

Approved 3-13-90 Date

MINUTES OF THE Senate COMMITTEE ON Economic Development

The meeting was called to order by Senator Dave Kerr at  
Chairperson

8:00 a.m./~~pm~~ on March 1, 1990 in room 123-S of the Capitol.

All members were present except:

Committee staff present:

Bill Edds, Revisor of Statutes' Office  
Lynne Holt, Kansas Legislative Research Dept.  
Sue Pettet, Secretary to the Committee

Conferees appearing before the committee:

Charles Warren, Pres. of Kansas, Inc.  
Secretary Bill Graves, Secretary of State  
Ron Smith, Kansas Bar Association  
Brad Bradley, Attorney for the Kansas Bar Association

Chairman Kerr called the meeting to order and said the agenda was to discuss S.B. 678, which establishes the Information Network of Kansas, Inc.

Charles Warren, President of Kansas, Inc. testified. (Att. / ) He stated that the major purpose of the bill is to provide electronic access to public domain information. The fiscal impact of the bill to the state would be \$5,000 to provide a hardware connection. The funding that would otherwise be needed would be provided by the private sector and subscribers such as small businesses, large corporations, or law firms that would want access to the information network.

Mr. Warren also submitted Attachment 2, titled "Information Network of Kansas" (I.N.K.). He stated that this bill would give state agencies the opportunity to designate data, and make it available through technology.

Secretary Bill Graves, Secretary of State, testified. He stated that he supported S.B. 678. He said that he feels the state has an obligation to make information available to the public.

Ron Smith, Kansas Bar Association, introduced Mr. Brad Bradley, attorney for the KBA. He stated that the KBA is especially supportive of this bill. The Department of Information Systems and Communications, (DISC) would be an excellent vehicle through which to channel this information since they are already a state information agency. The bill would enable DISC to release information to the public sector, which they are presently unable to do. Currently, DISC is restricted by statute to release information to state agencies only.

He stated that the technology is not new or experimental. The Federal Government is currently using this in their court system.

There was considerable committee discussion, and several questions were answered by Virgil Basgall, a representative of DISC.

Meeting adjourned at 9:00 a.m.

Date 3-1-90

VISITOR SHEET

(Please sign)

Name/Company

Name/Company

(Please sign)	Name/Company	Name/Company
BEV BRADLEY - KS Assoc of Counties	Ed Haslam	
Ron Smith	WILLIAM F. BRADLEY JR	Leg Director KS Municipalities
Bill Hunt	Rick Bailey	KS Bar Assoc.
Brad Meares	Harland Puddis	KS Bar Association
ALAN STEPPAT	Tom Day	KS Sec of State
Virgil Basgall	Peter & Wolf	KDOC
David Brewitz	DWAYNE ZIMMERMAN	KDOC
Terry Denker	Scott Hensel	KDOC
		Pete McGill & Associates
		KCC
		DISC
		KDHR
		KCPR
		KDOC
		Bd. of Ag.
		Kansas Inc.

TESTIMONY ON S.B. 678  
by

Charles R. Warren  
President, Kansas Inc.

Senate Committee on Economic Development  
March 1, 1990

Thank you Mr. Chairman and members of the committee.

The Information Network of Kansas (INK) is technologically feasible, has a market ready for the service, and can make Kansas a leader in providing the public immediate access to data in the public domain. During the two years that Kansas Inc. has actively worked on this project, the most common comment from both state agency personnel and private sector representatives has been that INK is a good idea just waiting to happen. I am here to testify today on behalf of Senate Bill 678, which provides the organizational structure to make this good idea happen.

The work that has led to SB 678 began two years ago with a demonstration by representatives of the New Mexico Technet system to public sector agency directors and interested private sector people. The meeting was followed with a Kansas Inc. funded feasibility study of creating a similar operation (Volume II of the handout). At the same time several meetings have been held with state agencies and private sector groups. The Kansas Bar Association created a business plan (Volume I of the handout) and has been an active participant in this process along with several other associations. The Division of Information Systems and Communications (DISC) has assisted in this groundwork and the development of the bill's language. In addition, the Secretary of State's office has expressed interest in and a willingness to cooperate in development of INK.

