					Date	
MINUTES (OF THE House	COMMITTEE ON _	Communication,	Camputers	and Technol	ogy
Γhe meeting	; was called to order by .	Representati	ve Mike Meacham Chairper	son		at
3:30	a,xx./p.m. on	January 12	, 19	83 in room _	of t	he Capitol.
All members	s were present except:					
Committee s	Representative Aylv Representative Rami Staff present:					
	Marlin L. Rein, Chi Sherry Brown, Fisca Chris Stanfield, Fi Arden K. Ensley, Re	al Staff, Researd Iscal Staff, Rese	ch Department earch Department		Staff Direct	or

Approved <u>January 18, 1983</u>

Betty Ellison, Secretary to the Committee Conferees appearing before the committee:

(No Conferees)

Chairman Meacham announced that Bill Belleville, Acting Director, Division of Information Systems and Computing (DISC) will speak to the committee meeting on Tuesday, January 18 and the group will tour that facility on Wednesday, January 19.

Sherry Brown, staff member, distributed copies of the interim committee's report and gave a review of the report along with the background information that was used to do their study. ($\underline{\text{Attachment}}\ \underline{1}$)

Chairman Meacham asked staff to comment on DISC's problems with developing a stable rate structure. Staff answered that turnover of staff has also been a large problem of DISC's.

Representative Chronister asked staff if DISC has become computer advocates rather than watch dogs. Staff replied that DISC has the responsibility to advise agencies of their needs but will not determine if it is worth the cost. DISC will not say that it is not cost effective to automate.

Representative Dean asked how other states which have had this problem have addressed it and how they have solved it. Staff said that other states have approached the problem in different ways; some have a planning control staff, some have an equivalent of that which is an independent executive board or an appointed outside board or a combination of sorts to give evaluations.

Representative Dean asked if there are proponents for the Univac machine and proponents for the IBM machine. If you have both and have some question, why should you build up both? Staff said that the Univac just serves the Department of Administration.

Representative Sallee asked if there is any comparison of cost before and since the time of computers. Staff answered that most budgets will reflect increased costs overall, but the agencies cite advantages of improved efficiency and expanded workloads.

Representative Chronister asked if part of the problem might be that agencies are asked to look 14 months ahead as to what their needs will be. Staff replied that the agencies may be reacting to environmental or other circumstances, and that some unforseeable circumstances could arise.

Representative Green asked where the money goes that is paid for the cost of some of the information off this computer. Staff said there is an initial charge for specific requests.

Representative Chronister asked if research is being done to enable computers to talk to each other. Staff answered that some research has been done in that area, but results appear to be several years down the line.

CONTINUATION SHEET

MINUTES OF THE	House	COMMITTEE C	$_{ m NN}$ <u>Communication</u> ,	Computers and T	[echnology
)	January 12,		19 83
room <u>Journ</u> , Stateh	ouse, at	XXXX/p.m. on	Danuary 12,		

Marlin Rein noted that the legislature considered previously whether the machines could talk to one another. Results indicated no, at least not very efficiently. When computers can interface it is possible for one machine to draw from the second machine's data base, even though the latter may not be operable.

The meeting was adjourned at 4:25 by the Chairman.

The next meeting of the committee will be held at 3:30 p.m. on January 18, 1983.

Date: 1-12-83

GUEST REGISTER

HOUSE

COMMITTEE ON COMMUNICATION, COMPUTERS AND TECHNOLOGY

NAME () /	ORGANIZATION	ADDRESS
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TO: Special Committee on Data Processing

FROM: Kansas Legislative Research Department

RE: Centralized Data Processing in Kansas

Introduction

Attention to the state's experience and needs with respect to data processing is hardly new. As early as 1968, the then Executive Director of the Department of Administration commissioned the Lockheed Missiles and Space Company to prepare an analysis and proposal for improving the state's data processing efforts. This memorandum reviews the progress and changes that have occurred since that time and identifies some of the new issues that have emerged as old ones were resolved. Much of the material contained herein has been drawn from studies and reports by both the executive and legislative branches in recent years and represents an attempt to compile, in one document, a comprehensive history of the evolution of the Division of Information Systems and Computing (DISC). Additionally, this memo summarizes a number of issues that the Committee may wish to pursue.

