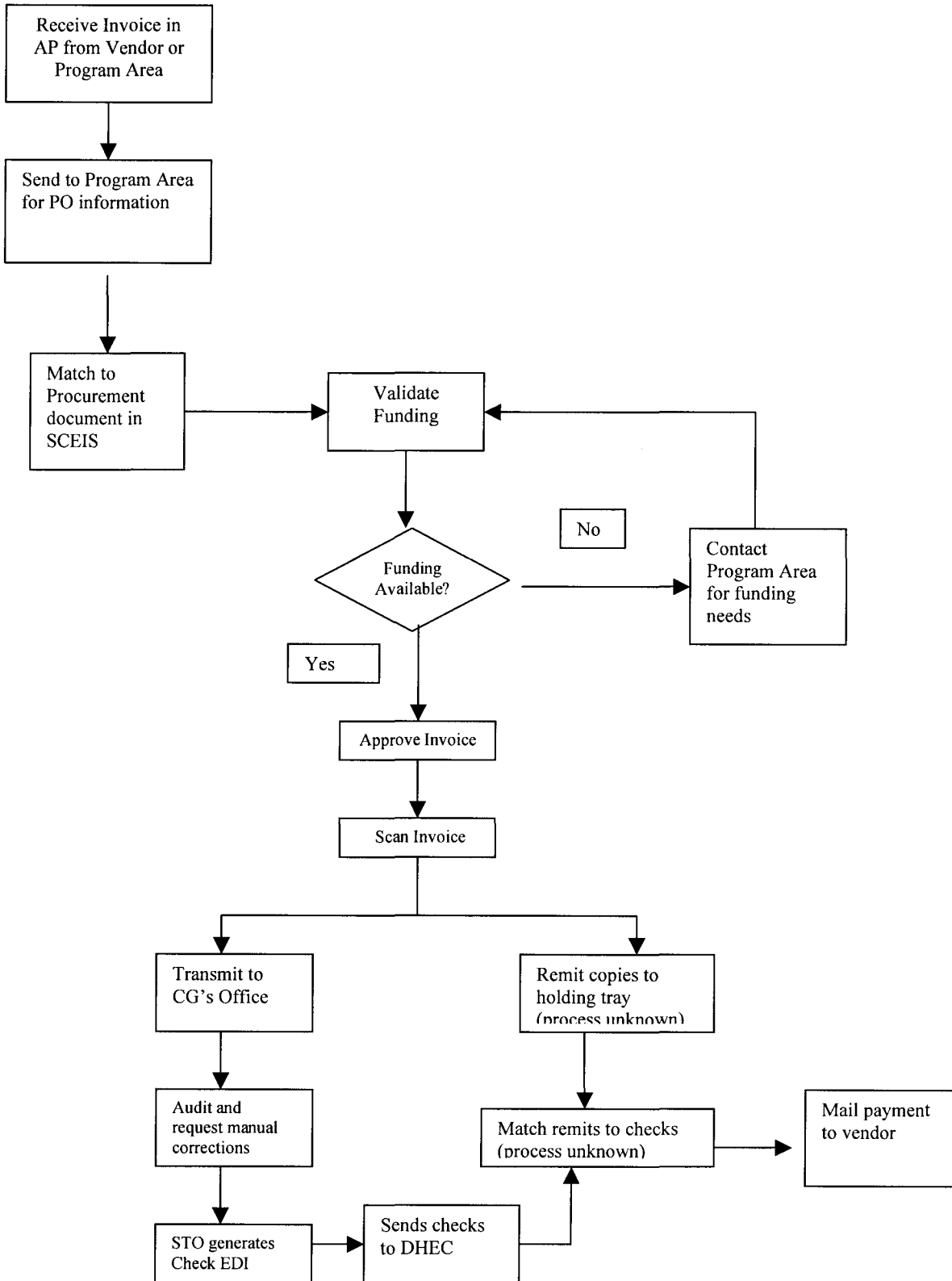
**Centralized Analysis #1 – All AP Clerks Setup to Scan Work as Processed:**

Modifying DHEC's current decentralized approach to workflow to a centralized workflow can be implemented with 2 different approaches. One approach is to have each AP keyer process invoices in SCEIS using the paper copy of the invoice. Once processed, each keyer will scan the document into SCEIS thereby eliminating the need for a dual monitor setup or additional personnel being hired specifically for scanning and mail out. This is outlined in Flowchart #3 – SCEIS Basic Workflow: AP Division – Centralized - All. Once again, the manner in which remittance advices are to be handled has not been addressed by the SCEIS Team and is currently on the GAP Analysis listing for implementation.

