Approved Stephen R. Cloud
Date

MINUTES OF THE HOUSE COMMITTEE ON GOVERNMENTAL ORGANIZATION.

The meeting was called to order by Representative Stephen R. Cloud at
Chairperson

9:08 a.m./~~p.m.~~ on Friday, January 25, 1985 in room 522-S of the Capitol.

All members were present except:

Committee staff present:

Avis Swartzman - Revisor
Russ Mills - Legislative Research Dept.
Carolyn Rampey - Legislative Research Dept.
Jackie Breymeyer - Committee Secretary

Conferees appearing before the committee:

Louis Chabira - Assistant to the Director of the Division of Administration, Kansas Department of Transportation
Robert Hrabak - Administrator, Bid Analysis Management System (BAMS)

The meeting of the House Governmental Organization Committee was called to order at 9:08 a.m. by Representative Stephen R. Cloud, Chairman. The minues of the January 23 and 24 meeting were distributed. The Chairman introduced Louis Chabira, Assistant to the Director of the Division of Administration, Kansas Department of Transportation, who was present to give an update report on the accounting system of the Department.

Mr. Chabira gave a slide presentation giving background information on the current accounting system. He explained that the acronym FIRST means Financial Information and Reporting System for Transportation. (FIRST) is the result of a joint executive and legislative concern with the financial management system of KDOT. These concerns were lack of information and integration, inadequate accounting controls and reporting system, outmoded procedures, lack of documentation and communication and too much time being expended on routine tasks in the Department. It was for these reasons that the Committee requested an annual update of the accounting procedures. A task force was formed and came up with the following recommendations: development of an information plan, integration of accounting systems, improvement of accounting controls, establishment of a responsive reporting system, revision and documentation of procedures and communication improvement and personnel utilization. There have been short term corrections but more time is needed for the more involved problems of the system. Operational testing and conversion will be begin in April, 1986, with the complete change over to be completed July, 1986, for Fiscal Year 1987. The Division of Administration was able to restructure its FY 1985 budget to allow $150,000 for the purchase of a system which will probably be the package system. Mr. Chabira defined KIPPS as Kansas Integrated Payroll and Personnel System; CASK as Central Accounting System for Kansas. He ended his presentation by stating that the Department is forging ahead and doing the best it can.

Robert Hrabak, Administrator, Bid Analysis Management System (BAMS) gave a presentation along with slides showing the various graphs of line items and profiles. These graphs show the many different ways to utilize information by chart analysis. This type information has been operational since the first par of 1983 but has not been fully utilized by the Department until about a year ago.

The chairman thanked Mr. Chabira and Mr. Hrabak for their presentations. He told the committee members which subcommittees they will serve on.

The meeting was adjourned at 9:59 a.m.

SRC

GUEST LIST

COMMITTEE: GOVERNMENTAL ORGANIZATION DATE: 1-25-85

NAME (PLEASE PRINT)	ADDRESS	COMPANY/ORGANIZATION
Dean M. Testa	Topeka, Ks.	K.D.O.T.
Robert J. Hrabak	Topeka, Ks	K.D.O.T.
John P McNeal	Topeka	observer
Paul R. Shawver	Topeka	KDOT

KANSAS DEPARTMENT OF TRANSPORTATION

JOHN B. KEMP, Secretary of Transportation JOHN CARLIN, Governor

MEMORANDUM TO: House Committee on Governmental Organization

FROM: Kansas Department of Transportation

DATE: January 25, 1985

REGARDING: Status of Study of KDOT Accounting System

The attached report is submitted in fulfillment of the Committee's request for an annual progress update on the study of the KDOT accounting system. The report was initially prepared for members of the Steering Committee which is reviewing the work of the Financial Information and Reporting System for Transportation (FIRST) project team. It was presented to them on October 9, 1984.

Although work on the project has continued since that time, the report contains valuable information about the history of the project, the methodology being used, and major considerations that have been taken into account.

Committee comments and observations are welcome.

Attch.

REPORT TO THE ADVISORY STEERING COMMITTEE ON

FIRST

DEPARTMENT OF TRANSPORTATION
AD ASTRA PER ASPERA
KANSAS

OCTOBER 9, 1984

1-25-85

F *I* *R* *S* *T*

F I N A N C I A L I N F O R M A T I O N A N D
R E P O R T I N G S Y S T E M F O R
T R A N S P O R T A T I O N

SYSTEM REQUIREMENTS DEFINITION PHASE

PREPARED BY:
FIRST PROJECT TEAM
OCTOBER 9, 1984

SRD PHASE END DOCUMENT

TABLE OF CONTENTS

PART I: INTRODUCTION

SECTION 1.0 - BACKGROUND INFORMATION

The Financial Information and Reporting System for Transportation (FIRST) effort is a direct result of a joint executive and legislative concern with the Kansas Department of Transportation (KDOT) financial management system. The 1982 Sunset Audit Report: Kansas Department of Transportation, which was adopted by the Legislative Post Audit Committee, states:

> The Department of Transportation should...redesign its financial management system so that the system will produce complete, accurate, and useful information. (Page 45)

The Governor's Report on the State of Kansas Budget Fiscal Year 1984 states:

> The budget contains $500,000 to acquire professional services for a comprehensive needs evaluation of the department's accounting process and for selection and design of an updated accounting system (Pages 8-13)

While the funding was not authorized, the question was whether an accounting firm should be hired to help with the initial design rather than whether the system should be revised.

History

Various Concerns. There have been numerous concerns with the KDOT financial system for several years. In 1976, Secretary Turner established a five member task force chaired by Mr. James Bush, the head of Project Control, to study the information requirements of the Kansas Department of Transportation. The study states:

> Perhaps the greatest need identified concerns additional financial information. There is a considerable need for revenue and fund projections as well as cost projections for planning use. Budget and cash flow information are also considered key to management decision-making but this information currently is being received too late to be utilized properly (Information System Plan, 1976, Page 71)

There are several reasons why the financial information system was not included in the part of the Resource Management System (RMS) that was implemented.

CPA Study. Mr. Richard Daily, CPA, was employed by KDOT in 1982 "..to identify the major problems in the accounting system of the Kansas Department of Transportation (KDOT) and to determine whether the system should be modified." Mr. Daily noted that "the report may seem negative because the study dealt with problems in the KDOT accounting system and was not directed toward the extensive amount of work that is being done efficiently." The reasons for the recommendation to revise the system are discussed in the Project Valuation Assessment section. The CPA study also recommended:

> KDOT should engage outside consultants to assist with each of the...tasks (of revising the system). They will have the resources and experience in dealing with these tasks routinely and should have knowledge of efficient system (development)... A consulting firm can furnish the skills of persons

experienced in a wide variety of accounting and data processing techniques who are trained specifically to conduct such projects and can provide additional manpower not available from existing personnel. (Assessment of Accounting System, 1982, Page 17)

Post Audit Report. Shortly after the start of the CPA study, the Legislative Division of Post Audit started a review of the management of highway funds as part of the Sunset Audit. As was previously noted, the audit concluded that the financial management system should be redesigned. The audit further stated:

> One option the Department may need to consider is bringing in an outside firm to study the problem and design a system. Before making plans to change the system, however, the Department should seek Legislative direction about whether such changes are desirable. (Page 45)

The Legislative Post Audit Committee reviewed the audit and accepted it. Since it was a Sunset Audit report, it was referred to the House and Senate Governmental Organization Committees.

Budget Request and Recommendation. As a result of the CPA study and the Post Audit report, KDOT requested and the Governor recommended $500,000 to employ a consulting firm to redesign the financial system. The estimate was obtained by comparing the experience of other states.

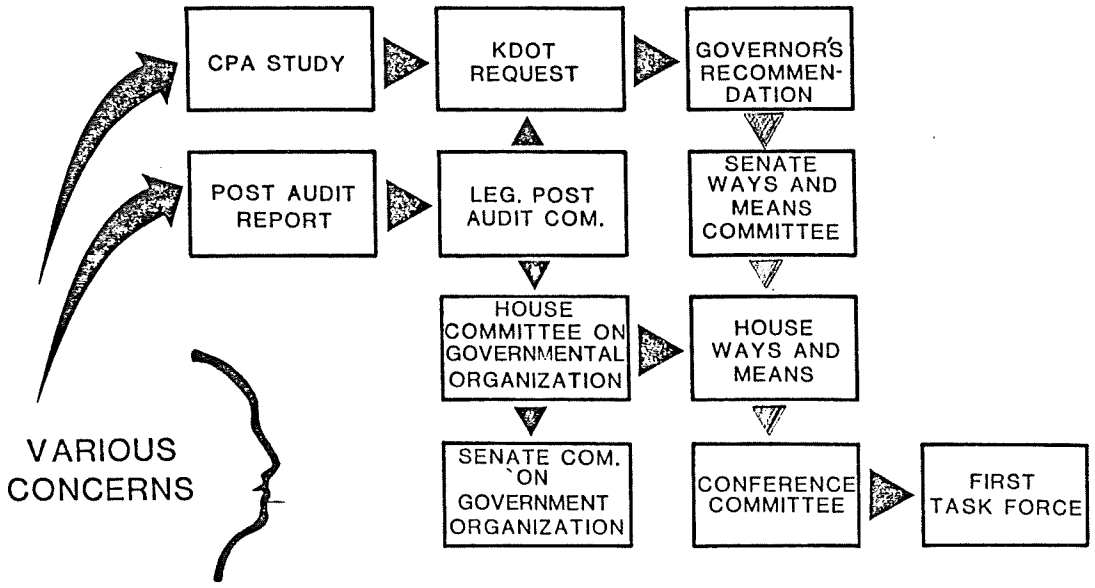
1983 Legislative Consideration. The Senate Ways and Means Committee initially reviewed the KDOT budget and deleted the funding for the consultant. It is the understanding of KDOT that the issue was the use of a consultant and not the revision of the system. The House Governmental Organization Committee reviewed the Sunset Audit and concluded that not only should the system be revised but that it should be done with assistance from a consultant. The Committee advised the House Ways and Means Committee of this conclusion. The House Ways and Means Committee concurred with the House Governmental Organization Committee; however, the funding was deleted in the Conference Committee.

1984 Legislative Consideration. As requested by the House Committee on Governmental Organization, KDOT presented a report on the status of the development of the accounting system. After discussing the deletion of the funding by the 1983 Legislature, the report stated:

> KDOT will proceed with its staff until an evaluation can be made of the work accomplished. If adequate progress has not been made or KDOT believes that it is in the best interest to again request contractual authority, KDOT will request such authority from the 1985 Legislature.

The 1984 House Ways and Means Committee also reviewed the issue and requested a report in 1985.

HISTORY OF CONSIDERATIONS



Establishment of the Task Force

SOM 0211. KDOT has used task forces to accomplish several major undertakings. The development of the project prioritization and optimization system and the pavement management system are two examples. Secretary Kemp established the task force by issuing SOM 0211 for inclusion in the Standard Operating Manual. It established that the Director of Administration is the Chief Financial Officer of the Agency and is responsible for the development of the total financial system of the Agency.

Significant Provisions. The SOM clearly establishes that the financial system of the agency, including the accounting system, exists to support managers in the efficient and effective utilization of resources to facilitate the efficient and safe movement of people and goods. It is also stated that the administrative system should not impose unreasonable burdens on the agency. Secretary Kemp directed that the financial information should be useful for:

1. Making decisions.
2. Demonstrating accountability and stewardship.
3. Evaluating managerial and organizational performance.

Secretary Kemp also provided that the financial management system should be designed to be in compliance with applicable federal and state requirements (including statutes, regulations, and policies) and generally accepted accounting principles (GAAP). While the Secretary noted that any material deviations should be appropriately disclosed, it is the position of the Director of Administration that material deviations should exist only when one requirement prevents one of the other requirements from being met.

The SOM also addresses the question of integration with other systems. It states:

> The Task Force shall be particularly cognizant of the need to coordinate FIRST with the Central Accounting System for Kansas (CASK) and the Kansas Integrated Personnel Payroll System (KIPPS) and should thoroughly explore the possibility of utilizing the CASK and KIPPS Systems insofar as possible to meet the accounting requirements of KDOT.

Advisory Steering Committee. Secretary Kemp established the Advisory Steering Committee to help assure all parties involved with the system or the information provided by the system were kept advised of what was being done and had an opportunity to make suggestions. The SOM provides that:

> An Advisory Steering Committee is established to review the findings of the Task Force.

It is assumed that the Advisory Steering Committee will also have an opportunity to review the plans for what is to be done.

Time Frame

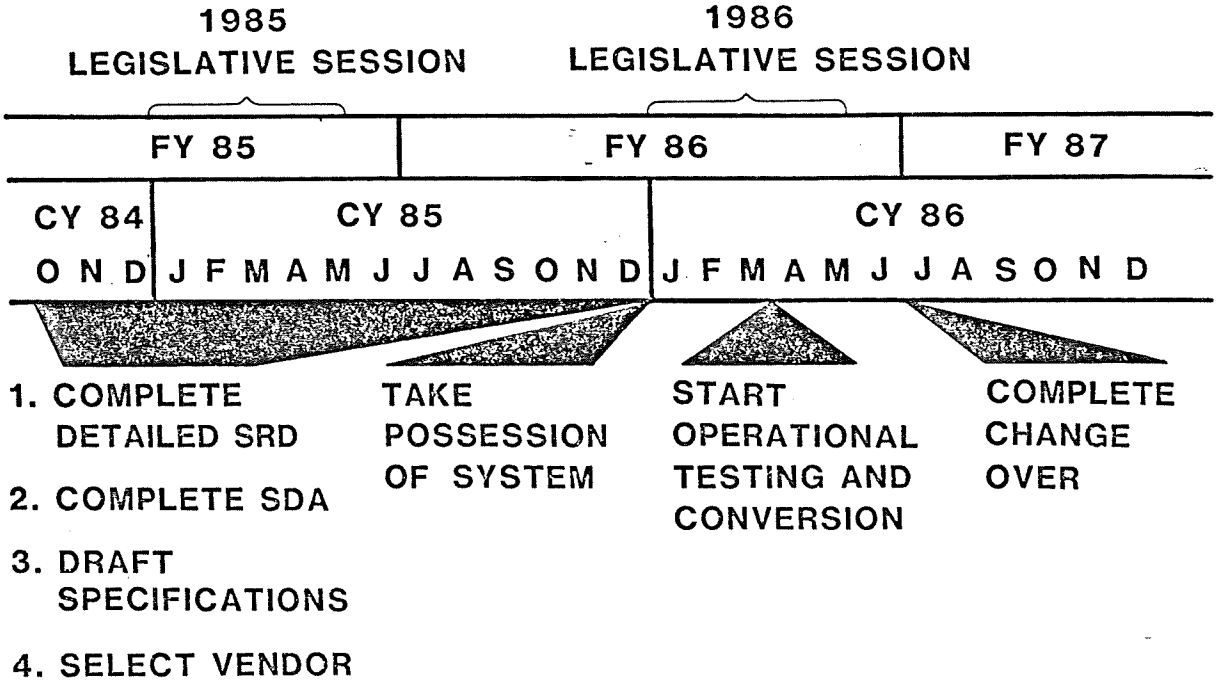
One of the lessons learned from the abandonment of the Resource Management System (RMS) was that a change in administration may result in a redirection of agency effort. Therefore, it is necessary to have, at a minimum, part of the system operational by January 1987. Since the anticipated changes will include a revision of the accounting structure, it is necessary that the changes be made at the beginning of the state fiscal year (July 1986).

Because of the complexity of the changes and extensive amount of training required, it is believed that at least three months should be allowed for dual processing and working with KDOT employees to make sure that the system is completely operational by the first of the fiscal year. Therefore, the system must be installed and ready for use by April 1986.

An experienced vendor has advised KDOT that most organizations should allow at least three months for the technical coding and modifications that may be required. This would indicate that KDOT should have possession of the system by January 1986. Since KDOT anticipates that it could require several months to select and announce a vendor, KDOT should have legal authority to purchase a system significantly before the 1986 session.

This indicates that the 1985 Legislature is the last legislative session that could take action on the purchase. The question is whether the funds should be in FY 1985 or FY 1986. KDOT concluded that FY 1986 might not allow adequate time for conversion and consequently 1985 was chosen. The Division of Administration was able to restructure its FY 1985 budget to allow $150,000 for the purchase of a system, if it is determined that a purchase is required.