Background

The Lockheed Study. The Lockheed study was really a proposal to centralize and expand the state's data processing activities. The report noted that "The present use of automatic data processing (ADP) equipment is almost exclusively on a departmental basis.... Data processing within a department has not been a matter of policy, but a matter of specific desires of the individual departments." The only general state policy at that time covered the acquisition of equipment, services and consultants, requiring approval from the Executive Director of the Department of Administration for such purchases.

Division of Computer Services. While not a direct result of the Lockheed proposal, the creation of the Division of Computer Services (DCS) in 1972 was the first step toward centralized data processing for state government. The new Division initially served only the Department of Administration; however, in 1973 its data processing services were expanded to include other state agencies as well. At the same time, the director of the agency was authorized to regulate purchases of data processing equipment in other agencies — excluding the Regents' institutions — in an effort to promote efficiency and avoid unnecessary duplication of services.

As data processing costs became an increasingly larger component of agency budgets, the computing activity of the Division of Computer Services neared capacity. Partially as a result of the near saturation, DCS gave approval for certain state agencies to acquire their own equipment. In other instances, data processing services were contracted with private concerns or the computing facilities of the state's colleges and universities.

Attachment 1

Special Committee on Ways and Means. In an effort to comprehensively identify the nature and magnitude of the state's computing operations, the 1976 House Ways and Means Committee asked the Legislative Coordinating Council to authorize a survey of state computer capability. Upon approval by the Council, the matter was referred to the Special Committee on Ways and Means. The study proposal called for the identification of data processing capabilities of state agencies and institutions, including personnel, hardware and software utilization, an inventory of hardware, and a summarization of costs.

That study was primarily an inventory of current equipment, personnel and related costs, with no resulting recommendations for action. However, it represents the most exhaustive effort, either before or since, to identify state expenditures for data processing. The Committee's final report summarized actual expenditures for FY 1976 by all state agencies and institutions as follows:

Total Expenditures - FY 1976	
Personnel Equipment Rental	\$ 8,622,810 2,647,587
Equipment Acquisition	3,206,849
Maintenance of Equipment	822,055 180,993
Rental, Purchase, Maintenance of Software Data Processing Service (Other than	100,000
DCS and A&R)	2,024,564
Supplies and Operating	1,412,712
Consulting Services Other	122,347 270,456
TOTAL	\$19,310,373

The report noted that of the total amount, \$7,714,119 — or 39.9 percent — were expenditures incurred by the Regents institutions. It was also noted that personnel costs might be somewhat understated to the degree that it was not possible to identify costs associated with individuals who devoted only a portion of their time to data processing functions.

Governor's Task Force on Effective Management. Less than a year after the Special Ways and Means Committee filed its report, the executive branch released a study on effective management commissioned by Governor Bennett which included a section on data processing. One observation made by the Governor's Task Force on Effective Management was that the statewide data processing policy reflected a "let nature take its course and urgency reign" philosophy. Among the specific problems identified by the Task Force were fragmented and duplicated efforts by state agencies, antiquated and inadequate equipment, the absence of explicit responsibility for strategic planning and policymaking on a statewide basis, lack of control by departmental executives over their utilization of computer facilities and difficulty in developing new computer applications.

The Task Force recommended a hybrid approach, encompassing concepts of both centralization and decentralization. They recommended establishment of three computer centers — one for financial transactions, one for human services and one for transportation. Each center would then accommodate not only the obvious affiliations that certain agencies would have with one over another center, but also the computer needs of other agencies that did not necessarily fit logically into these three

components. Centralized planning and control would be exercised by a Policy Advisory Board which would have the responsibility for insuring that departmental plans were consistent with state policies. While the Task Force report served to keep the issues alive, no significant changes were made at that time.

The Mann Report

The study that perhaps had the most influence on later decisions was conducted by Dr. Richard Mann, University of Kansas, at the direction of the Secretary of Administration. This study, entitled "Data Processing in Kansas State Government" was presented to the 1980 Legislature. Concurrently, that Legislature reviewed budget requests for new equipment by the Department of Revenue, for purchase of a Univac Computer by the Department of Administration, and confronted the continuing issue of computer support for the Judicial Branch. The Department of Revenue had requested to be allowed to use its data processing budget to lease hardware and software to provide a dedicated computer. Hardware specifications had been prepared in December and bids were to be sought in January, 1980; however, all target dates were set back in mid-December when the Secretary of Administration placed a "temporary hold" on the new acquisition by the Department of Revenue.