***Identified Additional Costs:***

- Centralized scanning will require purchasing approximately 8 scanners and licenses @ a cost of approximately \$16,000.
- Approximately 33 dual monitors setups will be needed in the Bureau of Financial Management for processing @ a cost of \$10,560.

**Flowchart #3 – SCEIS Basic Workflow: AP Division – Centralized - All**



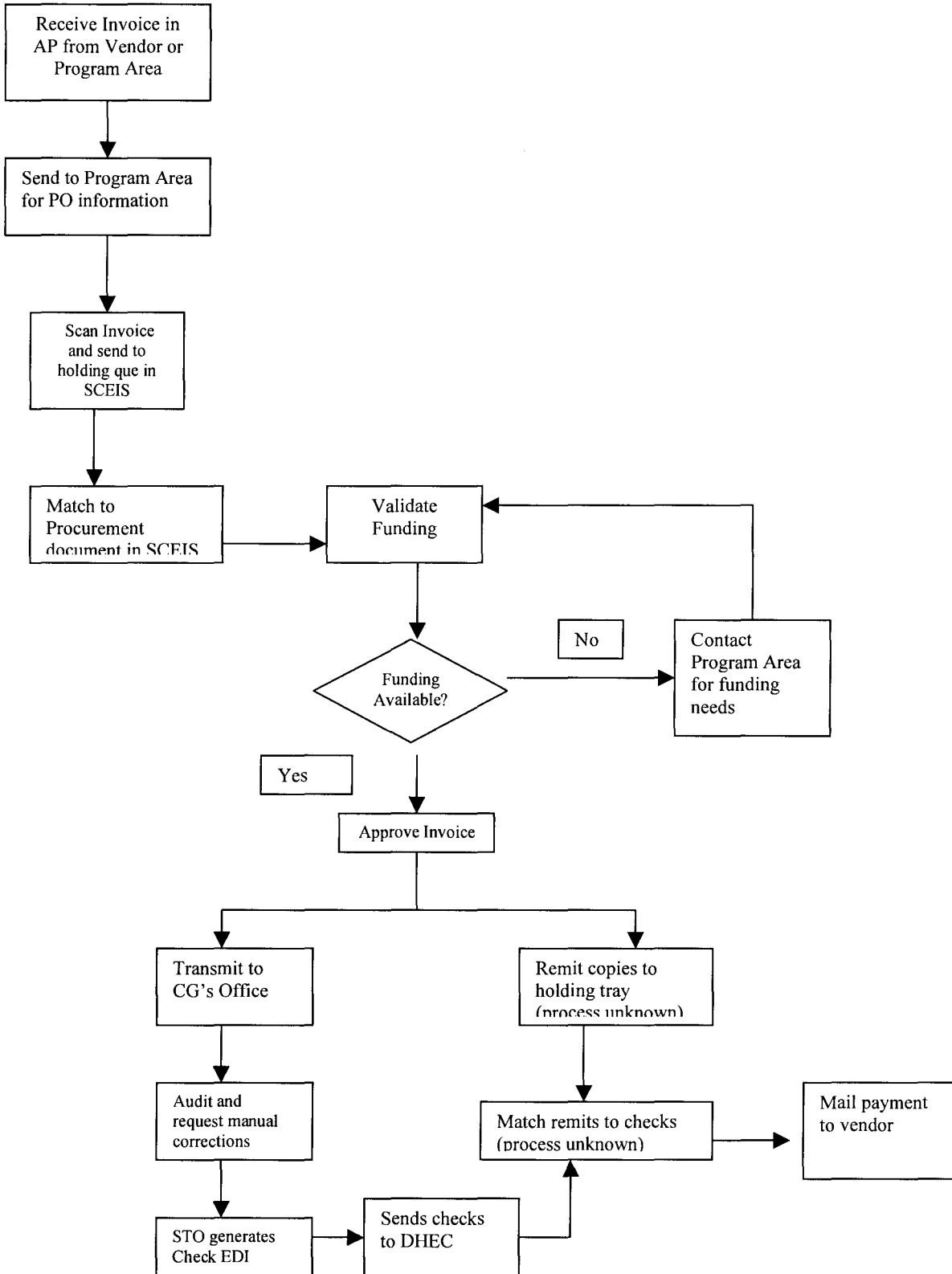
### **Centralized Analysis #2 – Assigned Scanner Positions in AP:**