TIME FRAME


1985
LEGISLATIVE SESSION
1986
LEGISLATIVE SESSION
FY 85
FY 86
FY 87
CY 84
CY 85
CY 86
O N D J F M A M J J A S O N D J F M A M J J A S O N D
1. COMPLETE DETAILED SRD
2. COMPLETE SDA
3. DRAFT SPECIFICATIONS
4. SELECT VENDOR
TAKE POSSESSION OF SYSTEM
START OPERATIONAL TESTING AND CONVERSION
COMPLETE CHANGE OVER

PART I: INTRODUCTION

SECTION 2.0 - STUDY METHODOLOGY

Reason for a Methodology

Systems Development Methodology/70 (SDM/70) is a proprietary product of AGS Management Systems, Inc. It was designed to provide:

> A pre-defined system life cycle within which all the required development work can take place; and within this structure one has sufficient flexibility, based upon the needs of the project, to choose the tasks and the design considerations within the task. (Introduction to SDM/70, Page 11)

KDOT elected to use a version of SDM/70 for three major reasons. The first reason is that KDOT has agreed with DISC to use SDM/70 on the development of major computer systems. While FIRST is actually concerned with the development of a financial information system, it is reasonably assumed that a significant part of the project will relate to computerized systems. The second reason is to assure a logical process with adequate control. The third reason is to assure appropriate documentation to allow a future researcher to understand what was done and why it was done.

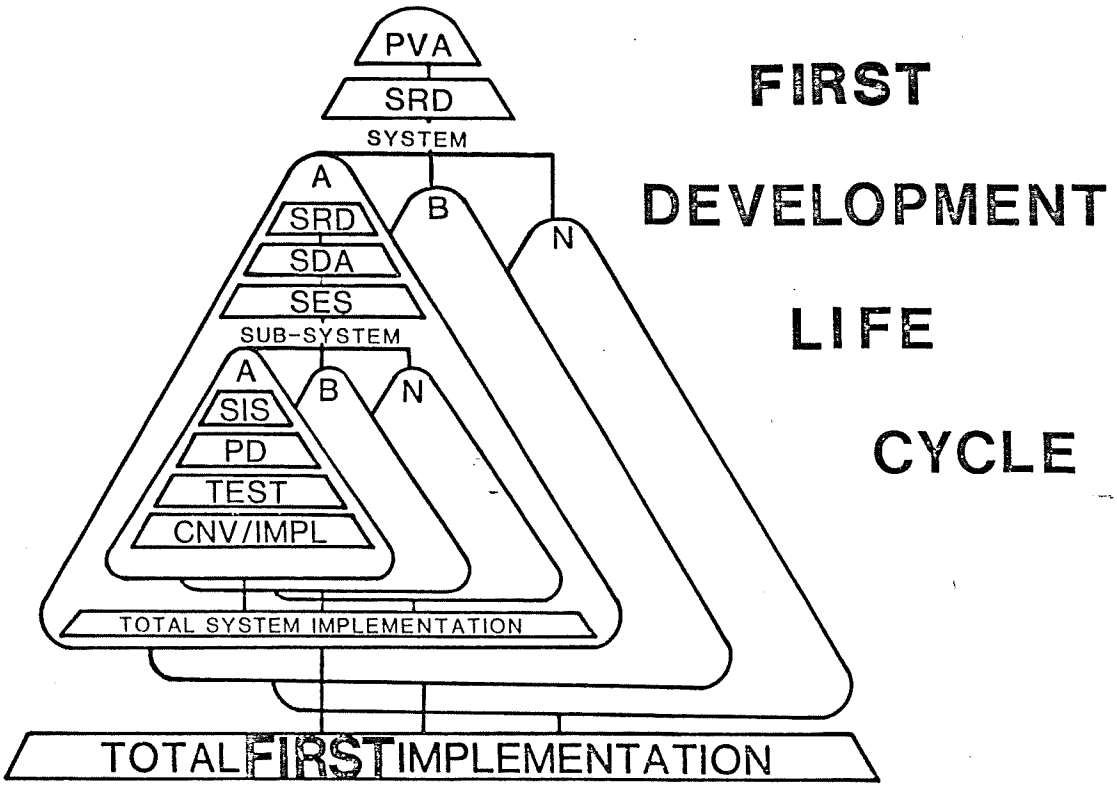
A major concept of SDM/70 is to divide the development of a system into various phases. Each phase has an end product that must be approved prior to the next phase. This assures that difficulties in the development of the system are identified, allows for corrective action prior to the expected completion of the total project, and facilitates the refinement of project estimates.

Life Cycles

Life Cycle for Very Large Systems. FIRST is an extremely large system. Not only does it encompass several subsystems (Federal-aid billing, general accounting, etc.), it encompasses several systems (budgeting, financial accounting, cost accounting, etc.). SDM/70 provides the following guidance for such systems:

> Very large systems are typically phased, i.e., subsystems are implemented one at a time so that the user can start deriving incremental benefits without having to wait for the total whole to be completed. However, even though the system is implemented in chunks, to ensure that all the pieces properly fit with each other there must be an overall plan. (Introduction to SDM/70, Page 29)

While SDM/70 indicates that the division into "chunks" should be made after the phase "System External Specifications", KDOT has determined that for the FIRST project, the division should be made at the preceeding phase. This is shown in the following diagram:



There are two basic reasons for this modification of SDM/70. The first reason is that the system is extremely large and complex. The second reason is that a new version of SDM/70 (SDM/70-Structured) was acquired by the State during the System Requirements Definition phase. Because of the significant improvement in the structured version, particularly in the area of analysis, it was determined that a conversion would be made to the new release. Thus, it will be necessary to restructure part of this second phase.

It should also be noted that if the System Design Alternatives phase determines that acquiring a data processing system rather than developing the system is the most desirable option, then modification of several of the following phases is recommended. This may be the case for some of the subsystems in FIRST.

Project Viability Assessment. The Project Viability Assessment (PVA) phase is an attempt to determine whether the opportunity for improvement justifies the development effort. It also includes a preliminary determination of the magnitude of the effort. The CPA study and the Legislative Post Audit report provided this information.

System Requirements Definition. The System Requirements Definition (SRD) phase provides for an analysis of the present system, determination of the areas where there is an opportunity for improvement, establishment of the objectives and requirements for the proposed system, and a "general indication of anticipated benefits to be derived by the user if the system gets implemented" (Introduction to SDM/70, Page 44). The initial SRD is focused at a higher level than the SRD for the various systems that may follow.

System Design Alternatives. The System Design Alternatives (SDA) phase compares possible alternatives to the system requirements and objectives established in the system SRD phase to determine which ones are viable. The evaluation of alternatives will include the possibility of acquiring a system from another governmental unit or a vendor.

System External Specifications. The design of the system is divided into the external specifications (what the system is to receive and accomplish) and the internal specifications (how the system is to accomplish the tasks). The System External Specifications (SES) phase contains the external design specifications; the system security, data control, and availability specifications; the preliminary system testing and acceptance criteria; and the preliminary plan for conversion. SDM/70 provides for a modified phase if a system is to be acquired.

System Internal Specifications. The System Internal Specifications (SIS) phase establishes the internal specifications based on the specifications for the inputs, functions and outputs established in the SES phase. The SIS phase specifies the architecture of the system, the programs or modules and the interfaces, the processing logic, the report and display formats, and the record and file structures. The preliminary test plan is finalized. If a system is acquired, SDM/70 provides extensively modified guidelines for this phase.

Program Development. The Program Development (PD) phase includes the translation of the system design specifications into executable program code, the preparation of the required test data, and the testing and "debugging" of the individual modules and programs. As with the SIS phase, SDM/70 provides extensively modified guidelines for the PD phase when software is acquired.

Testing. The Testing (TST) phase, which is done after the individual modules and programs have been "debugged", provides for the integration testing. The results of the tests that were finalized in the SIS phase are compared with the acceptance criteria that were developed in the SES phase.

Conversion. The Conversion (CNV) phase includes all tasks required to convert all inputs and files from the existing formats to those required by the new system.

Implementation. The Implementation (IMPL) phase includes all the other tasks necessary to implement the system (ordering forms, etc.). User training is an important priority. This training must be specifically designed for managers (what information is available and how to use it), the non-accounting staff (how to prepare documents, enter data, correct errors, etc.) and the accounting staff (how to execute the system). A user guide for non-computer and non-accounting users must be developed. Specific manuals for accounting and computer personnel must also be prepared.

Post Implementation Review. The Post Implementation Review (PIR) phase is designed to determine if any additional modifications are required and provide a feedback structure so that problems in the initial system development will not be repeated in the following efforts.

PART I: INTRODUCTION

SECTION 3.0 - REVIEW OF PROJECT VALUATION ASSESSMENT

Introduction

While either the study by the CPA or the Post Audit report could be considered as providing the information required for this SDM/70 phase, the CPA study provides a more convenient working document since it avoids the questions concerning whether the statements are correct or whether they indicate that the system is difficult to understand.

Mr. Richard L. Daily, CPA, interviewed sixteen KDOT managers and representatives of the Division of Accounts and Reports, the Division of the Budget, the Legislative Research Department, and the Federal Highway Administration. These interviews together with his assessment of the accounting system provide a basic foundation for determining whether a major redesign should be done.

Findings

Lack of Information Plan. The CPA study identified eight significant problems with the current system. They are discussed in the perceived order of importance. The first problem, lack of an information plan, is discussed as follows:

> KDOT does not have a well-defined plan to collect, process and report systematically the results of its operations. The lack of a plan is the primary cause of many of the problems encountered. The present accounting systems have been developed piecemeal over the years without the benefit of a systematic plan. (Page 1)

Lack of Integration. The second problem that was identified is the lack of integration. It was discovered that not only are the traditional systems not integrated, various units have independent systems. The study noted:

> The agency does not have an integrated accounting system. There are a number of fragmented, stand-alone accounting sub-systems, each developed for a separate purpose and not complementary to each other. (Page 2)

It was found that this lack of integration not only resulted in duplication of effort, it resulted in various systems providing what appears to be contradictory information because the data is in various stages of processing. This lack of integration makes the control of the data, including reconciliation, difficult. Another significant problem resulting from lack of integration is the delay in reporting. The study provided the following explanation:

> The lag time required for processing and reporting accounting information is aggravated by the failure of the sub-systems to complement each other. Although many of the systems operate independently of others in many regards, they are often dependent on other systems for a portion of their information. Some systems, therefore, cannot process information until other systems are finished, creating delays. Significant improvements in the lag time will be difficult without the redesign of several of the systems. (Page 5)

Inadequate Accounting Controls. In addition to suggesting a reorientation of the internal auditing effort, the study concluded that the primary problem was the lack of a controlling General Ledger. The study states:

> The General Ledger is not used to control the other systems. Sub-systems are not consistent with, and subsidiary to, the General Ledger. The General Ledger is used by KDOT primarily to manually accumulate the summary of transactions independently from many of the sub-systems. (Page 5)

This lack of a controlling general ledger was cited as a key problem in error detection and correction.

Inadequate Reporting System. It was found that the financial system did not provide adequate information to users and the data provided was not useful to them.

Outmoded Procedures. The study also noted that information is often copied from one form to another.

Lack of Documentation. The study determined that there is a significant lack of documentation of the various systems. In addition to creating accounting control problems, the lack of documentation frustrates coordination of systems and creates difficulties in training new or substitute employees. The lack of documentation also results in a lack of consistency.

Lack of Communication. Two problems were cited. The first is that changes will be made without regard to how they would impact other units. The second is that "insufficient effort is made to obtain feedback from other (units)...as to problems experienced with the quality and quantity of accounting information disseminated."

Personnel Utilization. The study contended that too much time was required for routine tasks and not enough effort was made to coordinate, analyze, and disseminate useful information.

Recommendations

Develop Information Plan. While KDOT has an official plan as required by the Division of Information Services, the recommendation addressed a different aspect of planning. The FIRST task force is working on the total financial requirements, thus progress is being made in this area.

Integrate Accounting Systems. The study states that "the sub-systems should be pulled together into an integrated system controlled by the General Ledger."

Improve Accounting Controls. The study provided the following recommendation:

> Formal written controls should be developed to control the flow of data into the system and from one sub-system into another. Formal written procedures should be established to monitor those controls to see that they are consistently enforced. Responsibility for the controls and monitoring procedures should be well-defined. Sub-systems should be designed to be controlled by and reconciled to the General Ledger. (Page 12)

The study also stated that "the internal audit function should be carefully reviewed to ensure that it is functioning properly to serve the needs of the entire agency..."

Establish a Responsive Reporting System. The study recommended the establishment of a philosophy of providing information to management. It was also noted that the revised system should be flexible so that it can be changed as requirements change.

Revise Procedures. The study indicated that procedures and forms should be revised to eliminate unnecessary duplication. The central focus of the recommendation was to have one entry serve several functions.

Document Systems and Procedures. It was recommended that KDOT should flowchart and describe the systems (1) to help understand the processes, (2) to document accounting controls, and (3) to facilitate training.

Improve Communications. It was also recommended that communications should be improved.

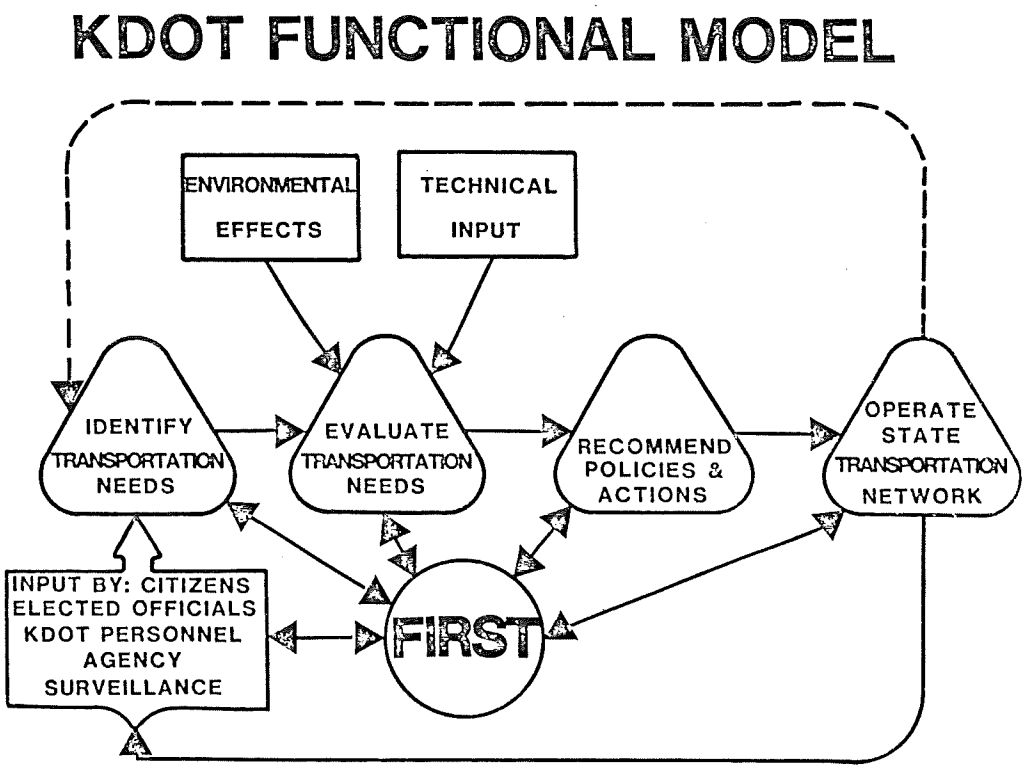
Redirection of Personnel Utilization. While the study recommended that efforts be shifted from routine tasks to higher level activities, the study states:

> There should be no reason...that most existing personnel cannot be trained to exercise the highest level of skills required. (Page 15)

PART II: ANALYSIS OF CURRENT SYSTEM

SECTION 1.0 - BUSINESS MODEL

Reason for Business Model. SDM/70-Structured suggests that an analysis of a system should be done from the perspective of how it relates to the goals and objectives of the organization rather than from a purely technical viewpoint. The purpose is to attain a high level perspective of the processes and functions that the system under study affects.



Establishment of Official Goals. KDOT has adopted a set of statements concerning the mission, the goals, and subgoals of KDOT. While one could question whether they should be revised, it is believed that they are still appropriate for the purpose of providing a general perspective of the function of the agency.

Mission - There shall be promoted, planned, developed, maintained, and operated a safe, efficient, balanced, and multi-modally integrated statewide transportation system adequate to meet the present and future needs of the people of Kansas to move people and goods - and this shall be done in such a manner that: (1) the economic, social, and general welfare of the people are enhanced; (2) the environment and natural resources of the state - including scenic, historic,

and recreational assets - are preserved, conserved, and enhanced; and (3) the output of transportation products and service is maximized with the least input of resources (time, labor, materials, equipment, overhead) required to produce these products and services at an adequate level of service.

Advocacy - The Kansas Department of Transportation will endeavor to be an effective advocate and spokesman for an adequate statewide transportation system in the State--a system which is safe, efficient, balanced and multi-modally integrated, and which optimizes the movement of people and goods.

Relationships - The Kansas Department of Transportation will continuously seek to establish and maintain effective professional and cooperative relationships with all agencies, jurisdictions, and bodies with interests and responsibilities in transportation - to the end that there is promoted, planned, developed, maintained and operated a safe, efficient, balanced and modally-integrated Statewide Transportation System adequate to meet present and future needs of Kansas' people to move people and goods.