The Department of Administration budget contained a request for funds to obtain a separate computer system for that department and to transfer the RCA computer to the Department of Revenue, effective July 1, 1980. The Secretary of Administration had made a decision to acquire a separate computer dedicated primarily to the Department of Administration programs. The computer was to be under the control and supervision of the Division of Accounts and Reports.

The Judicial Branch requested five new positions for the development of an inhouse data processing capability and funds for the rental of a minicomputer, two printers, software programming, and display units. This request was similar to the one made by the Unified Judicial Department in 1979, which was denied by the 1979 Legislature. Both the 1979 Legislature and the interim Special Committee on Ways and Means (1979) concluded that there was a need for the development of data processing capabilities in the Judicial Branch.

These major initiatives by the executive agencies served to highlight many of the problems identified in earlier studies, particularly the lack of cental management. The Mann Report appeared to offer some solutions.

General Conclusions of the Mann Report. The Mann Report examined data processing resources of executive agencies of state government and offered recommendations for improving management of those resources. The following issues and conclusions were identified:

- 1. There is no coordinated management of computer resources in the executive agencies. While hardware is managed by the Division of Computer Services, there is no central coordination and management of systems development, production, control, or data entry.
- 2. The Division of Computer Services operates its computer center as a utility with limited control over the scheduling of work that runs on its computers.

- 3. No mechanism exists in state government to establish priorities for the development of new applications, for scheduling the computer, or for the provision of funding for computer equipment and staff.
- 4. There has been little data processing management leadership in the state government in recent years.
- There is no management system in place to evaluate the relative merits of agency requests for data processing resources; applications which are developed by the individual agencies are sometimes redundant and are rarely integrated to accommodate more than one agency's needs. Several agencies sell data processing services to other agencies which are duplicative and are sometimes dependent in nature.
- 6. Additional funding of computer capacity will be required to support executive agencies in the coming fiscal years. The report stated that the executive agencies and offices of elected officials in the state would spend more than \$15.9 million for computer services during FY 1980 and that approximately half that amount would be expended for the salaries and wages of the 511 data processing personnel in those agencies. Existing data processing organizations may result in overstaffing the peak data processing requirements in some agencies; the quality of data processing and staff training and procedures varies significantly among the agencies; and current organization of computer staff throughout the state contributes to recruiting and retention problems experienced by the agencies.
- 7. Applications with the greatest impact on resources will be in the Department of Revenue, the Department of Social and Rehabilitation Services, and the Division of Accounts and Reports. The application requiring the most significant resources is the conversion of the Department of Revenue from the RCA computer. The report concluded that although internal changes, such as adding terminals and increasing staff, could alleviate some of the existing problems, more fundamental solutions were necessary in order to change the fragmented organization of data processing in the state.

Alternatives. The report compared two alternative solutions to the existing problems:

- 1. decentralize computer activities to certain of the larger agencies; and
- 2. develop a single full function, centralized division of computing to serve the executive agencies.

Dr. Mann concluded that either approach would be difficult but not impossible to implement within a short period of time. "On balance it would appear that the centralized approach in managing data processing and computer resources in the executive agencies should provide more benefits than detriments It is recommended, therefore, that a measured approach to more effective management, drawing on the best features of both centralized and decentralized alternatives, be adopted."

The approach recommended would centralize some management aspects of data processing, encourage the sharing of resources among agencies, develop minimum common standards for executive agency data processing organizations, develop data processing projects which would benefit more than one agency, and establish priorities for the development of applications and the schedule of production in accordance with executive agencies' needs. The recommended approach included:

- 1. establishing a new management structure for data processing in the Department of Administration;
- 2. upgrading central computer capacities from data processing depreciation reserve funds;
- 3. enhancing central systems' developments;
- 4. exercising more central control over the computer schedule;
- 5. expanding central data processing prior approval for addition of staff and purchase of data processing equipment, software and contract services; and
- 6. creating a cabinet-level policy board and an inter-agency data processing director to assist in establishing computer application abilities and inter-agency cooperation.