INK is patterned after the New Mexico Technet system, I would like to outline briefly some of the features of Technet. To customers that subscribe to its service, Technet provides private citizens and businesses electronic access through a modem to selected public sector data bases. One example may clear up how the system is used, 35 percent of Technet's revenue comes from car dealers who use computer access to the New Mexico Department of Revenue to register automobiles for customers immediately upon purchase.

Revenue to Technet comes in the form of annual subscriber fees, and a set payment each time the subscriber uses a data base in the network. State agencies are reimbursed when their data base is used by a subscriber.

Technet provides an attractive model for states to follow because:

- 1) its current operations are self-supporting through subscriber fees; and,
- 2) there is now a waiting list of state agencies to "get on" the system having seen the efficiencies and cost reductions available from public computer access to information and the revenue generating potential.

Kansas has the hardware and systems in place to create an operation similar to Technet. The missing ingredient is an organization to direct the start-up, to market the product, and to handle the accounting procedures. SB 678 provides the framework to create the organizational structure required.

The bill details a governing Board of Directors for INK. The director of DISC serves as an ex-officio member of the Board. INK's first task will be to develop a request for proposals that outlines criteria and specifications for a network manager. The initial process will culminate in the selection of a private service provider to operate INK.

Other than a communications software up-grade DISC estimates at \$5,000, all costs will be born by the network manager through true cost pricing of network access by subscribers.

SB 678 provides the opportunity for Kansas to take a lead role in the provision of data to its citizens. This will not result in placing barriers to public data currently available to citizens on a walk-in or telephone call basis. Provisions of data in this current format will continue. Passage of this bill and subsequent INK operation will:

- \* give state agencies the opportunity to "designate" data for which there is a high rate of demand by private citizens and make that data accessible through electronic technology.
- \* result in reduction of costs by eliminating the need for a state employee to retrieve and hand deliver or mail frequently requested data.
- \* result in more efficient private and non-profit sector operation by allowing employees to go directly to a data base for required information.
- \* INK will be an additional source of revenues to individual agencies through payment of subscriber fees.

Thank you, I would be glad to respond to any questions.



INFORMATION NETWORK OF KANSAS (I.N.K)

Volumes I and II

A Business Plan

Information Network of Kansas (INK)

Volume I

A Business Plan

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## I. EXECUTIVE SUMMARY

This proposal summarizes all pertinent information related to establishing a new on-line link between the public and certain professional associations, with state government information resources. This state information resource is a nonprofit, non-charitable corporation which acts as a gateway with state government information resources. For purposes of this proposal, it is denominated Information Network of Kansas, or INK for short. In addition, this proposal speaks in terms of member association sub-menus on the INK system.

### Overview

Any government generates a certain amount of public domain information, most of it quite useful to private entities. This is especially true of state governments.

Some of the information is available only by return mail, that is, by a "paper" media. Some of it is provided by telephone. Some of the information is electronically stored and retrieved. Some data is provided free of cost, some with a nominal cost. Each agency is free, within applicable law, to determine how the public accesses public domain information, the method of response and costs.

Technology is available which can put such information into a common media format for a more wide-spread and cost-efficient access. There are a number of data information and technology companies who, for a fee, will manage and maintain such a network.

### Statement of Objective

The Kansas Bar Association and other associations of professionals will establish a nonprofit, not-charitable corporation for the purpose of contracting with state agencies to provide through dial-up modems and a gateway service, information which is considered public domain by statute or regulation in Kansas, including data generated by the state as well as that gathered and stored by the state.

The nonprofit non-charitable corporation would provide all subscribing members of the participating associations and the general public with a computerized information and communications network that would be available to subscribers with a broad selection of electronic databases useful in various professional endeavors, including law, accounting, insurance, engineering and health care.



A board of directors would consist of members from the general public and joint venture associations. Joint venture participants may have a nominal capitalization cost as determined by the Board.

Manual search and access to the data would continue to be provided by state agencies. The corporation intends to rent data transmission lines through the KANS-A-N telecommunication network to six nodes scattered around the state. The corporation intends to contract with a private for-profit corporation for the purpose of creating and managing the gateway, providing other add-on services, marketing the network and providing billing and collection. The nonprofit corporation would receive a percent on the charges for information for purposes of repayment of start-up money and system improvements. The state agencies would be paid a contracted fee for providing the information depending on the form in which the information is provided (floppy disk, data dump, tape, etc.).