System Planning, Development, Maintenance, and Operation - The Kansas Department of Transportation will continuously strive to provide competent professional leadership and direction to promotion, planning, development, maintenance and operation of a safe, efficient, balanced and modally-integrated Statewide Transportation System which best meets Kansas' needs--all in accordance with the most advanced systems analysis, design and development concepts, principles, and techniques.

Transportation Resources - The Kansas Department of Transportation will continuously analyze and evaluate the resources--time, manpower, financial--available to it and to other agencies and jurisdictions in relation to the need for resources; and will seek to acquire adequate resources for planning, developing, maintaining and operating the total State Transportation System to a level of service adequate to satisfy Kansas' present and future transportation needs at the least possible cost to users.

Productivity - The Kansas Department of Transportation will continuously seek to achieve a balance among all factors of transportation production which will result in maximum output of transportation products and services for the least input of resources (manpower, materials, equipment, facilities, money) required to achieve that output and provide an adequate level of service and quality of product.

Innovation - The Kansas Department of Transportation will continuously seek to develop and maintain a climate throughout its organization which fosters creative and innovative approaches to promoting, planning, developing, maintaining and operating a safe, efficient, balanced and modally-integrated Statewide Transportation System adequate to meet Kansas' transportation demand/needs now and in the future.

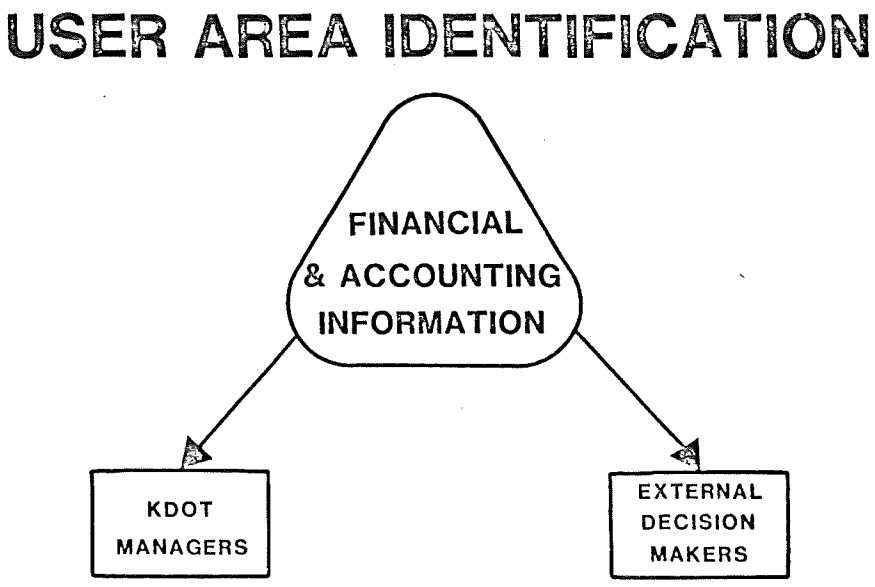
Human Resources - The Kansas Department of Transportation will continuously seek to assure that there is a high degree of human resource competence, vitality and effectiveness in the Department; and that there is developed and maintained an organizational climate conducive to self-development, growth and achievement of all individuals in the organization.

PART II: ANALYSIS OF CURRENT SYSTEM

SECTION 2.0 - USER AREA IDENTIFICATION

The FIRST task force is charged with coordinating the revision and integration of the Kansas Department of Transportation's financial and accounting systems to provide the information needed by KDOT managers and by external decision makers in order to make decisions, demonstrate accountability and evaluate performance. Relevant and reliable information is vital to optimal resource utilization and therefore valuable to resource managers throughout the organization and to external decision makers.

It is recognized that KDOT managers and external decision makers will have different needs and different levels of understanding. The Financial Accounting Standards Board (FASB) provided guidance on this issue in the 1980 Statement "Concepts Number 4." FASB provides, in paragraph 37, that "financial reporting should provide information that can be used by all who are willing to learn to use it properly." KDOT has the obligation to external decision makers to provide information that can be understood by those that have a basic knowledge of the operations of the department and a basic understanding of governmental accounting.



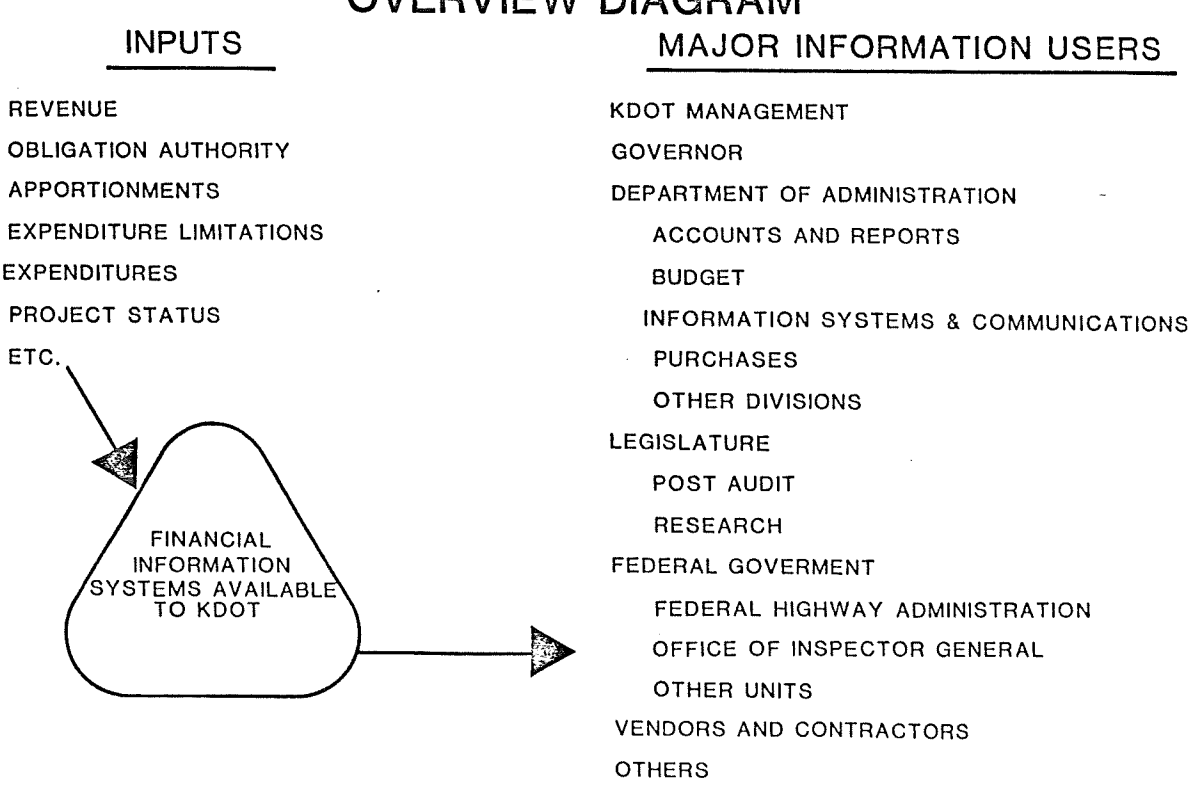
PART II: ANALYSIS OF CURRENT SYSTEM

SECTION 3.0 - CURRENT SYSTEM DESCRIPTION AND ANALYSIS

Overview

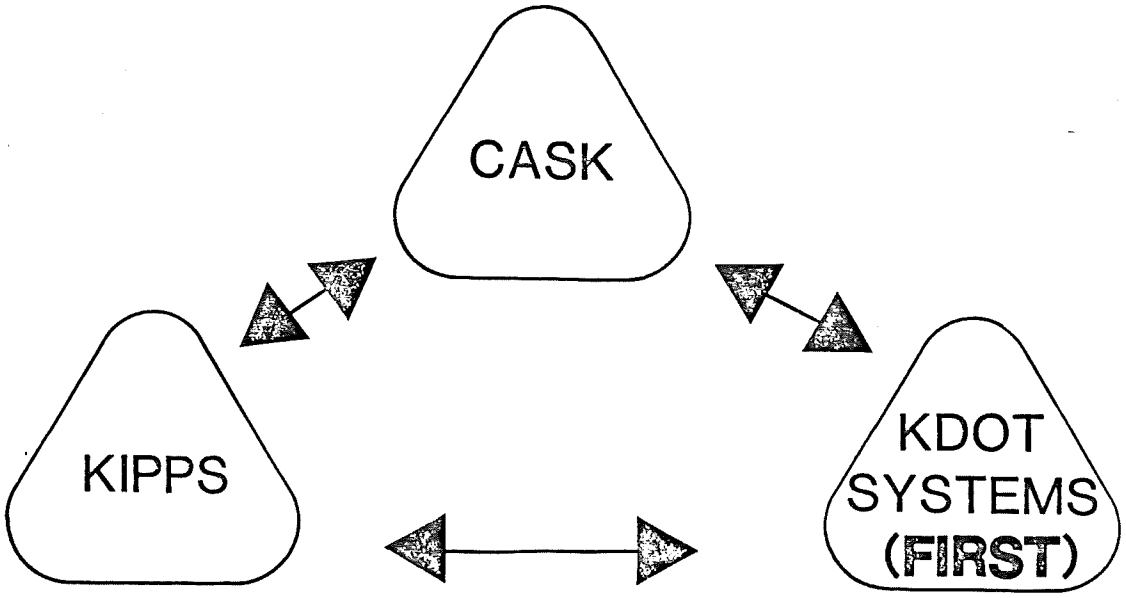
There are numerous financial systems available to KDOT and those interested in the financial actions of the agency. It should be noted KDOT has a great many different types of financial transactions.

OVERVIEW DIAGRAM



The Central Accounting System for Kansas (CASK) and the Kansas Integrated Payroll and Personnel System (KIPPS) are both administered by the Department of Administration. These systems provide a very large percentage of the information concerning KDOT financial transactions. The Performance Audit Report: Duplication of Computerized Accounting Systems (January 1984, Page 8) by the Legislative Division of Post Audit noted because of the detail required by KDOT, CASK could not be required to provide the needed information. The recent announcement of the phase-out of Sperry Univac by DISC will require the Department of Administration to either revise or replace both CASK and KIPPS.

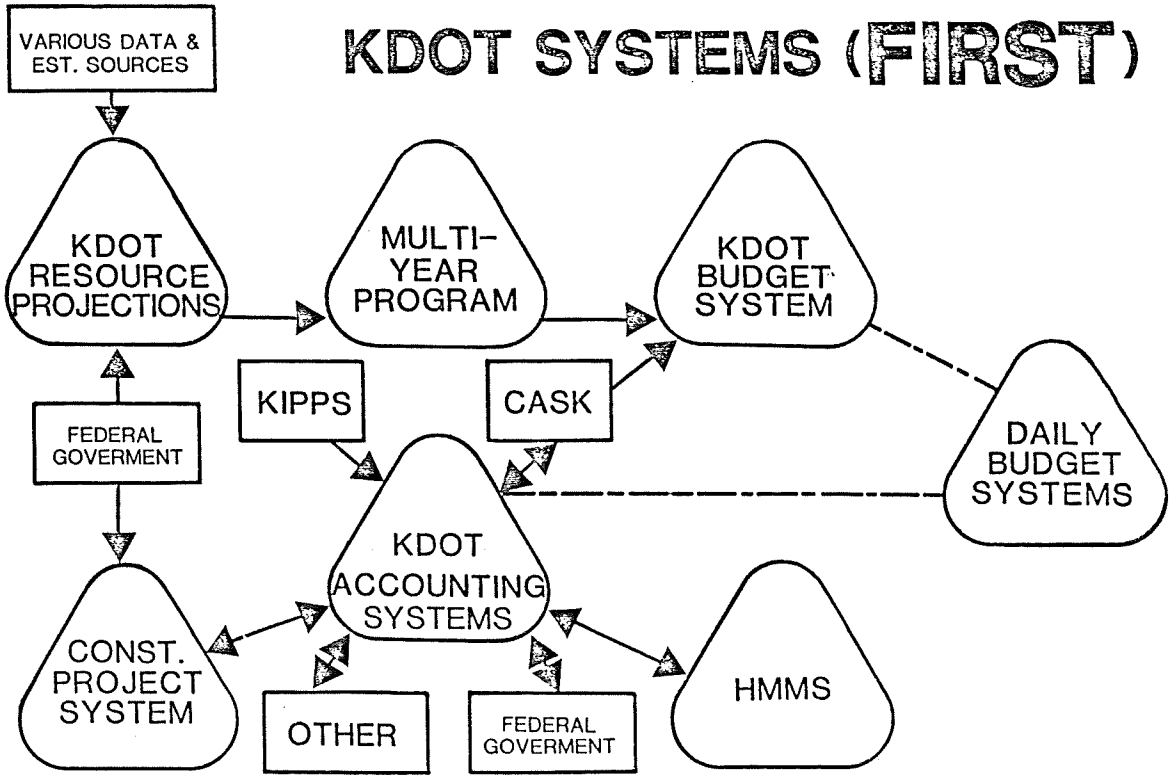
MAJOR FINANCIAL INFORMATION SYSTEMS



Major KDOT Financial Systems

KDOT does not have an integrated financial system. Instead, a number of independent, stand-alone systems and processes without a central focus have developed over time. Although the cost center feedback system has resulted in some consolidation of data collection, most of the systems and processes described below remain essentially separate, functioning as isolated entities rather than pieces of a cohesive whole. The various KDOT systems will be integrated into the comprehensive FIRST project based on the ability of the agency to integrate the system, and the need for the integration.

From the problems/needs analysis by individual system or work process certain central needs emerge. Primary among these is the need for timely, reliable information. Currently, it is not uncommon for users to experience difficulty obtaining data they can count on in a time frame during which it is still useful for decision-making. A second significant problem is the lack of integration among individual systems and work processes and the need for an overall plan. Separate, isolated systems and work processes lead to overlaps, duplication of effort and unnecessary (re)processing of the same data. They also lead to the development of inefficient manual bridges. Other needs which stand out include the need for further automation, the need for updated procedures and the need for better documentation, user guidelines and user training.



KDOT Resource Projection. Both the Division of Planning and the Division of Administration provide estimates. An example is that the Division of Planning estimates motor fuel tax collections and the Division of Administration estimates operating expenditures.

Multi-Year Program. The multi-year construction program is developed from the various estimates and system needs.

KDOT Budget. The KDOT Budget System includes both the development of the annual budget and the tracking of expenditures against the budget or expenditure limitation. This is done from CASK reports and not from the KDOT accounting system. KDOT's monthly budget system has not been fully functional since the reorganization of the agency in 1982.

Daily Budget. The purpose of the automated daily budget system is to provide managers in the Division of Operations with current expenditure information. The system accommodates estimates and encumbrances as well as expenditures. Vouchers are the primary input document used by daily budget. They are entered at the district level using Burroughs hardware. Daily budget output consists of budget status reports which users rely on heavily for expenditure information. The Bureau of Management and Budget is attempting to coordinate the daily budget system. This system neither shares common data with nor interfaces with any other KDOT system.

Some problems with using the daily budget, which was developed in the 1960s, arise from the need for more accurate and complete data than the system was designed to provide. Daily budget data is never up-to-date because it takes a minimum of two weeks to get a voucher through and then it must be returned to the district for entry. Although the problem is not as serious as it once was, there are still concerns about the completeness of daily budget data because the districts have no way of knowing if they have received all of their vouchers for entry. Another primary problem with daily budget is accuracy. Last year approximately four million dollars out of about forty million was "lost" by the system. Discrepancies like this one may be due to encumbrances which are not updated when current cost information is received. It also appears that encumbrances are not always liquidated when the corresponding expenditures are entered in the system. Consequently, daily budget reports sometimes show deficits that are inaccurate.