A second approach is to hire personnel for the specific duties related to invoice mail out and scanning. This approach is recommended at this time based due to the unstable budget affecting the State. As each invoice is received in AP, it is the duty of these positions to determine proper handling of each invoice and to scan each invoice into SCEIS when all PO information is obtained and noted. This is outlined in Flowchart #4– SCEIS Basic Workflow: AP Division – Centralized – Scan Positions. The manner in which remittance advices are to be handled has not been addressed by the SCEIS Team and is currently on the GAP Analysis listing for implementation.

#### ***Identified Additional Costs:***

- Centralized scanning will require purchasing approximately 2 scanners and licenses @ a cost of approximately \$4000.
- Approximately 20 dual monitors setups will be needed in the Bureau of Financial Management for processing @ a cost of \$6,400.
- Approximately 2 new employees will need to be hired to process mail to the appropriate program areas and to scan all invoices @ approximately \$33,600 (Administrative Specialist II Positions – Band 2)

**Flowchart #4– SCEIS Basic Workflow: AP Division – Centralized – Scan Positions**



**Cost Savings for all 3 Analysis Situations (exact cost savings unknown at this time):**

- Storage fees for records retention
- Paper and toner costs due to the elimination of need for multiple copies needed for processing
- Courier costs associated with pick up and delivery of paperwork

**Cost Shifting for all 3 Analysis Situations (exact cost shifting unknown at this time):**

- Use Tax Auditor's workload should decrease by  $\frac{3}{4}$  due to SCEIS having a use tax module. Audits to ensure keyers are using this function will need to be performed, however, need for manual re-calculations will be eliminated.
- Only one vendor table will exist vs. the current 3 thereby reducing the Vendor Table Maintenance desk workload by approximately  $\frac{2}{3}$ .
- Voucher Desk functions will be eliminated in total due to scanning.

*All 3 position's time would be shifted to invoice processing when possible.*

**Major "Unknowns" that will affect workflow and/or cost:**

- At present it is undetermined exactly what will need to be scanned in regards to invoices. If backup documentation is not to be scanned as implied to date, the need for file storage will remain since this documentation will be needed for audit purposes.

- At present, SCEIS will only accommodate one line of funding per invoice. DHEC has multi-line needs, therefore, journal entries will need to be completed for each invoice with more than one line of funding.
- Until the HR module goes live, SSN/name information will need to be keyed manually by AP staff when processing any travel reimbursement documents.
- If funding is set up by direct pay in the Procurement Module, AP staff will need to manually key expenditure account codes to complete processing. This will also create a need to train AP staff on this type of coding. At present AP is not responsible for coding of invoices.
- SCEIS gap analysis meetings suggest tracking of grants on an external excel spreadsheet. DHEC currently monitors over 500 grants therefore this requirement will be, for the most part, impossible.
- Many of the normal procurement processes will not encumber funds "up front". Budget may not be available by the time the invoice is processed.

With the many known and unknown gaps associated with the SCEIS project, it is very difficult to project or predict with accuracy, the final product or outcome of this implementation will be. Like any other new system, SCEIS will have its good points and its shortcomings. The overall system should prove to be an asset to the State however the aggressive implementation schedule may prove to be its downfall. As with everything else, only time will tell.



## Definitions

SCEIS	South Carolina Enterprise Information System
SAP	Systems Applications and Products
AIMS	Administrative Information Management Systems, DHEC's current accounting system
FMS	Financial Management Systems, DHEC's legacy accounting system, currently used in the Division of Health Services, vendor table only, in conjunction with the CRS subsystem.
CRS	Children's Rehabilitative Services
DHEC	Department of Health and Environmental Control
C.G.	Comptroller General Office
DOT	Department of Transportation
STO	State Treasurer's Office
PO	Purchase Order

## Appendix

1. <http://www.sceis.sc.gov>
2. 2005 SC State Appropriations Manual