### The State's Role

The state would be involved in consenting to provide the information in the manner required by the INK network and in working with the technicians supplied by the network manager to interface the gateway service with state data. Future expansion includes expanding the number of state agencies on the system once a specific user base is identified for the information in any particular agency.

The Division of Information Services and Computers in the Department of Administration (DISC/DA) is a willing participant in the project. DISC's statutory charge is to make internal state information available within state government, but not to serve as a public vendor to the private sector. Since an access fee will be charged, it would be inappropriate for DISC to take the lead role in such development.

The state's major role will be to port over existing database information to INK's host system unless the agency is willing to allow, through INK's host system, direct port access. The network's data is then made available through INK to individual home and business subscribers.

The state's telecommunication system, using available nodes in a variety of cities, can provide reliable and cost-efficient public access to the INK system, especially through an extensive system of public libraries. State agencies also can easily access the state's KANSAN telecommunications network for cost-efficient communication, and through INK, have access to other state agency data not now readily available on computer-to-computer links between state agencies.

One example of the positive future growth of a INK system with state involvement might be to provide a means of on-line sales tax collection and registration of new or used automobiles at the point of sale. This would speed up the process and free considerable personnel in the Division of Motor Vehicles and in County Treasurer's offices for other tasks.

Special mention should be made of the keen interest of Kansas Inc. in the success of INK. Kansas Inc. is the economic development arm of state government with close ties to the Department of Commerce. The Governor chairs this body of state industry leaders. Kansas Inc. has expended money to conduct a feasibility report on this project, and that information is part of the foundation for this business plan.

### INK's Role

The company is being formed for the purpose of engaging in the development, production and marketing of computer access to the state information database. The state through its agency heads will determine the cost of such information, and INK's board of directors and managers will decide whether the price is competitive, the information worthwhile on the electronic system, and the physical requirements of placing such information on the system. INK must custom design its menus to meet both the needs of the state as an information provider, and subscriber end-users.

### Unrelated Business Income Tax Concerns

It is envisioned that INK will be developed as a joint venture by several 501(c) nonprofit associations and perhaps another for-profit company which is in the business of supplying a variety of electronic databases to the public. Some are (c)(6) and (c)(3) organizations. In order to avoid problems with accumulation of too much unrelated business income which can create dues deductibility problems for the members of the various associations, it is the intent of the founding organizations that INK be profitable and prudently managed, but that unrelated dues income be kept to a minimum. This generally means the plowing of accumulated income into the services the business provides, or periodically adjusting the cost of access to INK as a member benefit.

### The Network Manager

There are numerous electronic information and communications networks offering a world of information, services and convenience for business and personal uses. The accessible

information is even international in scope. It is envisioned that INK would hire a network manager based on specifications prepared by INK.

In conjunction with the Board of Directors, the network manager would determine which information is placed on the system, design the system architecture including menus, decide which information is best accessed through the system, market the network, collect the monthly fees and charges and pay the bills.

## II. DESCRIPTION OF THE BUSINESS

INK intends to provide low-cost reliable information services to subscriber-users primarily by providing public information in a usable format from state government agencies and databases.

All governments generate public domain information, most of it quite useful to private entities if accessible in a timely manner and at reasonable costs with conventional (paper, telephone) data transmission systems. Legislatures determine through Open Records Laws and public policy whether the public has access to such information. Executive branch agencies then determine the quality and methodology of data transmission. The bureaucracy, however, has no unifying standards by which public information is made available by electronic access because there is no uniform point of access to such information. While the common thread is that all such information for which INK will be developed already is in the public domain, that is, the public has a right to see it, the ease and method of accessing the information differs greatly.

Some of the information is available only by return mail, that is, by a "paper" media. Some of it is provided by telephone. Some of the information is electronically stored and retrieved. Some of the information is free, other information requires a nominal cost. Sometimes the information is available on a variety of media (e.g. by phone response or by written letter). Each agency is virtually free to determine how the public accesses public domain information (computer, telephone, in person), the method of communication (paper, letter, computer modem, telephone reply) and the costs of reproduction, if any.

Technology is available which can put such information into a common media format for wide-spread, cost-efficient access. With the explosive growth of the use of low-cost personal computers and modems, there is a need to make such information available in a common electronic data link with state government.

There are a number of data information and technology companies who, for a fee, will manage and maintain such a network.