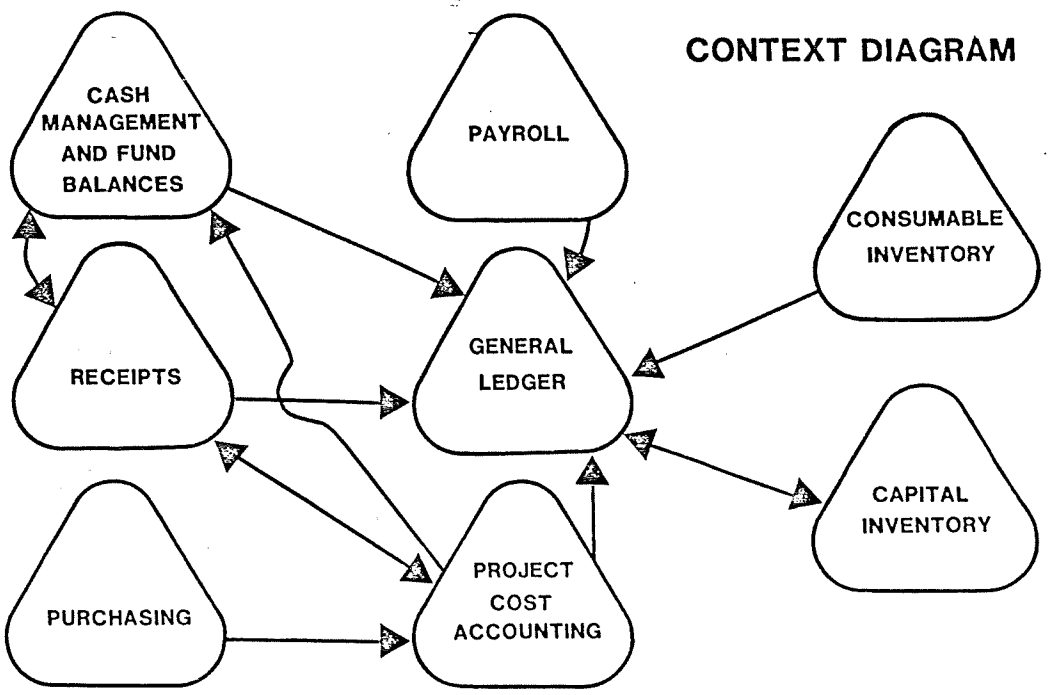
Currently, daily budget information is presented in a year-to-date format rather than the twelve month spread-sheet format which some users would prefer. The system tends to be inflexible, and access to data is limited. (On-line data access would be helpful.) Finally, daily budget users have indicated they need comprehensive system guidelines if the accuracy and usefulness of daily budget information are to be improved.

Construction Project System. The Construction Project System provides information concerning the status of the KDOT construction projects. This includes financial information. There is not a complete or efficient integration of this data with the KDOT accounting systems.

HMMS. The Highway Maintenance Management System is similar to the construction project system. Again, there is not a complete or efficient integration of this data with the KDOT accounting systems.

Other project systems. The KDOT information system structure has the capability to track all efforts and accomplishments to projects; however, this system has never been used. It is assumed that it would function if the projects were defined and data recorded. The integration would be similar to the integration of the construction or maintenance systems.

KDOT Accounting Systems



Cost Center Feedback. The cost center feedback system is designed to collect, balance, edit, post and archive KDOT's accounting related resource utilization/expenditure data, thereby creating a pool of correct, reconciled accounting transactions for use by other accounting related systems. System input originates from numerous source documents, most of which are entered at the district level. Active (current) cost center data is stored in TOTAL data base files, while archived (history) data is stored on magnetic tapes by accounting month. Most corrections to cost center feedback transactions can be made on-line. The system does not produce management reports. Instead, the only reports generated are those associated with editing, balancing, etc. However, cost center feedback provides input to many other KDOT systems, including EMS, cash expenditures, consumable inventory, federal aid billing/project cost accounting and general ledger. The Bureau of Management Services is in charge of the cost center feedback system.

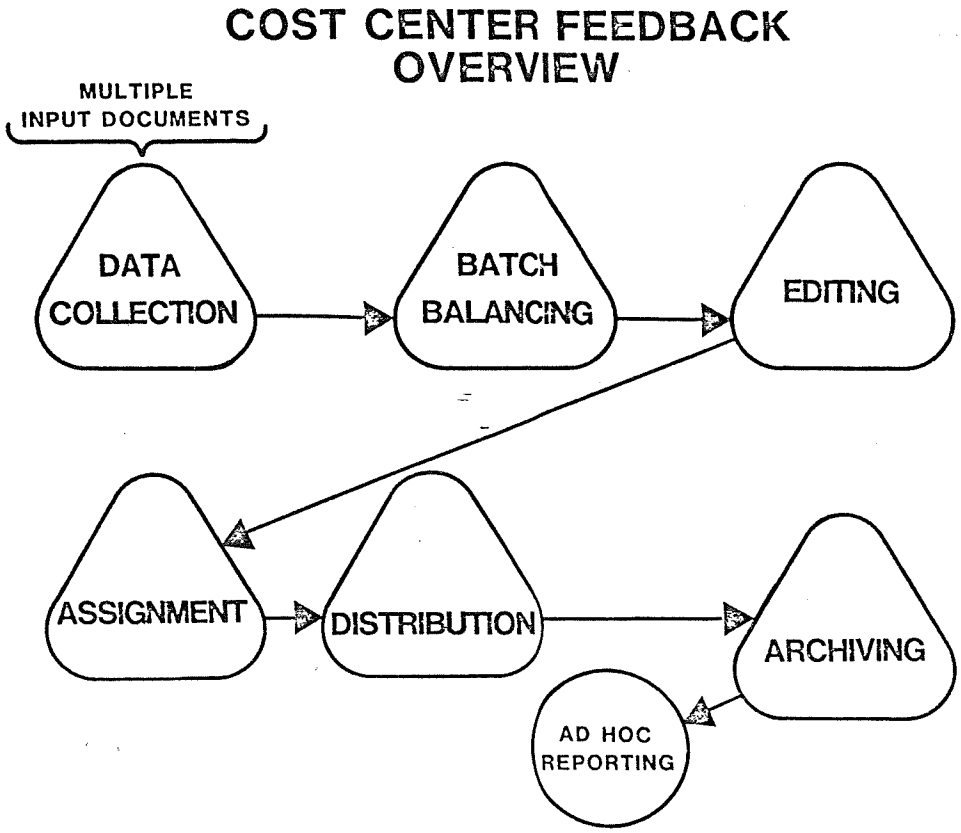
Cost center feedback has resulted in many significant improvements over the systems which it replaced and its value to KDOT should not be underestimated. However, as might be expected with any major system implemented on a very short timetable, certain problems and needs remain to be addressed. Important among these are several interrelated issues involving user understanding and perception of the system.

Cost center feedback documentation is either sketchy or nonexistent, and there is no comprehensive users' guide available. It is vital to the success of any system to have current, complete users' documentation available. The documentation should provide step-by-step instructions on how to complete and enter source documents, fill in transmittal forms, work with the output produced from processing the input and solve problems that might arise. (Thorough cost center feedback system documentation is also needed by the data processing staff. A well documented system is much easier and cheaper to maintain than a poorly documented system.)

Lack of user understanding and/or training and lack of system controls seem to have led to a lack of user trust in the cost center feedback system. This lack of confidence has resulted in extensive manual double-checking of the system. This double-checking is expensive and should be unnecessary. The lack of user trust has been compounded by experiences with both lost records and extra records resulting from system failures which were not identified and corrected in a timely manner. Comprehensive system controls which preclude such problems need to be installed.

Although they are not all entirely attributable to the system, certain other problems need to be addressed if cost center feedback is to meet KDOT's needs in the future. Diverse data collection cycles make it difficult or impossible to analyze relationships among related data. Confusion surrounding accounting periods and transaction dating (accounting dates, incurred dates, period ending dates, "as of" dates, etc.) contributes to this problem. Timeliness of data collection and data distribution is another issue which needs attention. Various users have indicated that data which is currently reported monthly would be more valuable if it were collected on a daily, weekly or semimonthly basis. Once collected, data must be distributed before it is available to the systems fed by cost center feedback. There are differences of opinion among user groups about optimal distribution timing, and there is no convenient way for users who do not schedule distributions to know when they have been done.

After cost center feedback data has been distributed, it is archived on monthly history tapes. One of the greatest difficulties users have experienced with these tapes centers around knowing when they are complete. Under current policy history tapes can be modified indefinitely. Due to physical limitations imposed by the storage medium, data on tape is not readily accessible to users either. Given the high volume of cost center feedback transactions and the importance of cost center feedback data to users throughout KDOT, this issue may need to be addressed in the future. A final problem associated with archival of cost center feedback data involves locating and/or obtaining data needed for reporting. At any given time a particular set of data may be on either the active cost center feedback file, the history file, or both. People time and computer time must be expended to determine where the needed data is and return it to a compatible format when it resides on both files.



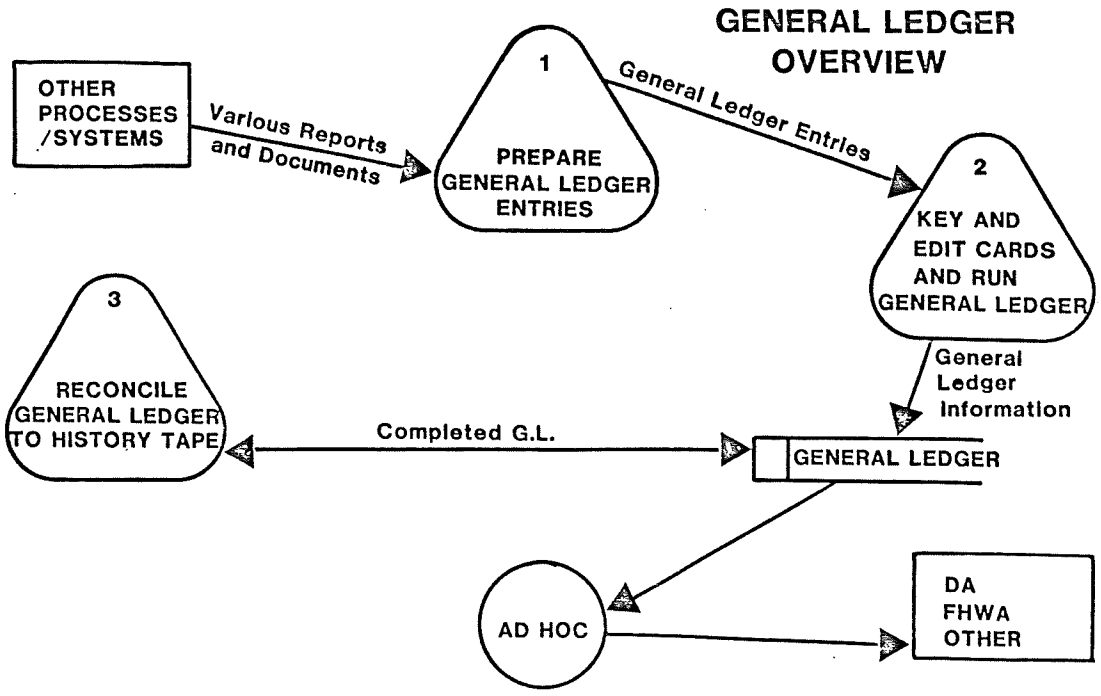
General Ledger. The general ledger system is used by the General Accounting section of Fiscal Management to build and maintain a general ledger for internal accounting purposes. General ledger entries are prepared manually by Fiscal Management personnel, then sent to data entry where they are transferred to a punched-card format. These cards serve as input to the automated general ledger system. The automated general ledger system has no on-line capabilities. Output consists of ledger reports by accounting parameters and organizational entities. Although general ledger data is (manually) obtained from other automated KDOT systems, the general ledger does not directly interface with any other automated system. The Bureau of Management Services is responsible for the general ledger.

The KDOT general ledger is not a modern, conventional general ledger because it does not control subsidiary ledgers, the account structure is no longer conventional, and it is not posted in a conventional manner.

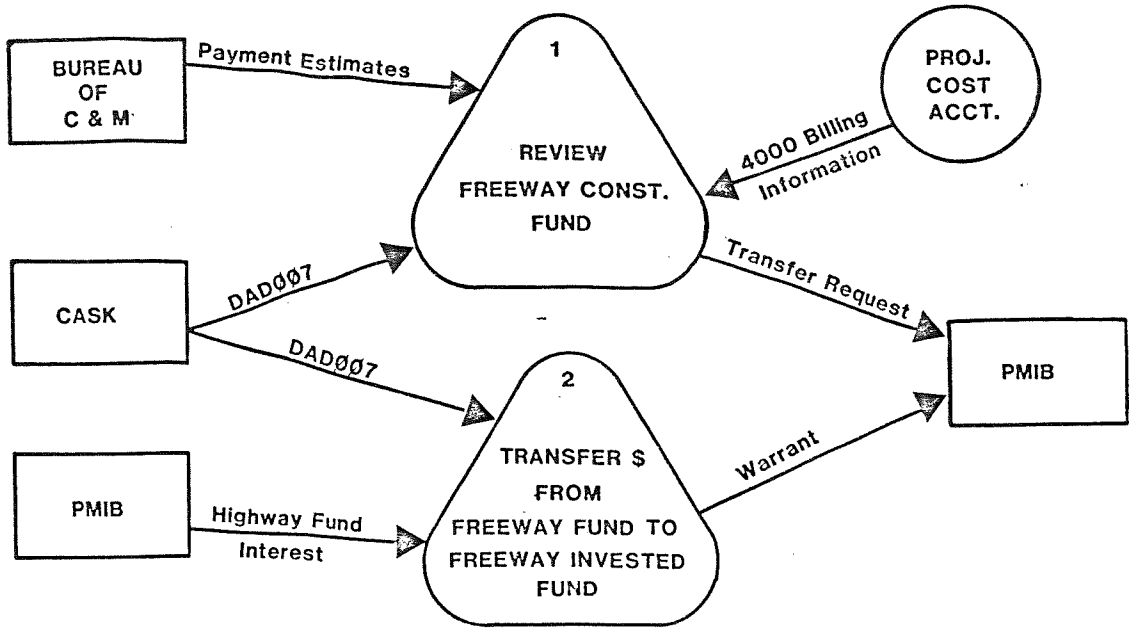
The automated general ledger system is one of the oldest KDOT systems running. The system relies on card input, and all general ledger entries are prepared manually. This requires a significant time investment and increases the chance for errors. Data needed to complete general ledger entries is not available in a timely fashion, and monthly general ledger entries sometimes are not completed for three or four months. Preparation of inventory adjustments

(general ledger month thirteen) and closing entries (general ledger month fourteen) is always quite time-consuming. As a result, the fiscal year general ledger closeout is not completed until at least October.

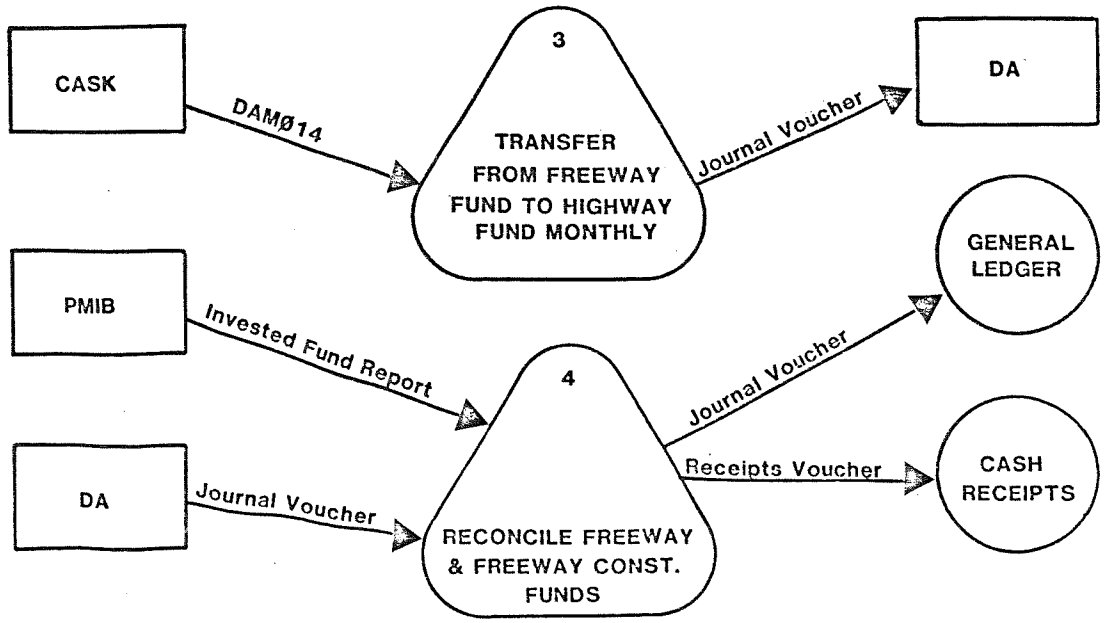
Possibly because of the antiquated nature of the system, general ledger information is not widely used. According to the Chief Accountant in the General Accounting section, the only current general ledger user is the FHWA. They have identified two problems with the general ledger. The first is the absence of a consistent monthly cutoff date for the general ledger. Secondly, they have questioned reconciliation of the general ledger.