Summary of Selected Agency Needs. The Mann Report also made comments concerning the need of the three agencies discussed earlier — Department of Revenue, Department of Administration, and Unified Judicial Department. The report noted that the Department of Revenue is the largest data processing user among the executive agencies and has the most serious data processing problem of all the agencies using the Division of Computer Services. The report states:

With 60 percent of its processing done on a computer that is obsolescent, if not obsolete, and whose continued support by its vendor is tenuous, the Department of Revenue and the state face a very real crisis in not only streamlining Revenue applications, but in removing these applications from such a precarious hardware environment.

The Mann Report noted that improvement of the state's revenue systems appeared to have the highest priority. The report recommended that the RCA computer be replaced with a machine which would allow the Department of Revenue to develop more integrated and responsive on-line systems to support the increasing demands of the Department. Since the computer language that is used on the RCA computer is not compatible with any existing vendor, conversion and development of new applications would be required and could take up to two years. The report stated that this conversion must be started as soon as possible.

The Mann Report also made specific comment concerning the acquisition of the new computer for the Department of Administration:

When the work processed on the RCA computer is analyzed, it shows that a need for a new computer capacity in Accounts and Reports, while important, it not as urgent as the need in the Department of Revenue. While

it is true that the present payroll runs on the RCA computer, its conversion and/or replacement is a much simpler task (less than 150 programs) than the effort necessary to convert the Revenue systems (625 programs). Acquisition of a new computer for Accounts and Reports does not address the Revenue problems and does not address the needs for additional capacity which exist in the other agencies.

The report noted the validity of the Division of Accounts and Reports' desire for on-line response with interactive systems but noted that experienced data processing management and leadership would be required in the Department of Administration so that appropriate equipment would be acquired, high priority applications would be developed and utilized, and duplication of services would not occur.

Judicial Branch. The Mann report noted that the Judicial Branch wanted to have its own computer and in-house data processing capacity in anticipation of potential problems as the state's central computers become more saturated and services more intense. The report noted, however, that the Judicial Administrator's Office was unclear on precisely the next step in the development of comparable data processing capability, and stated:

The services which the Judicial Administrator desires could be provided by the centrally managed computer facility with the systems development staff, if sufficient staff, resources, and computer capacity are available.

Several of the Mann Report recommendations were incorporated into legislation of the 1980 Session. H.B. 3287 abolished the Division of Computer Services and established the Division of Information Systems and Computing (DISC). DISC was charged with the responsibility for centralized data processing for all state agencies (with the exception of the Regents' institutions) and the director was given the authority to determine all data processing programs, contract services and new data processing positions needed by any state agency. Under the act, no state agency can lease or purchase data processing equipment, including both hardware and software, without prior approval of the director of DISC. The 1980 legislation also required DISC to prepare a comprehensive plan to implement the act, to establish data processing standards to be used by all agencies and to audit state agency compliance with those standards. The plan itself must be approved by the Information Systems Policy Board, composed of the Secretary of Administration, the Chief Justice of the Supreme Court or his designee and the Chairman of the Legislative Coordinating Council or a person designated by the Chairman. DISC was also required to review the data processing budget requests of all state agencies and make recommendations to the Budget Division as to the "...technical management merits of said requests."

Recent Developments

Appropriations. Prior to FY 1981, centralized data processing services within the Department of Administration were financed solely through charges to user agencies. In an effort to enhance the management and coordination responsibilities of the newly-created Division, the 1980 Legislature appropriated \$308,416 from the State General Fund for FY 1981 to fund 11 positions, including the Director, a secretary, three positions for a new audit and review section and six programmers to support the

conversion of Department of Revenue applications from the old RCA computer to a new IBM.

The 1981 Legislature continued State General Fund support by appropriating \$370,678 for FY 1982 to again fund the 11 positions. At the time of the FY 1982 budget submission, the FY 1981 estimate had been revised downward to \$171,232. The reduction reflected the fact that most of the authorized positions would be filled for less than six months of the year. As of January, 1981 the conversion of Revenue's programs had not yet begun and none of the programmer positions had been filled.

The 1982 Legislature reduced State General Fund support by deleting funding for the six programmers assigned to the conversion of Department of Revenue applications. The bulk of this conversion was completed in FY 1982 and the Legislature directed that these positions be funded by the Computer Services Fund in FY 1983. The Legislature also denied a DISC request that certain other administrative positions be financed by a State General Fund appropriation, and provided funds for only five of the positions previously funded.