There are three prerequisites to establishing a viable network, and INK intends to meet them all:

Understanding what is valuable. Not all public information has value, or, if it has value, it is not cost justified in accessing such information through electronic media. Target groups of users or their association representatives are able to pinpoint which



information is of value to their members and help INK management decide what kind of access (direct to the host database, monthly or weekly tape copies, etc.) is most cost-efficient. The term "value" has two connotations, one of cost and one of frequency of use. A low cost item is not "valuable" if there is insufficient access of the database to defray costs of placing the information on the INK network. Conversely, a high cost item may have value if users frequently access and use the information.

Proven Network Management. The network manager (NM) is a critical link in the success of this business. The NM must have a proven track record and provide management services, information and communication integration, computing and telecommunication services and establish sound economic formulas that will fund the network at the lowest financial risk possible in order to maximize non-dues income to the subscriber associations.

Marketing the Network. The network manager must be able to market the system in a constantly evolving technological system of end users. Electronic networks are not difficult to use, but they are intimidating to many end users who are content with work processing capabilities of personal computers. Marketing aspects are covered below.

### III. THE MARKET & COMPETITION

The predicate issue of marketing this concept is getting end users to move beyond the intra-computer processing to which personal computers are well suited, and get into the communications and information data processing that modem-to-database connections can provide.

There are many competing networks. One in the legal profession is ABANet, a service of the American Bar Association via the iNet company in Maryland. While this network has its own conference and database-access abilities, the INK network, for Kansas attorneys, could also become a "feeder" link to ABANet. The same is true for WestLaw and Lexis electronic research services for those attorneys and accountants wanting that kind of database service.

On-line data links with state library professionals can quickly reach the public, which makes wide use of current library information systems.

A number of electronic networks serve various legal communities. WestLaw and Lexis are well-known electronic legal research database systems. These databases have encouraged contracts with diverse bar associations such as Montana, Colorado and Ohio, providing lower-cost access and fees for services used than when individual attorneys contract directly with these bar-sponsored database suppliers. The reason is that the local bar associations usually take on some of the marketing responsibilities. It is the intent that INK take over this function with these two vendors.

New Mexico has "Technet," which for the New Mexico Bar association's 4,000 members has proven quite reliable. Developed in the Santa Fe area with technical help from the Los Alamos labs, Technet is already on-line. In fact, once INK is on-line, reciprocity of database gateways may become a simple sub-menu operation (if, of course, it is cost justified). Technet currently enjoys a subscription percentage to its services of about 60% of the attorneys in that state. Its monthly charge is \$25 for each subscriber and gives a variety of options for on-line usage. In the first 9 months of operation, revenues of \$200,000 were generated and they have a positive cash flow. Expenditures were primarily 3 full time employee salaries.

Mississippi's Bar Association also has a state communication system link created through the Institute for Technology Development (ITD), a nonprofit incubator-type economic development corporation. ITD serves 4,500 members, many of them bar association members. Mississippi's system is tied in with the Hilton Systems Corporation, which is a defense consulting contractor. They expect positive cash flow by 1990 and 1991.

Both New Mexico's and Mississippi's systems were developed in-house at the behest of their bar associations. Thus, INK is not a unique concept.

#### State Telecommunications Tie-in

The existing KANS-A-N telephone network has considerable potential for providing high-speed voice and data tie-in links with the INK network, especially since DISC is responsible for that network and is highly cooperative with the existing program. See Appendix E for a description of the state's system.

Those unable to access the state's nodes would be able to use the usual systems of communication, such as Telenet.

#### IV. THE NETWORKING FACILITY & MANAGEMENT

INK could purchase computer and telecommunication hardware, license and design contracts for specific software and hire staff to manage the system and train users. However, the dollar outlay is high and skilled people are hard to recruit and costly. This form of risk taking is inconsistent with the charters of most professional associations and the state itself.

The optimum plan for the INK network would be to develop, implement and maintain the service with as little financial risk and the most flexibility possible through an alliance with a for-profit Network Manager. Ideally, the manager should also serve as an information integrator and database service provider. In forming the alliance there are variables to consider relative to responsibilities and risks assumed, and return to be earned. When assigning responsibilities of network management, the most favorable outcome gives due consideration to each party's skills, track record, resources and objectives.

To share network management, INK will align itself with an entity that will be a long-term companion. Specifically, the network manager will be a hands-on manager of the system. System integrity, especially when working with state agencies which are providing public information from databases which have proprietary information as well, must be of high priority.