CASH MANAGEMENT— FUND BALANCES OVERVIEW



CASH MANAGEMENT— FUND BALANCES OVERVIEW

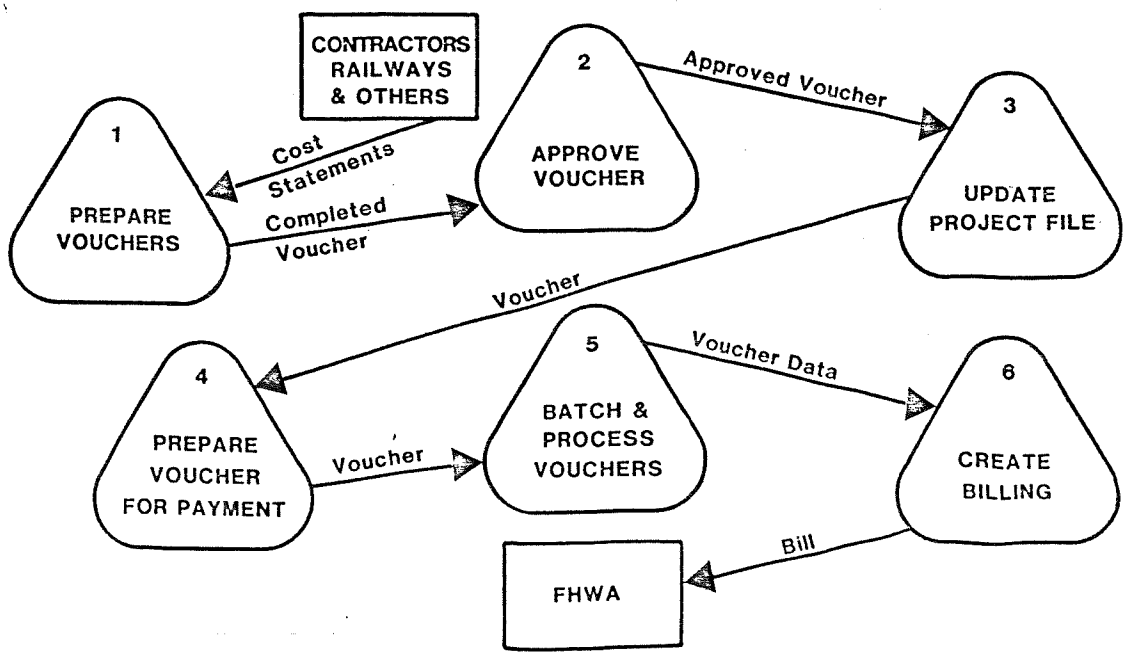


Federal Aid Billing/Project Cost Accounting. The federal aid billing/project cost accounting system is designed to track project costs by work phase and prepare billings for submittal to FHWA. System inputs include both on-line file updates and expenditure posting accomplished by cost center feedback. System outputs consist of on-line information and reports. Cost center feedback is the only other system federal aid billing/project cost accounting interfaces with. Responsibility for the system is shared by several bureaus, including the Bureau of Management Services, which is responsible for actual submission of billings to FHWA.

According to Fiscal Management personnel, approximately two percent of all preview billings have errors. These are usually coding errors. An FHWA representative has cited other problems, including difficulty in determining how much of a project's total cost has been billed to FHWA, the fact that participation factors must be rounded down to whole percentages, and the failure to categorize non-participating costs as to reason (e.g., costs in excess of agreement, audit citations, etc.). Adjusting billing rates for individual projects in the billing system to accommodate non-participating work results in a simple but inflexible billing system and leads to both under-claims and over-claims from FHWA.

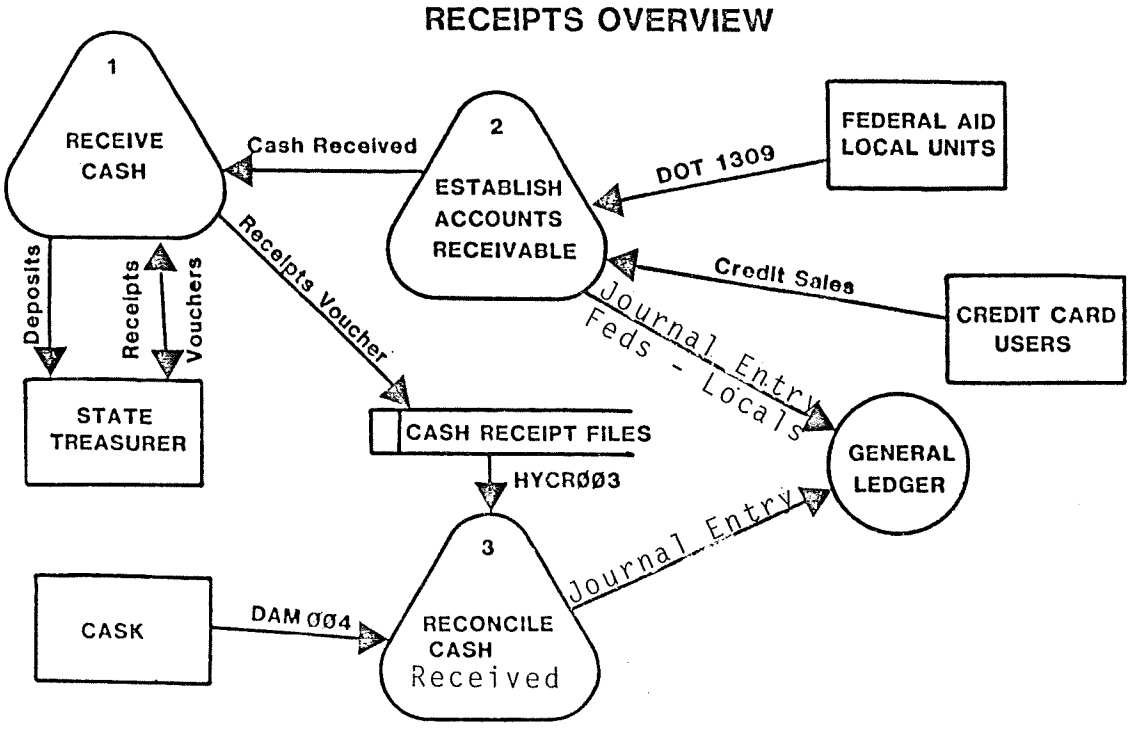
Additional problems have been created by the fact that FHWA, UMTA and Safety are all different but the system has forced them to be treated the same way. (For example, work phase is needed by FHWA but is not relevant to UMTA.) The Inspector General's Office has indicated that problems also result from the fact that the federal aid billing system is not completely automated. Given the importance of maximizing scarce resources, manual procedures need to be re-evaluated. The Chief Accountant in the Federal Aid section has indicated it may be possible to eliminate some of the manual files which are currently maintained. Furthermore, if project authorization dates recognized by the automated billing system included day as well as month and year, manual double checking of costs incurred during the authorization month could be eliminated. This would also prevent delays in clearing subsequently eligible non-participating charges.

FEDERAL AID BILLING/PROJECT COST ACCOUNTING OVERVIEW



Receipts. KDOT's receipts processing includes both billing and collection functions. Most front-end receipts processing is performed manually. After collection, cash receipts are coded and keyed in a punched-card format for entry in the automated cash receipts system. Cash receipts system output is limited to printed reports; no on-line information is available. There are no direct interfaces between the automated cash receipts system and other KDOT systems. However, cash receipts are also entered in the cost center feedback system if they constitute a credit to previously recorded expenditures. (This is done to prevent an apparent overstatement of expenditures.) The General Accounting section of Fiscal Management manually selects the receipts to be entered. They are not shown in cost center feedback as receipts, but rather as a "contra-expense". For example, when vehicle repairs are paid for with insurance money, the repairs appear as expenditures and the insurance settlement appears as an offset.

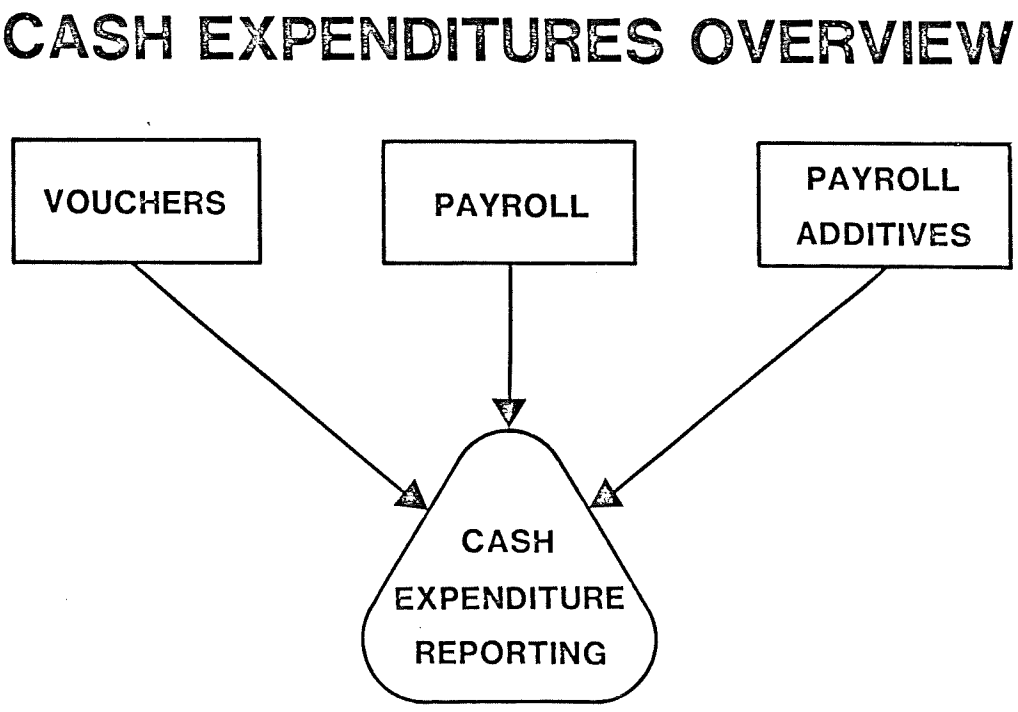
Like the general ledger system, KDOT's automated cash receipts system is an old, outmoded system which is dependent on card input. The automated system is not compatible with other automated KDOT systems, and computerized information is not readily accessible to users. Not only does the current automated system need to be updated, but some manual receipts functions need to be automated. Integration of this process with the cost center feedback system could eliminate both duplicate cash receipt cost center feedback data entry and the manual selection of records for the cost center feedback system.



Cash Expenditures. A specialized series of reports provides a view of "cash expenditures" using KDOT and statewide accounting parameters. Cash expenditures are defined by KDOT to include all transactions that either include cash or eventually will result in a cash transaction. Data used to produce monthly cash expenditure information is obtained from the cost center feedback system. The General Accounting section of Fiscal Management is responsible for cash expenditure reporting.

Two problems with cash expenditure reporting have been identified. The first involves the sheer volume of data being reported. During the system requirements definition phase it was discovered that most of the approximately 100,000 lines (nearly 1700 pages) of information produced each month was not needed or used. Cash expenditure reporting has been revised so that monthly reporting now totals approximately 25,000 lines (nearly 425 pages). Still, further consolidation and/or better inquiry facilities may be needed to assure that resources devoted to monthly cash expenditure reporting result in information that is both meaningful and manageable.

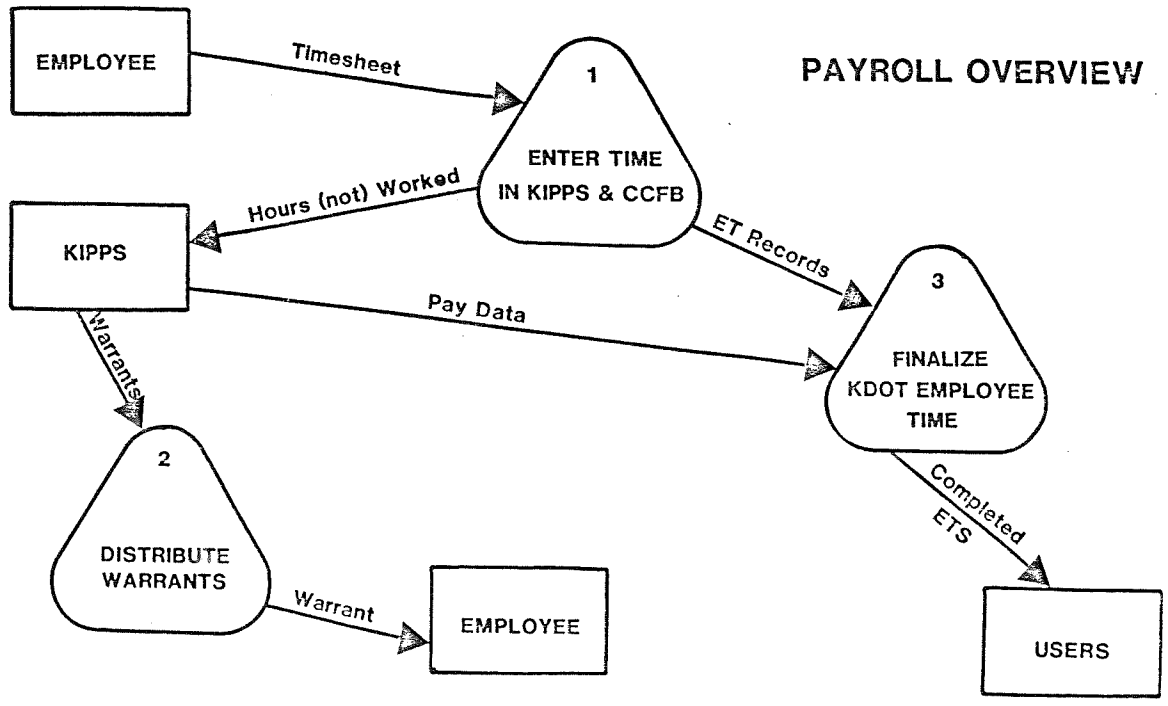
The second problem with cash expenditure reporting is the fact that it is usually at least three months behind. This delay is caused by the delay in arriving at final reconciled monthly payroll data.



Payroll. Each month employee time information is entered in both the Department of Administration's payroll system (KIPPS) and cost center feedback. The Department of Administration issues paychecks to KDOT employees, while KDOT's monthly "payroll" processing is intended to provide complete and accurate cost accounting information for managerial decision-making and federal aid billing purposes.

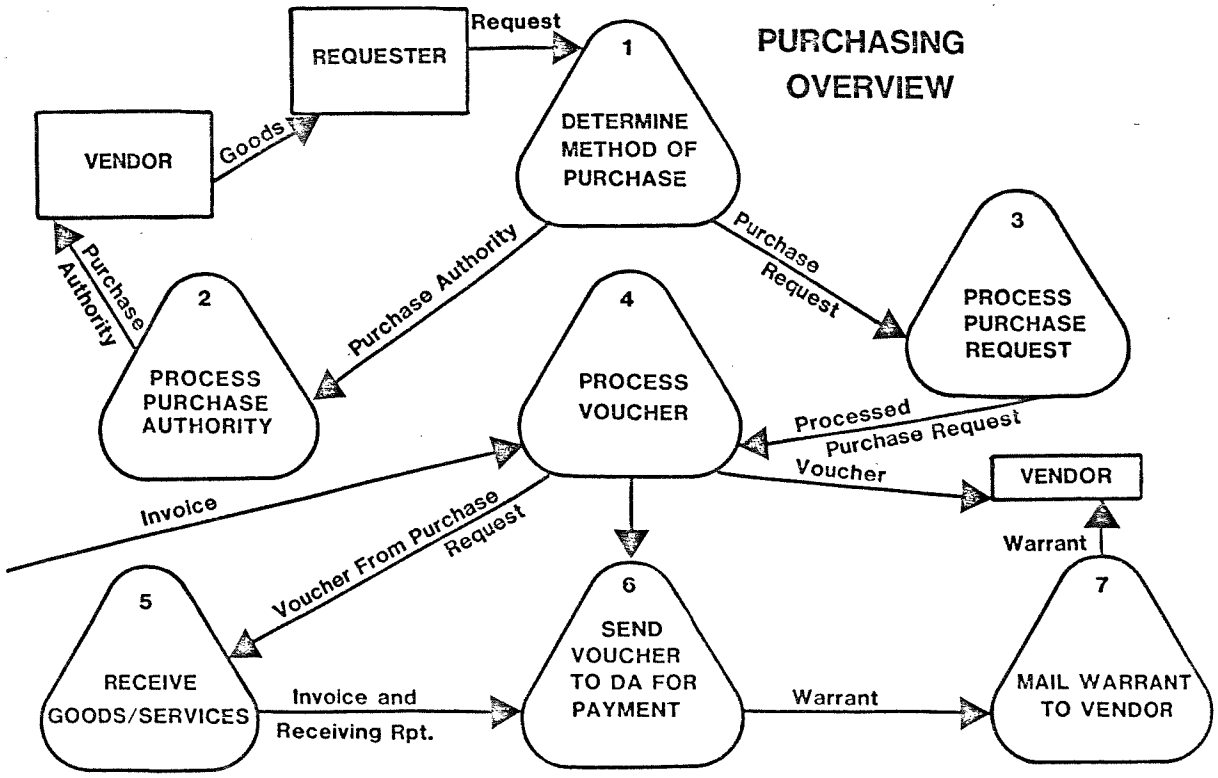
Inputs to KDOT's monthly payroll processing include employee time sheets which are entered through cost center feedback and KIPPS pay tape data which is provided by the Department of Administration. Payroll processing output includes various printed reports and prorated cost center feedback employee time records. Through cost center feedback distribution mechanisms payroll expenditure data is posted to several other KDOT systems. The General Accounting section of Fiscal Management is responsible for monthly payroll processing.