In addition to the State General Fund appropriations, no expenditure limitation has been placed on the Computer Services Fund since FY 1981, giving DISC full authority to expand operations as user demand and user resources dictated. The effect of this authority may be illustrated by the expansion of DISC's budget — from \$2,916,221 in actual FY 1980 expenditures to \$6,378,195 in estimated FY 1982 expenditures, and \$7,568,850 (estimated) in FY 1983.

Central Management Systems Development. A State General Fund appropriation for FY 1983 in the amount of \$420,560 was also approved for DISC to provide central management and control of systems development within the Department of Administration. The practice until this time has been to appropriate funds directly to the user program for costs of developing new systems. Previously, for example, the data processing budgets of the Division of Personnel Services and the Division of Accounts and Reports funded the development costs of KIPPS and CASK. The Department of Administration has taken the position that a more logical approach would be to fund DISC directly for systems development, including both staff and processing time to develop and test new systems. After the new system is operational, the user department would then be responsible for funding ongoing operation and maintenance costs.

Direct funding of DISC for development of new systems on the Univac holds two advantages for the Department of Administration. As DISC explains, it would, first of all, enable the Department to prioritize development of new central systems and allocate resources accordingly. Secondly, it would allow for the reallocation of resources once a system is implemented. The current dependence on individual division budgets makes this kind of centralized management and control virtually impossible on a department-wide basis.

DISC's Central Management Systems Development proposal, as approved by the 1982 Legislature, identifies the following operations as FY 1983 priorities:

For FY 1983 the remaining two modules (employee data and payroll) of the new integrated personnel payroll system (KIPPS) will be completed, tested, and installed. Work will also begin to systematically address any operational inefficiencies detected upon installation of this new system (a common

problem in new systems this large). Major sections of the central accounting system (CASK) will be rewritten to take advantage of the Univac data base technology thus reducing operating costs. Better interfaces between CASK, KIPPS, and other systems such as budget and purchasing will be developed. New programs to better determine and track accounts receivable setoffs and provide full functionality for the budget system will be developed. At the end of FY 1983 the design effort of an integrated purchasing system will begin.

Organization and Staffing. Plans for expansion of DISC were somewhat delayed in FY 1981, partially because of the difficulties encountered in hiring a Director. In January, 1981, the Secretary of Administration appointed Dr. Richard Mann, University of Kansas, as Acting Director of DISC following the resignation of the previous Director only two weeks after assuming the position.

In May, 1981, a permanent Director of DISC was hired and the Division was organized under four Assistant Directors for the following organization components: systems development, administration, technical support and computer operations. Additionally, a four-person Planning and Control Section was created with responsibility for long-range planning, review of agency data processing and word processing budgets, development of data processing standards and audit of agency compliance with those standards. The Division has a currently authorized workforce of 101 F.T.E. positions.

Information Systems Policy Board, With the hiring of a new director, regular meetings of the Information Systems Policy Board began in June, 1981. The Board meets quarterly to review DISC progress and at their first meeting discussed at length the growing use of word processing equipment by state agencies. The Secretary of Administration has assigned to DISC the responsibility to review and make recommendations on all agency requests for word processing as well as data processing equipment.

The Policy Board also declined to approve a DISC proposal to give review and approval authority back to the Regents' institutions for lease or purchase of data processing equipment or systems. Although the Regents' institutions were exempted from most sections of the 1980 legislation (K.S.A. 1980 Supp. 75-4701 et seq.), they cannot lease or purchase data processing equipment without prior approval of the Director of DISC. At the November meeting of the Policy Board, the Director noted that DISC does not have sufficient staff to review each Regent's institution request in detail, but the Board unanimously supported continuation of the present approval process.

Data Processing Equipment. Increasing demands on the capacity of existing hardware led DISC to lease an IBM-4341 computer in December of 1980. The new equipment was an interim measure without sufficient capacity to meet computing needs beyond a few months and the 1981 Legislature approved funds for the purchase of an IBM-3033 which replaced the IBM-4341 in June. In addition, a major upgrade of the Univac system was completed in November, 1981; installation of a multiprocessor for this system was completed in March, 1982, which doubled processing capacity and provides redundancy if the system is down.