##### Nature of the Contractual Relationship

INK, being a for-profit subsidiary corporation owned in part by the participating professional associations, has a direct need for insuring that the network manager indeed fulfills all expectations in a timely manner. Two methods of providing incentives are available: (a) a short-term, high-initial-return contract with the manager, or (b) a longer-term, lower-initial-return. Each alternative will be explored.

##### Network Relationship

The associations whose members are users and the network management system must have and will maintain a close working relationship. Consultations will be daily. See the Appendix B timeline for the scope and type of services this relationship will require.

The manager works with INK member associations and users to customize personal computer software to access the INK network, customize on-line user menus, and write gateway code to establish links with other on-line data bases from the state agencies and third party services such as Lexis and WestLaw.

### Sales and Order Realization

This is a key area. Timely responses are required. The NM hires and trains the marketing representatives. The duties of these representatives are:

- \* responding to inbound toll-free interest inquiries resulting from direct mailings, seminars and advertising;
- \* conduct inbound telephone sales campaigns;
- \* assemble mailing information packages in response to leads;
- \* making follow-up telephone contacts;
- \* assembling and mailing subscription kits;
- \* building and maintaining master files of respondents on ongoing basis; and,
- \* generating quarterly sales activity reports.

### Marketing the Network to Members

Marketing is focused around testimonials of other users. Positive word of mouth is the best advertising. Also included in the marketing techniques are luncheons for secretaries or paralegals of user professionals. The primary resources are:

- \* advertising in association publications;
- \* direct mailings to professionals and end users; and,
- \* association sponsored conferences and seminars.

### Total System Administration

Among the duties of the NM is housekeeping. The following are major components of such duties:

- \* maintain custom menus for each member affiliate association with INK;
- \* provide daily updating of the on-line directory of users and automated mailing lists to those users;
- \* issue user IDs and user passwords;



- \* database registrations;
- \* stocking and ordering User documentation and literatures;
- \* provides security for performance of production control tasks to ensure that data is loaded into electronic databases in a timely and secure manner;
- \* running various daily, weekly and monthly utility reports to provide statistics on usage by members; and,
- \* interpreting daily utility reports to monitor statistics on usage by members.

#### Contracting, Billing and Collection

The NM will be responsible for providing all the fiscal and contractual requirements of the INK network. The NM will:

- \* maintain subscriber files and special pricing arrangements;
- \* implement and provide support for paper, on-line or credit card billing as determined by the board of directors;
- \* integrate billing information from third-party suppliers into single invoice;
- \* handle billing and contract inquiries;
- \* work closely with bank management to insure timely collections;
- \* collect and submit sales and use taxes, where applicable; and,
- \* prepare quarterly management statements for user associations.

#### End User Technical Support

Technical support is important. All users will need some support. Customer support representatives will have to be hired and trained by the network manager. In addition, they:

- \* install and staff toll free assistance Help line and electronic help mailboxes on the system itself;
- \* organize and conduct quarterly regional training seminars for end users; and,
- \* conduct individual classroom, on-site and telephone instruction, as required.

Other Requirements of the Manager

In conjunction with the Board of Directors, the INK network manager's (NM) duties include:

- \* determine which information is placed on the system. Such activity requires determining which information is cost efficient and most highly desirable in terms of ease of access, usage, and cost. Priorities for inclusion on the database are determined by the NM.
- \* design the system architecture including menus to accommodate access to such information. Special requirements for "masking" confidential information is anticipated from a variety of state agencies or the electronic to electronic dump of information cannot work. The NM will be in charge of meeting state requirements regarding proprietary data.
- \* decide which information is best accessed through the system. INK anticipates many state agencies would be desirous of accessing other state databases not now available to them through their own computer resources. (For example, many state agencies run their own centralized computer operations, sometimes from uncommon architecture.) Some information, while available, might not be cost-efficient to put on INK. Such decisions must be part of the manager's efforts.
- \* connect private and public sector subscribers to the state's databases through a host system;
- \* serve as the carrier for outstate information services, e.g. legal, travel, news-weather, sports, business and financial news;
- \* provide communication services such as electronic mail, conferences and FAX services;

- \* design a INK User's Handbook incorporating instructions on database usage, services being ported and costs;
- \* provide training to end-users in the use of on-line services;
- \* provide access to the database on a 22-hour 7-day per week basis;
- \* market INK information through special interest groups, direct mailings, book and computer stores, and conventions and indigenous publications of those member associations whose members may have a specific need for certain state information;
- \* establish a headquarters in Topeka, Kansas;
- \* locate computer operations for INK in the headquarters;
- \* hire staff to market INK and contract with the state's information providers and other third-party providers to make their databases accessible;
- \* provide morning to evening customer service voice support 7 days a week;
- \* establish and operate a billing system service covering INK subscriber accounts for the state's information service providers; and,
- \* pay the INK network's monthly bills.