There are significant delays (as much as three months or more) between the time payroll data for a particular pay period becomes available and the time it is reconciled by Fiscal Management. By far the most significant problem with KDOT's payroll processing is the failure to reconcile payroll data in a timely manner. Numerous users throughout the department have cited this problem as one with a serious adverse impact on their operations. Users have also noted that certain kinds of coding errors are not detected by either the automated edits or the final reconciliation process. Finally, the automated payroll processing mechanisms available to Fiscal Management personnel are less than ideal. Although some payroll data is available on-line, most data manipulation must be done in a batch mode, leading to delays and decreased flexibility.



Purchasing. The purpose of the purchasing process is to acquire goods and services of acceptable quality at the lowest possible price. Automation is not a significant factor in KDOT's purchasing process, although vouchers are entered in the cost center feedback system after being paid by the Department of Administration. Inputs to the purchasing process include user requests and various KDOT and Department of Administration documents. Outputs include vouchers, warrants issued to vendors, and the goods or services purchased. Since information about past purchases is often used as a basis for making future purchases, various files containing such information are maintained manually. The Procurement section of Fiscal Management is in charge of purchasing.

KDOT users seem to be generally satisfied with the purchasing process. However, two areas which need to be addressed have been identified. The first involves manual record keeping. Information about past purchases is often used by Procurement personnel as a basis for making future purchases. However, much of this information is not incorporated in an automated system. Manual indexing and retrieval of the needed information tends to be quite cumbersome and time-consuming. The second area which may need attention is the revision of forms used in the purchasing process. Given both the large number of forms used and the fact that information is often transferred from one form to another, consolidation of purchasing documents might significantly simplify purchasing.

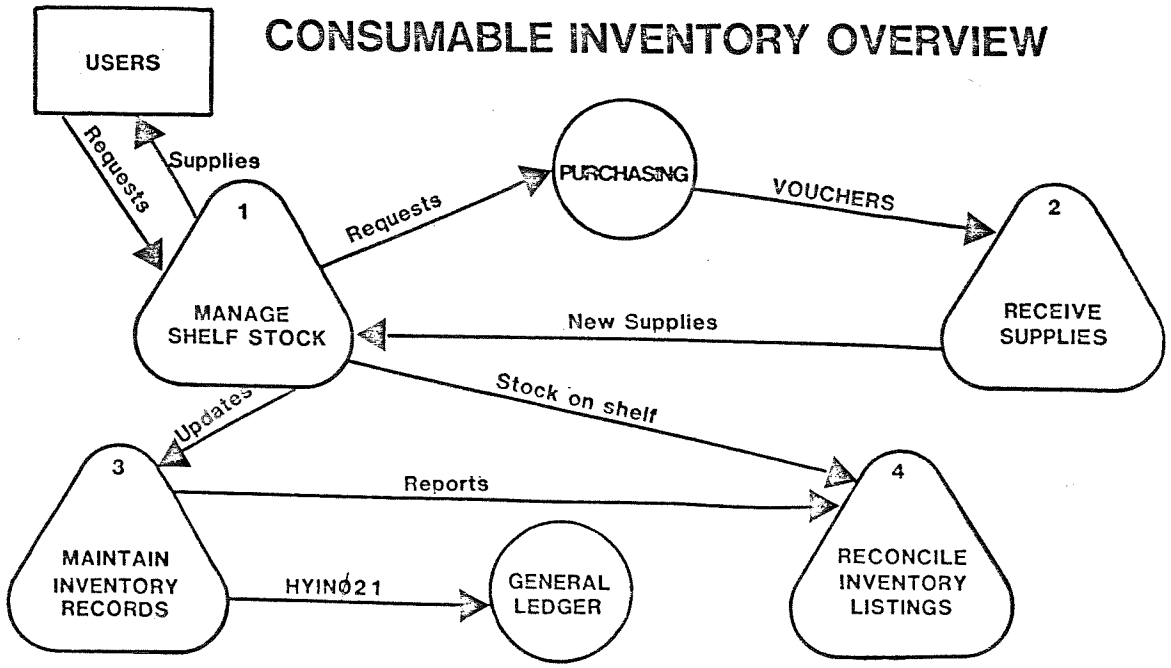


Consumable Inventory. Most of KDOT's consumable inventory is included in the automated consumable inventory system. It is a perpetual inventory system updated every night. This system assists in managing the department's consumable inventory and is intended to assure availability and accountability. Vouchers are the primary input document used by the consumable inventory system. They are keyed at the district level for consumable inventory, processed by cost center feedback and then posted to consumable inventory files. Consumable inventory output includes usage reports, issues and receipts reports and some on-line information. The Procurement section of Fiscal Management is responsible for the automated consumable inventory system.

The only portion of KDOT's consumable inventory which has not been automated is the supplies used by the Support Services section. These supplies have not been incorporated in the automated system yet because the resources needed to do so have not been available.

A manual record keeping system which duplicates the automated consumable inventory system is still maintained. Stockroom personnel tend to rely heavily on their manual records, possibly because terminals needed to access automated data are not available or they have not received training in their use. Another problem results from the fact that in some stockrooms the goods on the shelves have been charged out, while in others they have not. Therefore, parts or supplies which are actually sitting on a stockroom shelf may appear to be unavailable. Some users have indicated we have too many inventory stock numbers. Further confusion is created by the fact that the same items are sometimes carried in the system under more than one number.

Yet another problem with the consumable inventory system is the absence of automatic reorder points. We sometimes run out of stockroom supplies. It is often difficult to determine when supplies should be reordered because shelf-life, quantity on hand and demand must all be weighed. Automatic reorder points could greatly simplify reordering. The automated consumable inventory system may also need to be modified to include the supplies used by the Support Services section. Currently, Support Services believes it cannot adequately monitor the value of its consumable inventory.



Capital Inventory. Responsibility for inventories of capital accounts is shared by the General Accounting and Procurement sections of Fiscal Management. The following capital inventory accounts are automated: office equipment; trucks, tractors, etc.; attachments; communications; and automobiles. These are all part of the Equipment Management System (EMS).

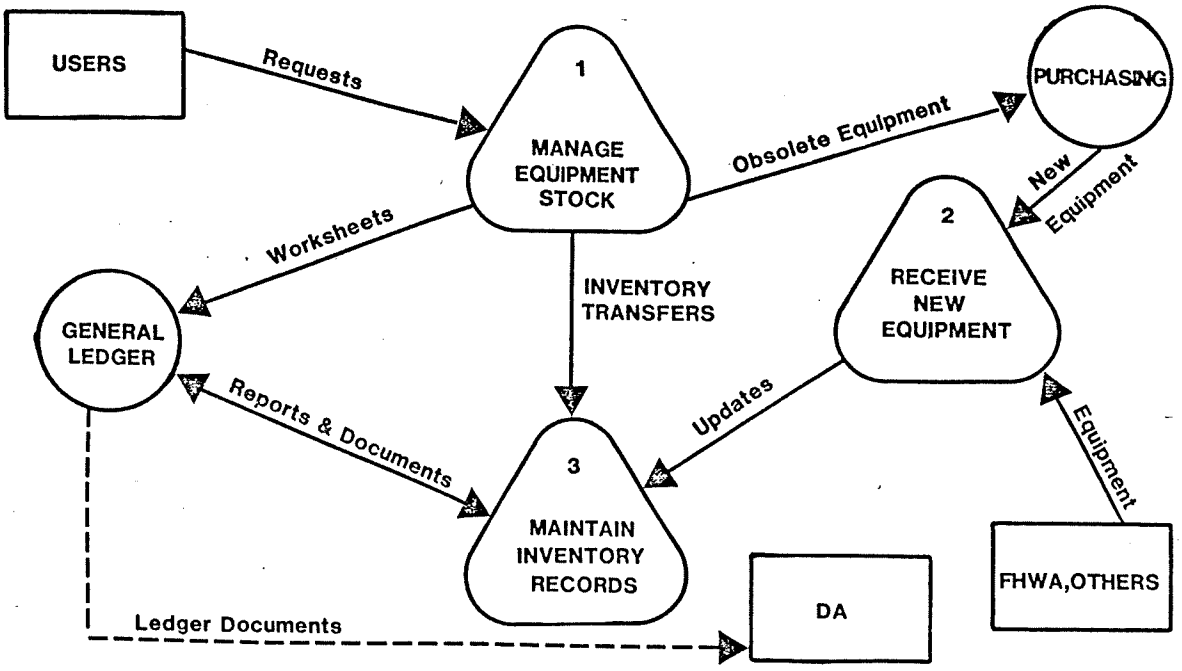
EMS is designed to provide management information to be used in managing the agency's equipment fleet and other capital assets. The system receives expenditure data from and shares common data with cost center feedback. Source documents are entered at the district level and expenditure posting is accomplished through cost center feedback. EMS data is stored in computerized data base files using a data base management system called TOTAL. These files are structured so that users have access to the data in an on-line as well as a batch environment. In addition to information available through on-line facilities, users may initiate and customize report requests through an extremely flexible report request facility. A comprehensive users' guide covering file structure, inputs, reports, on-line inquiry, tables and data definitions is available to assist EMS users.

Four capital inventory accounts have not been automated. They are: shop tools, lab equipment, land and buildings. Although all four of these accounts can probably be added to EMS, shop tools and lab equipment can be added most easily. There are plans to automate these areas.

The four capital inventory accounts which have not yet been automated need to be incorporated in the automated system. Automation should eliminate the need for time-consuming manual record keeping and it should greatly reduce the lengthy delays in arriving at accurate year-end inventory totals. Continued manual record keeping which duplicates information currently available through EMS is also a problem. Once a capital inventory account has been automated, unnecessary manual record keeping needs to be stopped.

Several ways in which the automated capital inventory system can be improved have been identified. EMS data would be more useful if input documents were received and processed on a daily or weekly, rather than monthly, basis. There is also a need to devote more time to data verification and the fine-tuning of exception report criteria for data available through the automated system. Finally, under-utilization of EMS has been a problem. It might be addressed by management placing greater emphasis on the system and devoting more resources to it.

CAPITAL INVENTORY OVERVIEW



PART III: REQUIREMENTS DEFINITION

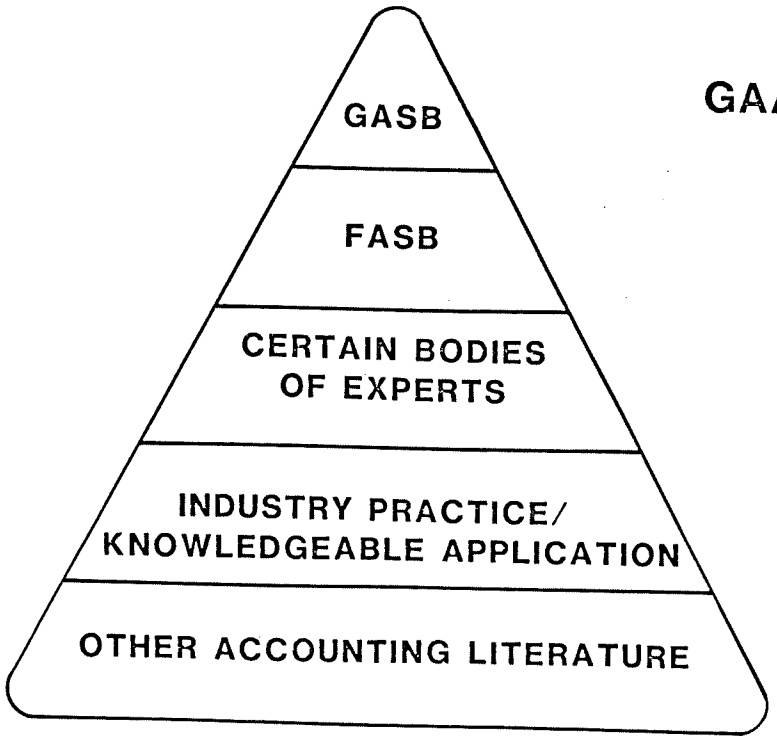
SECTION 1.0 - PROPOSED OBJECTIVES

Conceptual Framework

Governmental Accounting Standards Board. Authoritative accounting standards, commonly called Generally Accepted Accounting Principles (GAAP) in the private sector have a long history and are relatively well developed. Authoritative accounting standards help reduce damaging charges of bias, misinterpretation, inexactness, and ambiguity in financial reports. The need for such standards increases with the increasing complexity of organizations and their economic affairs. The Financial Accounting Standards Board (FASB) of the Financial Accounting Foundation has been the authoritative source of private sector accounting standards since the early seventies.

The Foundations's charter was amended and the Governmental Accounting Standards Board (GASB) was created in April 1984 to establish standards of financial accounting and reporting for state and local governments. Thus, pronouncements of GASB shall be considered as authoritative standards for KDOT.

GASB Statement Number 1 (July 1984) establishes the authoritative status of the statements and interpretations of the National Council of Governmental Accounting (NCGA) and certain works of the American Institute of Certified Public Accounts (AICPA).



GAAP HIERARCHY FOR KDOT

Nature of a Conceptual Framework. The 1976 "FASB Discussion Memorandum -Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurement" indicates that a conceptual framework is like a constitution in that it provides "a system of interrelated objectives and fundamentals that can lead to consistent standards . . ." It is hoped that the development of a conceptual framework for KDOT will provide the direction and consistency that has been identified as a critical deficiency in KDOT.

Mission

The mission of FIRST is as follows:

> FIRST shall provide 1) financial information useful for making decisions, 2) information useful for evaluating managerial and organizational performance, and 3) information demonstrating accountability and stewardship.

The NCGA in "Concepts Statement I - Objectives of Accounting and Financial Reporting for Governmental Units" (1982, Page 2) establishes that the overall goal of governmental accounting and financial reporting is:

> To provide 1) financial information useful for making economic, political, and social decisions, and demonstrating accountability and stewardship; and 2) information useful for evaluating managerial and organizational performance.

While the cornerstone goal of FIRST is derived from and consistent with the NCGA goal, it was modified to stress decision-making and performance evaluation since FIRST is, to a large degree, a managerial accounting system. The demonstration of accountability and stewardship is included in the goal.

The overall goal provides a standard for evaluation of all accounting and financial reporting objectives, characteristics, assumptions, constraints, principles, and practices. While these must be compatible with the overall goal, NCGA cautions that mere compatibility with the overall goal does not assure that they are acceptable. (NCGA Concepts I, Page 3)

The primary focus of governmental accounting and financial reporting on decision-making requires that emphasis must be given to the usefulness of the information. Accounting and financial reporting is defined as the "collection, maintenance, processing and communication of information useful in making decisions or in assessing organizational performance." The NCGA notes that "nonmonetary information such as measures of service outputs is included within the scope of this statement." (NCGA, Concepts I, Page 1) KDOT will apply the appropriate accounting and financial reporting tests strenuously to all information traditionally supplied by accounting systems and to the appropriate degree for all other information used in reports produced by FIRST.

General Goals

The "Statement of Financial Accounting Concepts No. 4 - Objectives of Financial Reporting by Nonbusiness Organizations" (1980) by the Financial Accounting Standards Board (FASB) may not be mandatory for KDOT; however, it is the policy of KDOT that the concepts statement is voluntarily accepted. While

FASB does not differentiate between goals and objectives, paragraphs 35, 38 and 40 appear to be appropriately classified as goals. The following FIRST General Goals are restatements of the FASB paragraphs with only minor working changes.

Resource Allocation Decisions. FIRST shall provide information that is useful to present and potential resource providers or allocators and other users in making rational decisions about the allocation of resources to and within KDOT. (restatement of paragraph 35)

Assessment of work products. FIRST shall provide information to help present and potential resource providers or allocators and other users in assessing the work products of KDOT and its various units and their ability to continue to provide those work products. (restatement of paragraph 38)

Assessment of stewardship. FIRST shall provide information that is useful to present and potential resource providers and allocators and other users in assessing how KDOT managers have discharged their stewardship responsibilities and about other aspects of their performances. (restatement of paragraph 40)

Objectives

NCGA in its "Concepts Statement I" establishes the objectives of governmental accounting and financial reporting. The following FIRST objectives are restatements of the NCGA:

Organizational and managerial performance. FIRST shall provide information useful for evaluating managerial and organizational performance.

a) For determining the cost of programs, functions and activities in a manner which facilitates analysis and valid comparisons with established criteria, among time periods, and with other governmental units.

b) For evaluating the efficiency and economy of operations of KDOT units, programs, activities and functions.

c) For evaluating the results of programs, activities, and functions and their effectiveness in achieving their goals and objectives.

d) For evaluating the equity with which the burden of providing resources for KDOT operation is imposed.