The installation of the IBM-3033, which was compatible with the existing AS-5000 (ITEL) system, gives DISC two major central processing units: the IBM/ITEL complex and the Univac. The Univac has been dedicated to Department of Administration programs, with the Central Accounting System of Kansas (CASK) and the Kansas Integrated Personnel-Payroll System (KIPPS) as the major systems. The IBM/ITEL

complex serves all other state agencies and has, as major users, the Department of Revenue, the Department of Transportation and the Department of Social and Rehabilitation Services. Both the AS-5000 and the IBM-3033 were acquired through lease/purchase agreements and FY 1983 represents the final payment year for the AS-5000. For the IBM-3033, a \$494,760 installment payment will be made in FY 1983, the second year of a five-year lease/purchase agreement.* The Division of Information Systems and Computing estimates that current capacity will be adequate through the end of FY 1983. Expansion of equipment and personnel has allowed DISC to meet the data processing needs of the Department of Revenue, Accounts and Reports and the Judicial Branch, all of which were identified as problem areas by the Mann Report.

User Services. A growing emphasis within DISC has been the development of more user services. A monthly meeting with staff from user agencies has been instituted to keep agencies informed of DISC plans and operations. Smaller user groups have been formed around basic software programs such as MAPPER and ROSCOE/LI-BRARIAN. A User Services Coordinator was hired in December to work with agencies and enhance staff ability to access and manipulate data. "User friendly" software systems, such as MAPPER, have been leased to increase the ability of agency personnel with limited data processing training to generate information and reports without assistance from DISC. Seminars have been held for user agencies on both word processing and information systems planning. Such attention to the user community is designed to improve the ability of state agencies to use the data processing resources of DISC.

Location. DISC has experienced a number of problems at their current location on the 11th floor of the State Office Building. Water leaks, lack of a back-up power supply, overcrowding and security risks have contributed to a general consensus that the current DISC space is inadequate. The 1981 Legislature, in an appropriation measure setting aside a contingency fund for costs of moving or modifying space for state agencies, stipulated that major consideration be given to the relocation of DISC. The Division of Architectural Services reviewed a number of alternatives, including moving DISC into leased space, building a new facility specifically for DISC or incorporating DISC into a proposed new Safety Building along with the Highway Patrol and KBI. The most recent proposal surfaced with consideration of state purchase of the Santa Fe Building, which has approximately 24,000 usable square feet of space specifically designed for computer operations. At the current time, no decisions have been reached about potential relocation of DISC. Should DISC remain in the present quarters, the Division of Architectural Services estimates that it will be necessary to fund expenditures of approximately \$1,412,000 over the next five years for further facility modifications.

Summary of Issues

Rate Structure. A complex variety of factors determine the amount that DISC charges an agency, depending on the CPU involved, the kind of processing, the time of day, the amount of dedicated equipment, programmer time required and numerous other considerations. The basic rate structure fluctuates both with regard to

^{*} Since FY 1982 expenditures totally depleted the Computer Services Depreciation Reserve Fund, all FY 1983 capital outlay expenditures will have to be recouped through FY 1983 user charges.

the costs incurred by DISC for equipment and software and to the number of users available to share those costs. Charges for processing time on the IBM computer center rose from \$35 per hour in FY 1981 to \$99 per hour in FY 1982, an increase attributable to significantly higher costs incurred by DISC. In that same period fees declined on the IMB-3350 disk drives from \$10 per hour to \$5 per hour. Agencies requiring programming or systems analysis are currently charged \$20.00 and \$23.50 per hour respectively, compared to \$18.32 and \$22.08 one year ago. The costs of dedicated equipment, such as video and hard copy terminals, are passed directly on to the user agency and a Univac CRT terminal, for example, currently costs \$111 per month. In some instances, software products are leased or purchased for only one agency, in which case the entire system cost is billed to that agency. As other agencies find application for these programs, the cost is absorbed into the basic rate structure.