While this accounting objective is similar for both governmental and profit-seeking organizations, a significant difference is the measure of performance. NCGA has assumed that it is the function of accounting and financial reporting to provide reasonable measures of performance, both for the organization as a whole and for particular programs and activities. (NCGA Concepts I, Paragraph 61)

The determination of cost information must be based on the use of the data. NCGA notes cost information useful for providing for reimbursement under grants may not be useful for performance evaluation. (NCGA, Concepts I, Paragraph 62)

NCGA cautions that "accounting and financial reporting cannot make the determination as to whether the burden (of providing resources) has been spread equitably but can provide information useful for interested parties in making their own determinations." (NCGA Concepts I, Paragraph 67)

Planning and Budgeting. FIRST shall provide information useful for planning and budgeting, and for forecasting the impact of the acquisition and allocation of resources on the achievement of operational objectives.

a) For forecasting the impact of program alternatives on short-term financial resources of the governmental unit.

b) For forecasting the impact of program alternatives on the financial condition of KDOT.

c) For forecasting the amount of financial receipts needed to support activities for a given time period.

d) For forecasting the effectiveness, including the distribution of benefits among groups, of proposed programs and activities in achieving goals and objectives.

e) For forecasting the incidence of the burden of providing resources for governmental operations.

Legal, Contractual and Fiduciary Requirements. FIRST shall provide financial information useful for monitoring performance under terms of legal, contractual, and fiduciary requirements.

a) For determining whether financial resources were utilized in accordance with legal and contractual requirements, including budgetary provisions.

b) For determining whether financial contributions of taxpayers, grantors and service recipients intended to support activities of a given time period were sufficient.

c) For determining whether fees or reimbursements are in accordance with legal, grant or contractual requirements.

d) For accounting for the use and disposition of resources entrusted to public officials.

Financial Condition. FIRST shall provide financial information useful for determining and forecasting the financial condition of the governmental unit and changes therein.

a) For determining the value and forecasting the service potential of resources held by KDOT.

b) For determining whether the value and service potential of physical resources have been maintained during a period, and forecasting the financial impact of maintaining or replacing service capacity.

c) For forecasting the amounts and timing of future outflows resulting from existing commitments and the ability of KDOT to meet these when they come due.

d) For determining and forecasting the cost of programs or services provided by KDOT.

Short-term Financial Resources. FIRST shall provide financial information useful for determining and forecasting the flows, balances and requirements of short-term financial resources of the governmental unit.

a) For determining and forecasting the balances and availability of short-term financial resources, including cash, for specific uses.

b) For forecasting the need to obtain additional short-term financial resources.

c) For forecasting the impact on short-term financial resources of specific revenue and other financing sources.

d) For forecasting the impact on short-term financial resources of planned programs and activities.

e) For forecasting the ability of KDOT to meet its short-term obligations as they come due.

Communication. FIRST shall communicate the relevant information in a manner which best facilitates its use.

a) To present the information clearly and concisely.

b) To make the information conveniently available, comprehensively and with full disclosure.

c) To enhance the reliability of the information.

d) To provide the information on a timely basis.

e) To present the information in a comparable manner among entities and among time periods.

Qualitative Characteristics of Accounting Information.

The overriding criterion for evaluating accounting choices is the usefulness of the information provided for decision-making. FASB has determined that relevance and reliability are the two primary qualities that make accounting information useful for decision-making. (FASB, Concepts 2, Paragraph 15) Comparability and consistency are considered secondary qualities.

Relevance. Accounting information is relevant if it is capable of influencing the making of a decision. For information to be relevant, it must help users make predictions, confirm or correct prior expectations and be available to decision-makers before it loses its capacity to influence their decisions. As has been shown, delay in providing information is a significant problem in KDOT.

Reliability. Reliability is the quality of information that gives assurance that it is reasonably free of error and bias and is a faithful representation. Accounting information must be verifiable, faithful, neutral. Verifiability is a quality that is demonstrated when a high degree of consensus can be secured among independent measurers using the same measurement methods. Representational faithfulness means agreement between accounting numbers and descriptions and the resources or events that these numbers and descriptions purport to represent.

Comparability. Information that has been measured and reported in a similar manner for different organizations is considered comparable. Comparability enables users to identify real similarities and differences in economic phenomena.

Consistency. When an accounting entity applies the same accounting treatment from period to period, it is considered to be consistent in its use of accounting standards. The nature and effect of any accounting change and the justification of the change must be disclosed in the financial statements for the period in which the change is made.

Basic Assumptions.

Economic Entity Assumption. It is assumed that economic activity can be identified with a particular unit of accountability. In governmental accounting, the entity concept relates to the separate or fund type entities, not the organization as a whole.

Going Concern Assumption. It is expected that the entity or fund will be in existence long enough to fulfill its objectives and commitments.

Periodicity Assumption. The periodicity or time period assumption holds that the economic activities of an entity can be divided into artificial time periods. The periodicity assumption typically relates to the flow of funds during the budgetary period.

Monetary Unit Assumption. Governmental accounting is based on the assumption that money is the common denominator by which economic activity is conducted and that the monetary unit provides an appropriate basis for accounting measurement and analysis. However, it is appropriate to include statistical data in financial reports.

Constraints

Cost-Benefit Relationship. FASB provides "cost/benefit considerations may indicate that information understood or used by only a few should not be provided."

Materiality. An item is material if its inclusion or omission would influence or change the judgment of a reasonable person. Consideration must be given to relative size, importance, and nature of the item.

PART III: REQUIREMENTS DEFINITION

SECTION 2.0 - ACCOUNTING PRINCIPLES AND PRACTICES TO BE USED BY KDOT

The authoritative source of governmental accounting principles is the NCGA "Statement I -Governmental Accounting and Financial Reporting Principles." These principles have been restated for use in KDOT.

Accounting and Reporting Capabilities. FIRST must make it possible both: (a) to present fairly and with full disclosure the financial position and results of financial operations of the funds and account groups of KDOT in conformity with generally accepted accounting principles; and (b) to determine and demonstrate compliance with finance-related legal and contractual provisions.

It is the policy of KDOT that when there is a conflict between legal provisions and generally accepted accounting principles (GAAP) the accounting system shall be "maintained on a legal-compliance basis, but should include sufficient additional records to permit GAAP-based reporting."

Fund Accounting Systems. FIRST shall be organized and operated on a fund basis. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein, which are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations.

NCGA notes that physical segregation of the assets and liabilities is not required and that each fund may have financial transactions and debtor-creditor relationships with the other funds. NCGA classifies accounting entities as Governmental Funds, Proprietary Funds, Fiduciary Funds, and Account Groups. Proprietary and Fiduciary Funds are not relevant to KDOT.

The acquisition, use, and balances of KDOT's expendable financial resources and related current liabilities should be accounted for through governmental funds. Expendable assets should be assigned to the various governmental funds according to the purposes for which they may or must be used, current liabilities should be assigned to the fund from which they are to be paid; and the difference between governmental fund assets and liabilities should be referred to as the fund balance. The focus of governmental fund measurement is upon determination of financial position and changes in financial position (sources, uses, and balances of financial resources).

The general fixed assets and the unmatured principle of its general long-term debt should be accounted for in account groups. These account groups are not funds, they do not reflect available financial resources and related liabilities, but are accounting records of the general fixed assets and general long-term debt and certain associated information.

Number of Funds. KDOT shall establish and maintain only those funds required by law and sound financial administration. Only the minimum number of funds consistent with legal and operating requirements should be established, since unnecessary funds result in inflexibility, undue complexity, and inefficient financial administration.

Fixed Assets and Long-Term Liabilities. All fixed assets of KDOT should be accounted for through the General Fixed Assets Account Group. All unmatured general long-term liabilities of KDOT should be accounted for through the General Long-Term Debt Account Group.

While reporting of infrastructure fixed assets (roads, bridges, etc.) is optional, KDOT does account for such assets. This long standing practice may need to be considered. General fixed assets include those obtained through noncancellable leases. Significant noncapitalized lease commitments and non-accrued contingent liabilities should be disclosed.

Valuation of Fixed Assets. Fixed assets should be accounted for at cost or, if the cost is not practicably determinable, at estimated cost. Donated fixed assets should be recorded at their estimated fair value at the time received. This is a significant issue for KDOT because KDOT has elected to report infrastructure fixed assets.

Depreciation of Fixed Assets. Depreciation of general fixed assets should not be recorded in the accounts of governmental funds. Depreciation of general fixed assets may be recorded in cost accounting systems or calculated for cost finding analyses; and accumulated depreciation may be recorded in the General Fixed Assets Account Group.

Accrual Basis. Governmental fund revenues and expenditures should be recognized on the modified accrual basis. Revenues should be recognized in the accounting period in which they become available and measurable. Expenditures should be recognized in the accounting period in which the fund liability is incurred, if measurable, except for unmatured interest on general long-term debt and on special assessment indebtedness secured by interest-bearing special assessment levies, which should be recognized when due.

Transfers should be recognized in the accounting period in which the interfund receivable and payable arise.

Budget Formulation, Control, and Reporting. An annual budget(s) should be adopted by KDOT and every unit of KDOT. The accounting system should provide the basis for appropriate budgetary control. Budgetary comparisons should be included in the appropriate financial statements and schedules for governmental funds for which an annual budget has been adopted.

Account Classification. Interfund transfers and proceeds of general long-term debt issues should be classified separately from fund revenues and expenditures or expenses. Governmental fund revenues should be classified by fund and source. Expenditures should be classified by fund, function (or program), organization unit, activity, character, and principal classes of objects.

Common Terminology. A common terminology and classification should be used consistently through the budget, the accounts, and the financial reports of each fund.

Interim and Annual Financial Reports. Appropriate interim financial statements and reports of financial position, operating results, and other pertinent information should be prepared to facilitate management control of financial operations, legislative oversight, and where necessary or desired, for external reporting purposes.

A comprehensive annual financial report covering all funds and account groups of the governmental unit - including appropriate combined, combining, and individual fund statements; notes to the financial statements; schedules; narrative explanations; and statistical tables - should be prepared and published.

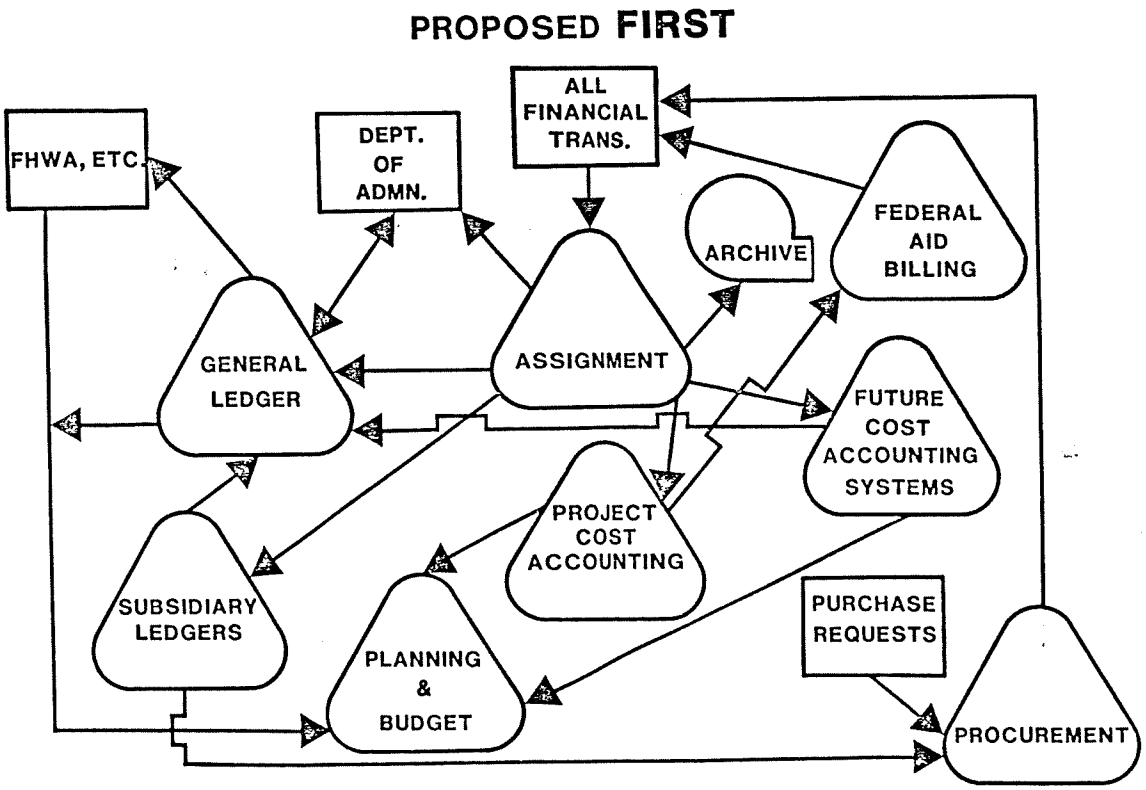
General purpose financial statements may be issued separately from the comprehensive annual financial report. Such statements should include the basic financial statements and notes to the financial statements that are essential to fair presentation of financial position and operating results (and changes in financial position of proprietary funds and similar trust funds).

PART III: REQUIREMENTS DEFINITION

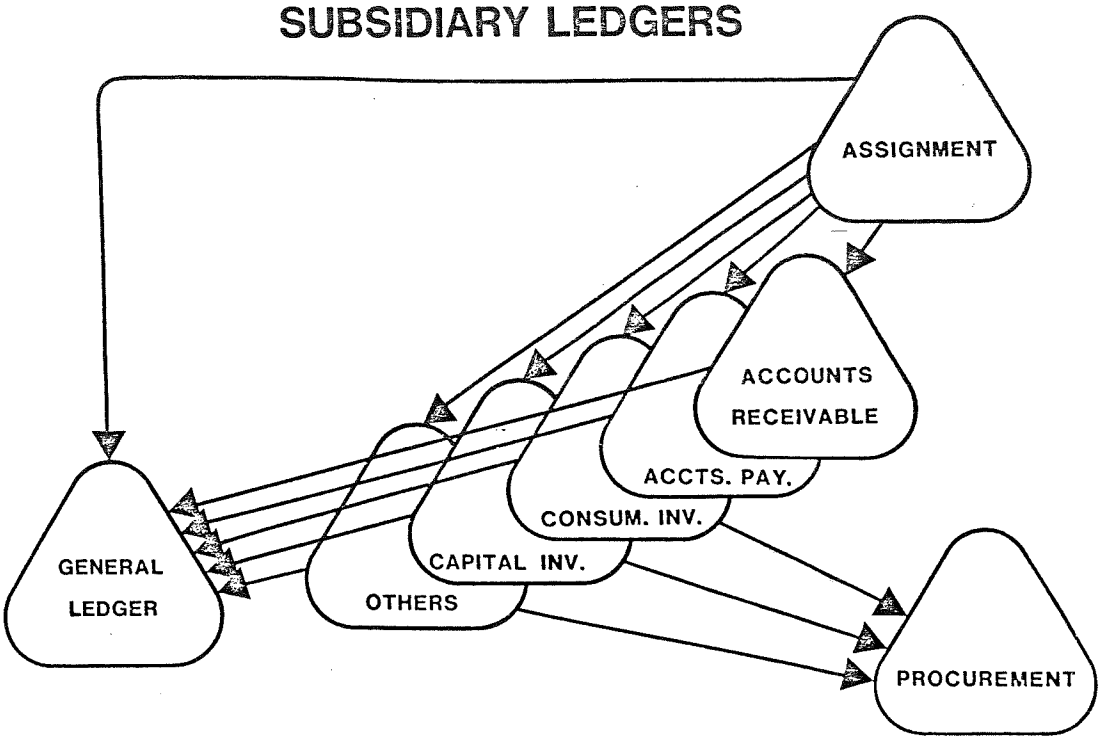
SECTION 3.0 - PROPOSED SYSTEM REQUIREMENTS

Overview

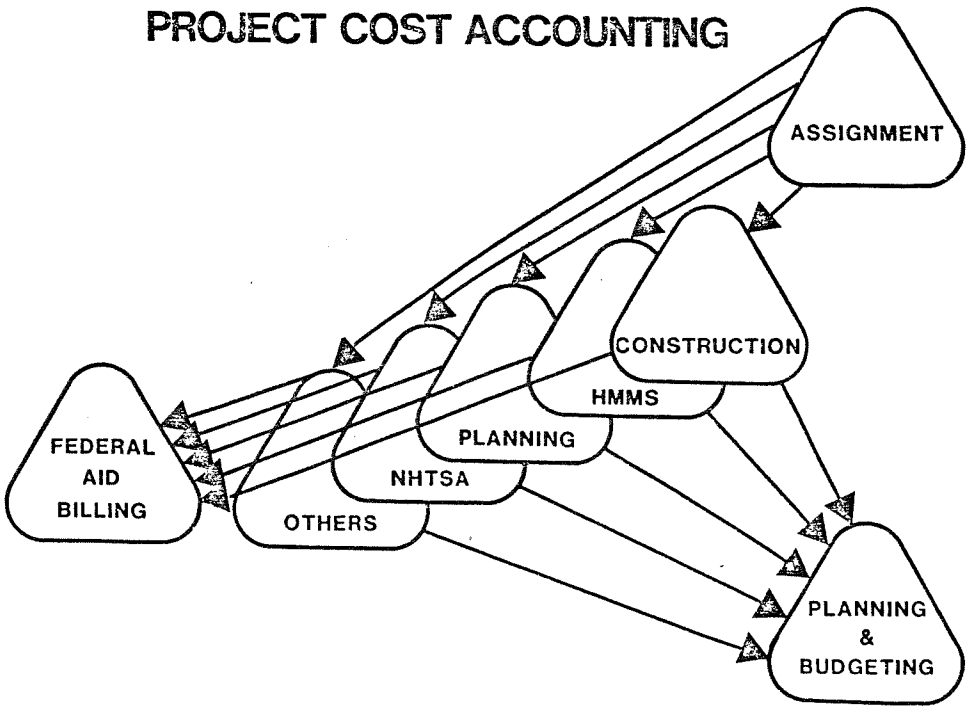
One of the major concerns with the current system is that it does not have a cohesive logical structure. While it is possible to develop a structure to guide future development, the actual implementation will require modification of current systems over an extended period of time.