It is impossible to generalize about the impact of a DISC rate increase on the "average" agency budget because of the vast differences that exist from agency to agency. Increases in data processing expenditures by a state agency could result from the development of new systems, expanded use of existing applications, acquisition of more terminals (implying increased use), higher rates, or a combination of all of these. However, it is probably safe to say that processing charges comprise a major portion of expenditures for most agencies and that a rate increase alone will have a significant impact on agency expenditures. While not applicable to any particular agency, it may be roughly indicative of the impact of rate increases to note that DISC estimated approximately 67 percent of user revenue in FY 1982 was derived from processing charges. Revenue for systems development was projected at 13 percent and dedicated equipment and software accounted for 20 percent of total projected revenue from user It should be also noted that the impact of DISC charges on agency expenditures has another dimension. If, for example, increased rates caused agencies to curtail or discontinue data processing activities, further rate increases might result as DISC attempts to spread the same costs among fewer users.

Statutory Responsibilities. Another issue is the degree to which the audit and review staff has been able to carry out its functions. The DISC title for this section is Planning and Control and staff has the responsibility for carrying out many of DISC's statutory charges including development of a comprehensive plan, review of data processing budget requests, review and approval of data processing purchase requisitions and bid specifications, development of standards and audit of compliance with those standards annually. Additionally, this section reviews word processing budget requests, prepares the DISC Annual Report, develops job descriptions, arranges conferences and seminars and performs a variety of other activities that are not required by statute. Progress in many of the activities required by statute is not clearly evident. Development of long-range plan for state data processing, establishment of data processing standards, and development of procedures for an annual audit of state agency compliance with those standards are still in the planning stages.

DISC is currently projecting completion of a comprehensive statewide data processing plan by the end of FY 1983. The process of annually auditing state agency data processing activities has not yet begun pending development of standards or criteria by which to perform the audits. The Division's program objectives for FY 1983 include implementation of standards and audit procedures for: (1) system development methodology and documentation; (2) system security and recovery, and (3) data base/data communications programming.

Growth. The dramatic growth of DISC over the last two years is evidenced by an FY 1981 budget that was a \$1,966,499 increase, or 67.4 percent, over the previous

year and the FY 1982 estimate of \$6,378,195, which is \$1,495,525, or 30.6 percent, over FY 1981. The FY 1983 estimate totals \$7,796,740. Such expansion is inevitably accompanied by increased rates to user agencies and escalating data processing budgets within agencies. Some of the factors contributing to DISC's growth, such as the hardware, software and technical personnel required to respond to agency needs, are beyond DISC control to some degree. The Division was established to centralize the state's data processing resources and would, therefore, be expected to maintain the capacity to handle user agency requirements. Some of DISC's growth, however, particularly the substantial emphasis on user services and the activities designed to "market" DISC's products may be more uniquely a reflection of DISC's view of its own role to develop and promote data processing. Should control of the Division's growth become an issue, distinguishing the various reasons for that growth are important considerations.

Budgeting Implications. The symbiotic relationship between DISC's budget and the data processing budgets of user agencies complicates both the budgeting process and DISC rate projections. DISC advised user agencies to budget for a 15 percent rate increase in FY 1983, but noted during its review of agency data processing budgets that "...without knowing the magnitude of other new intended uses of our computers by major users. . .it is impossible to say if the 15 percent rate increase will be sufficient or an over statement." DISC's concern is that, if one or more of their large users curtails use for any reason, rates to other users would have to increase to cover DISC's costs, and those other users might not have budgeted sufficient funds to cover such an increase. Conversely, if an agency plans a major expansion in data processing, the potential exists for inadequate funding in that agency while other users could be overfunded for their existing applications. In other words, DISC has the capacity to handle expansion of any agency's data processing provided the agency has sufficient funding; DISC does not consider it feasible to reduce its own operating costs in concert with reduced demand, and must therefore look to rate increases as the alternative.

The problem of establishing a reasonable rate structure without knowledge of user agency plans and data processing budgets represents a major dilemma. At the present time, DISC estimates that state agencies have adequate data processing budgets in the aggregate to sustain DISC in FY 1983. However, the distribution of those funds may concentrate more dollars than necessary in many of the major user agencies while leaving many of the smaller agencies short, if DISC projections of use are accurate. The lack of coordination in the preparation of agency budgets with respect to data processing results in considerable guesswork on the part of both the agencies and DISC about needs, plans and rates. Without fairly detailed information about agency plans and projected needs, DISC is unable to protect rates with any accuracy. Lacking reliable information on projected rates, agencies are unable to budget for data processing with any accuracy. In recognition of this problem, DISC began its FY 1984 planning process, including a request for agencies to submit their FY 1984 plans to DISC, late in FY 1982. It remains to be seen whether this will facilitate a better coordinated approach to budgeting and financing.