SUBSIDIARY LEDGERS



PROJECT COST ACCOUNTING



Information and Data Needs

Perspective. The review of the financial information structure indicates that at best there is a lack of understanding of (1) what data is available and (2) why and how it is recorded. Before a system is revised to improve the processing of data, it would be best to know whether the data is necessary and, if it is needed, what are the specific requirements for the data.

The initial SRD study has determined general informational concerns. It is now necessary to translate these concerns into various meaningful perspectives of the financial transactions.

It is known that financial transactions must be displayed to show how they relate to the legal authority to expend funds. It is also necessary to display the same financial transactions in a manner that allows managers to evaluate projects, processes, and units.

Once there is agreement on the various perspectives that are needed, the data requirements can be determined.

Fund Structure. The initial SRD study determined that it will be necessary to structure the various accounts into appropriate fund and account groups.

Transaction Records

Single Entry. A financial transaction should be recorded only one time. For example, an expenditure should not have to be entered by the District, KDOT Headquarters, and the Department of Administration. Not only does multiple entry of the same data require excessive resources, it results in confusion concerning the status of various transactions and makes reconciliation difficult.

Entry Close to Event. The entry of the data should be made as close to the event as possible. The districts have demonstrated that they can do an excellent job entering data. Since the districts are currently entering the financial data for the daily budget system, there should not be an increase in their workload. Error correction, to the extent possible, should be done where the data is entered and as quickly as possible after the original entry is made.

Time periods. While the schedule of entry should be based on the user requirements, it is necessary to clearly define collection periods. The collection time periods should be consistent with other relevant data periods.

Consolidate Forms. The current KDOT forms should be reviewed and revised. It appears that there is an excessive number of forms, duplication of data, and confusion concerning the forms. The forms should be designed to minimize the effort required to complete them.

Assignment Process

Controlled Access. The current cost center feedback system has made significant progress in establishing controlled access to the accounting system; however, all transactions (for example, most receipts) do not enter through the cost center system.

Archive Records. One of the primary reasons for establishing controlled access is to allow for the establishment of an archive record that shows the nature of the transaction, how it was distributed, and when it was distributed. Error correction should continue to be made with an additional journal entry. No entry should ever be deleted from the active system. The archive records are an essential part of the audit trail.

Accelerate Assignment. In the past, KDOT has delayed the assignment of any data until all the data can be correctly assigned. For example, because of an immaterial problem with certain payroll records, none of the personnel costs were distributed. Thus, for months HMMS was unable to provide cash information required by the Division of Operations.

Data will now be distributed as soon as individual records are reasonably error free. While the initial information should provide a very close approximation of the final period reports, it must be recognized that it will not be completely correct. It is necessary to reconcile the data presented on any two dates.

Controlling General Ledger

One of the problems cited most often in the studies of the accounting system is the general ledger. The replacement of the general ledger is a key element in the redesign of the financial information system. The general ledger must be revised so that it supports the reconciliation of data and the preparation of reports.

Integrate Systems

To a large degree, the development of controlled access to the system and the development of a general ledger will relate to this effort. The current systems must continue to be supported until they can be integrated.

Revise Programs and Procedures

The initial SRD determined that several of the fiscal procedures should be revised to increase effectiveness. Some of these revisions will require computer program modification.

Establish Controls

Accounting Controls. In addition to development of a controlling general ledger and continuation of the archive records, other accounting controls must be established. These include documentation of procedures, computer programs, responsibilities, and how exceptions are to be processed.

It is also necessary to redistribute work so that one person does not have sole knowledge and access to a key control process. This will require training of staff and documentation of what is done.

Security. FIRST must provide different levels of access to data. While some individuals must have the ability to update information, others should not have this ability but should have the ability to read all data records.

Management Controls. It is also necessary to establish specific time requirements for the completion of work and establish acceptable levels of performance.

Information Production

FIRST must produce information that is convenient to use. Data that is not organized in a manner that supports an individual in decision-making should not be considered information. Different users will have different types of decisions and thus a report that is helpful to one will not support another. Because information requirements will change over time, reports must be flexible.

Training

One interesting finding during the initial SRD study was that people did not know what information or data was available, or how to use the data that was available. Any implementation of a new system will require extensive training of both the fiscal staff and other KDOT employees.

PART IV: ANTICIPATED BENEFITS

In determining the anticipated benefits of FIRST, it is clear that there will be significant benefits in terms of the potential for improved controls, "better decisions", and efficiency of fiscal management.

Controls. Automating the general ledger, making it the focus of KDOT's accounting system, will be another major step toward creating an integrated accounting system. (The implementation of cost center feedback, a data collection, editing and distribution system, was the first). As part of the implementation of a general ledger, an in depth review of procedures, accounts and policies will result in a better understanding of accounting practices in KDOT and improved methods for handling transactions, posting to accounts and maintaining subsidiary ledgers. Hours will be saved each week that have been spent manually posting data that could be posted by the computer. Improved procedures for closing out the fiscal year will result in reducing that effort by several person-months.

The development of complete accounting manuals and a revision of methods and procedures will provide guidelines for maintaining a consistent accounting system. This will lead to greater employee productivity by reducing work duplication and providing a source of procedural information. The manuals will also be used for training and helping auditors review the system.

"Better Decisions". Tied closely to implementation of a controlling general ledger is the availability of financial information for "look-up" and financial report retrieval. The ledger system will provide the financial reports needed by the audit community and the management reports needed by all levels of KDOT. The potential for better decision making will be improved, which may lead to improved efficiency and productivity.

Ensuring that data reporting, correcting and posting are timely will mean that information for planning and forecasting is available sooner and that KDOT can be more responsive to changing trends; provide more timely legal, contractual and fiduciary reports; and respond to ad hoc requests. The ability to view or request selective information when needed and be assured it is complete, up-to-date and timely should result in better management performance and decision making.

Enhancement of project cost accounting will further provide managers with more complete information on agency resources and a way to explore deviations and exceptions in organizational performance.

Budgeting is an area that touches all managers and requires considerable time, both in planning and monitoring. A budget system that is useful and accessible will eliminate the manual systems kept by many bureaus and provide consistent information for budget decisions.

Fiscal Management Efficiency. Automation of the remaining capital inventory accounts will permit monthly reconciliation and significantly reduce fiscal year closing efforts. In addition, it will give managers direct access to their inventories and allow them to keep track of those resources better.

Providing more access to consumable inventories allows districts and bureaus to monitor their inventories better, thereby saving time and dollars. Enhancing automation to determine reorder points for inventory could provide for better availability of goods and result in lower costs through improved controls.

PART V: PROJECT RECOMMENDATIONS

In meeting the objectives of the FIRST project, all of the system functions must be implemented. However, because this is a big system and because some needs are more pressing than others, it is recommended that a controlling general ledger be our first priority. This general ledger should provide budgetary control and financial reporting.

The scope of this SRD was general in nature; therefore, it is further recommended that the next phase include a detailed SRD of accounting systems (general ledger, project cost accounting, capital and consumable inventories) in connection with the SDA Phase for the general ledger. This phase will include evaluating software packages that perform general ledger and budget functions and determining how the general ledger should fit into the accounting system. Other functions/systems must also be considered to ensure complete integration.

PART VI: SUPPORTING DATA AND APPENDICES

SECTION 1.0 - CONDUCT OF STUDY

SOM 1211.00/01 established the task force for the Financial Information and Reporting System for Transportation, established an advisory steering committee to review findings, and provided the charter for the project.

SDM/70 was the basic methodology chosen for this project, but it was revised to fit a more general SRD phase. Tasks were renumbered and therefore do not coincide with SDM/70's.

The original project team reported to the Bureau of Management Services and consisted of Jo Brown, Dan Carter, Steve Hulsopple and Cathy Jones. By the end of the phase, turnover and reorganization resulted in a staff of Kelly Badenoch, Cathy Jones and Donna Miller, reporting to the Director of Administration, Robert Haley, and/or his assistant, Louis Chabira.

After general orientation, interviews were conducted with the following employees of KDOT and other agencies:

KDOT, FISCAL	KDOT, OTHER	OTHER AGENCIES
ATWOOD	ANSCHUTZ, VIALLE	ISON
BARRACLOUGH	BADENOCH	ROOKER
BERG	BOYD	WACHS
CLARK	CATRON	WILSON
COCHRAN	CERNY	
DAHLSTROM	COMSTOCK, WOODS, ROBINSON, KINNETT	
EHMEN	CRUMPTON	
FIGGS	DUGAN, SHIRK, WALSH	
FULTON	FRY, KEEVER, DEBES, WENDT	
GLENN	HAFENSTINE	
GOLDFUSS	HALL, R.	
HALL, B.	HEMPHILL, BROWN, VARGAS	
HINSON	HICKS	
LANDRY	KEMP, WATKINS, HALEY, BUSH, CHABIRA	
MICHAELIS	KRAHN, VICORY, LEE, JENKS, GILMAN, MUNSON	
OLIVER	LACKEY	
ORTIZ	MOBLEY	
REILLY	MORLAN	
ROGERS	NEADERHISER	
ROWE	O'KEEFE	
SANNEMAN	PREDMORE	
SEITZ	REID, BLAIR, PUGH	
SHUBERT	ROBERTS, BRUBAKER, HURST, CUTTER, LUALLIN	
SMITH	BREWER	
SQUIRES	ROHAN	
STUCKLE	RUSCH	
TWOMBLY	SICK, RAY	
	STOFFEL	
	TESTA	
	TRAMEL	
	WATTS	

Following the interviews, interviewees were permitted to edit their interview summaries. After they were signed, copies were given to supervisors. These interview summaries and supporting documentation (input documents, reports, and procedures) served as the basis for all other analyses.

A task work plan was updated each week and a copy was sent to each member of the advisory steering committee along with schedules and staff meeting notes.

PART VI: SUPPORTING DATA AND APPENDICES

SECTION 2.0 - SUMMARY OF COLLECTED DATA

Work papers are on file in the office of the FIRST task force.

1-25-85

KANSAS DEPARTMENT OF TRANSPORTATION

STATE OFFICE BUILDING—TOPEKA, KANSAS 66612

JOHN B. KEMP, Secretary of Transportation JOHN CARLIN, Governor

MEMORANDUM TO: Governmental Organization Committee

FROM: Kansas Department of Transportation

DATE: January 25, 1985

REGARDING: KDOT Contracting Procedures

The KDOT has improved its contracting procedures to discourage the likelihood of collusion and bid rigging on highway construction projects in recent years. The areas of the contracting procedure that have been modified by the KDOT include:

1) Improving Contractor Prequalification Procedures.

2) Improving Project Estimating Procedures.

3) Informing Contractor's of Collusive Activities.

4) Analyzing Contractor's Bidding Patterns.

5) Periodic Reviews of the Contracting Process.

To improve KDOT's Contractor prequalification procedures, the Department revised on June 13, 1983, its SOM 0265.00/02, "Prequalification of Contractors" to more thoroughly address the prequalification process. A Contractor's Review Questionnaire was developed for the field staff to "rate" contractors on their performance. Items rated by the field staff include:

1) Quality of Work.

2) Prompt Completion of Work.

3) Prompt Payment of Accounts: (i.e.; complaints of workers, suppliers, subcontractors).

4) Cooperation with KDOT.

5) Cooperation and Attitude with Public.

6) Compliance with Specifications.

7) Compliance with EEO Requirements.

8) Knowledge of Work.

B

This review questionnaire, along with the "Contractor's Qualification Statement and Experience Questionnaire" are used to establish the contractor's rating and thus, a maximum dollar limitation for bidding. A listing of the individual who controls or influences the bidding effort is a part of the "Contractor's Qualification Statement and Experience Questionnaire" in that principles, officers, and partners are listed, and these individuals controlling the bidding must sign the contract. KDOT also includes a sworn certification regarding collusion that must be submitted with each individual bid. The Prequalification Committee has adjusted the rating factor of all contractors previously found guilty of collusion, enough to have a practical affect on the company. While a point system has never been developed in determining the rating factor, areas which should influence the rating factor are outlined in KDOT's S.O.M. and all factors are given consideration.

To improve the accuracy of the Department's construction estimates, the following improvements in the estimating process have been implemented:

1) Increased the estimating staff by one position in order to allow additional time for individual estimates.

2) Provided, through the University of Kansas, estimating training for all KDOT Estimators.

3) Increased the lead time provided to estimators in order to allow more complete estimate work-ups.

4) Making more contacts with suppliers in order to determine current market prices.

5) The implementation of the computerized Proposal and Estimation System which came on line in December of 1984, will allow better use of historical data in combination with current price trends.

6) Selected projects are estimated, using little or no historic data. The results are then correlated to projects estimated with historic information for comparisons of the two procedures.

All project bids which fall outside of KDOT's estimate are thoroughly reviewed by the original estimator prior to any recommendation to the State Transportation Engineer to accept or reject the bid.

To inform contractors of the anti-trust laws, all bids received by the Department contain a sworn statement relating to collusion. While the sworn statement does not indicate the penalties for collusion, it places all bidders on notice that they are subject to applicable State and Federal regulations regarding collusive activities and anti-trust violations. The Department believes that enough publicity about bid rigging activities has been made available through news articles, trade journals, and trade organizations to inform all interested parties of the penalties involved in the violations of these regulations.

To improve the Department's procedures of analyzing bidding patterns to identify possible collusion, the Department has implemented a bid analysis section which has been fully staffed since March, 1984. This section's staff consists of a section manager, a computer systems manager, and a part-time secretary.

The Department is systematically analyzing bids for irregular bidding and charting line items bids that have a significant impact on the total bid, and comparing them to bids of the other contractors and the State's estimate in an attempt to identify unusual bidding patterns that may be evidence of collusion. Part of the analysis is to identify front-end loading, unbalanced bidding or other bidding inconsistencies by contractors. If further analysis is warranted, the Department analyzes the area of the state that the contractor bids and what jobs he is presently working. In addition, the Department analyzes the contractor in question against other contractors for each letting and for a series of lettings to determine which contractors tend to compete with each other and how they fare in the competition. Maps may be developed showing the level of activity of construction in each county or district of the state and where the contractor is a winner, loser, bidder and subcontractor. The data for the analysis is in the form of reports generated by computer software known as BAMS (Bid Analysis and Management System). With the aid of the computer, support documentation that would normally take weeks to compile can be generated in a relatively short time, thus giving the Department the tools its needs to determine whether further investigation is warranted by the Attorney General's Office. Even with all the available resources, much time is required to gather and analyze the data to determine the need for further investigation.

The Department fully intends to examine bids from 1981 to present, but the information that can be analyzed will be limited by the State's settlement agreements with fourteen (14) contractors. The other contracts of contractors, who bid and won and were bidding with contractors who have settled with the state, will be analyzed.

Periodic reviews of the contracting process and the maintenance of the Bid Analysis Monitoring System (BAMS) security has become the responsibility of the Bid Rigging Task Force. This task force is composed of KDOT's Chief Counsel, Chief of Construction and Maintenance, and the Inspector General. To insure the effectiveness of the bidding process in discouraging collusion, the Department has modified its administrative directives, bidding specifications, contractor qualifications process and established a bid analysis section. In addition to these procedures, and the previous discussed procedures, the Department has taken the additional following actions to discourage collusion.

The Department's Public Information office publishes notices to contrators four weeks prior to a letting. State law requires these notices to be published no later than three weeks prior to a letting. These advertisements are published in the Kansas Register, the Kansas State Globe, and the minority contractor's newspaper in the State.

In order for the Department to ensure the accuracy of a conractor's net worth, used in determining its qualification rating, the Department requires the Contractor to submit financial statements certified by a Certified Public Accountant of this State or of any state which has a reciprocity agreement with Kansas.

In situations where the low bidder exceeds the Engineer's Estimate by more than 7%, the Department has adopted the basic guidelines of the FHWA Technical Advisory T5030.4 to evaluate the bid prior to making a recommendation to approve or reject the bid. This process includes a re-evaluation of the individual line items of the bid and the technical aspects of th project to determine if mistakes have been made in the estimate or that the contractor's bid is excessive.