Joint Committee on Reivew of DISC

In partial response to this problem of coordination the Joint Committee of House and Senate Ways and Means Committee members was established during the 1982 Session to review DISC, with particular attention to the coordination of agency data processing budgets and funding of DISC operations. The Joint Committee was charged with three specific tasks:

- 1. Review DISC financing and the method by which DISC arrived at its estimates for agency data processing budgets.
- 2. Examine state agencies' data processing budgets as compared to DISC estimates and, if warranted, recommend specific adjustments to the various subcommittees.
- 3. Develop recommendations as to the future methods, if any, the Legislature may wish to employ to review and coordinate agency data processing budgets and the funding of DISC operations.

In addition to recommending that subcommittees adopt DISC estimates of the appropriate dollar amounts that should be included in agency budgets, the Joint Committee explored a number of alternatives for future legislative oversight of state data processing operations. These alternatives were summarized as follows:

- 1. Establish a Joint Committee on Data Processing to review the planning process, individual agency plans and DISC resource requirements. Questions to be resolved regarding such a committee:
 - a. Membership. Should members be appointed from the Ways and Means Committee or the Legislature as a whole?
 - b. Authority. Should a permanent standing committee be authorized by statute or should a committee be appointed, perhaps by the LCC, for a one-year study with future action to be considered at that time?
 - c. Role. Should a Joint Committee address principally the planning and coordination aspects of budgeting for data processing or should the role be expanded to an evaluation of the merits of proposed systems and the assignment of statewide priorities?
 - d. Information Systems Policy Board. How should a Joint Committee interface with the existing Policy Board?
- 2. Create a position within Legislative Research requiring specific skills in programming or systems analysis to provide technical expertise and analysis of data processing proposals.
- 3. Hire an outside consultant to periodically evaluate the management and operation of the state's centralized computer system.
- 4. Rely on an improved planning process by DISC and continued subcommittee review to provide an adequate basis for legislative decisions.

Committee Recommendations. The number of and complexity of issues that emerged during the Joint Committee meetings led to a consensus that the area of centralized data processing warranted further study. The severe time constraints under which the Committee operated simply did not allow for detailed study nor for resolution

of many problems that were identified. Consequently, the Joint Committee recommended that the Legislative Coordinating Council authorize an interim study to address the above alternatives 1 and 3 specifically as well as the broader issue of future centralized computer operations. While the Committee's recommendations incorporated reliance on an improved planning process by DISC and continued subcommittee review, the Joint Committee felt that additional work was needed.

Possible Interim Concerns

It should be noted that many of the problems and concerns of earlier years have been, for the most part, resolved. Management of data processing activities has been centralized and equipment has been expanded or upgraded. Several specific priorities, such as conversion of Department of Revenue programs, conversion and enhancement of the Central Accounting System of Kansas (CASK) and development of the Kansas Integrated Personnel/Payroll System (KIPPS), are either substantially completed or proceeding on schedule. In their stead, new issues have emerged and the following list presents a number of options that this Committee may wish to consider as possible goals for this study:

- 1. Resolution of the question of need for increased legislative oversight of centralized data processing operations. Is there reason to believe that the issues under review during this interim warrant continued legislative consideration beyond the normal subcommittee review process, and, if so, how should such additional oversight be accomplished?
- 2. Establishment of criteria by which to evaluate agency data processing budget requests. What kinds of information do legislative committees need in order to decide the merits of a particular computer application, whether it should or should not be developed or enhanced, and at what costs? How can the relative priorities of computer programs be assessed?
- 3. Evaluation of the 1980 legislation that created the Division of Information Systems and Computing (DISC). Has DISC met the statutory mandates? Is that legislation adequate, realistic or in need of revision?
- 4. Establishment of a mechanism by which agency budgets and DISC financing can be effectively coordinated. How can the impact of adjustments in a major user agency's budget be accommodated in the budgets of other agencies and DISC? Where does principal responsibility for this coordination lie?
- Determination of long-range plans and policy implications. Will the rapid growth of state data processing activities continue at the same rate (DISC's budget more than doubled from FY 1980 to FY 1982)? What the implications of major expansion in a time of declining revenues? Should legislative management of expansion focus on the individual user agencies or on DISC?

Attachment 1