## V. POTENTIAL USERS

To determine the feasibility of the project, in early 1989 Kansas Inc. conducted a market survey in the Topeka area. Interviews were conducted by Capitol Research, Inc., of Topeka, and arranged with representatives from the agencies identified as potential public and private sector users of INK data. We are indebted to Kansas Inc. for its help and cooperation in this proposal.

### State Databases

The State has 40,000-plus employees and many of its own agencies have smaller PCs and modems and are potential end users of part of the INK network. The State has worked for a number of years to develop a private state-agency computer network that will be completed sometime in 1989. It will link computers in Topeka and across the state with each other. Dr. Russ Getter of DISC anticipates that INK could utilize this network, consistent with confidentiality requirements. If so, 80% of the state's population would be able to access this network with a local telephone call.

Agency heads indicate their departments maintain on-line databases though they are not generally accessible to the public. The problem of public access is that users must log on and traverse multiple screens to reach the database. INK and state government will work to simplify these access procedures and insure that state proprietary information is "locked out" to INK users.

A study of the feasibility of developing a subscriber based information network for data gathered by state agencies has been conducted by Capital Research Services, Inc. The feasibility research is contained in Volume II of this document INK business plan.



## VI. FEES & CHARGES

Fees and costs of access, monthly maintenance costs, and other service costs are fairly easy to determine and track, once the number of accesses and the size of the database is known.

### Path of Least Resistance

In pricing fees and charges, care must be taken to stay within the phenomenon of the "path of least resistance." For example, if by telephone a user can access state information for a \$1.00 charge during the work week and time is not of the essence to the user, providing the same information over a computer for \$1.00 or \$1.25 may not be attractive enough to gain the business. The user may choose the path of least resistance and stay with the voice-communication mode of information transfer. If prices are roughly equal and time is important to the user, the shift to INK will occur. The marketing of INK must constantly be aware of this phenomenon and speak to it.

The associations may want their own subnetworks. The Bar Association, for example, could build its own member-oriented services that way, and block public access unless a fee is paid.

### Bill Collection

It is anticipated that individual users, and even smaller firms, would be assigned pre-approved line of credit on a VISA or MasterCard number through a larger Kansas bank, and that when billable access occurs, such account is automatically debited. Actual credit cards need not be issued, since it is an on-line and pre-approved transaction, and the credit card ID number from the bank becomes an additional number to be a part of the password system.

This means that the bank is in charge of determining the lines of credit, and has charge of collection of overdue accounts. No subscriber will gain access to INK without a pre-approved line of credit, and INK will, upon request by the bank, terminate passwords and identification numbers of users the bank no longer deems credit worthy. This method should free INK to pursue other markets and services.

There are exceptions. On-line calculation of charges would also be required for public access of INK through public libraries where the user is the library and not the patron who requests the search. Such technology is available.

## Source of Income

INK can expect payment through combinations of registration fees, monthly subscription fees, margins on network usage, and premium fees derived from the network's own information services offerings.

1. Registration fees: cover costs of issuing a user identification number, password, setting up the pre-approved line of credit with the participating bank, registration of new users to access particular data bases, providing documentation, tutorial diskettes or training sessions and in some instances, computer software itself.

2. Subscription Fees: are charged monthly for providing the service and take into account the makeup of the target member and the perceived value of the services the network provides. Subscription fees basically go for consultation, development and promotion and provide an ongoing source of income to help with base costs.

3. Margins on Network Usage: are value-added charges for basic networking components, such as communication and connect fees and constitute a small part of income. Individual usage of the network varies widely month to month, and technological advances allow users to sign on a network and strip out the information desired using quickly executed streams of commands in an unattended mode, permitting fast downloads of information. Competition between national database vendors means that while there is some room for bargaining with database providers, the room to maneuver and bargain is small.

4. Premium fees: are placed on accessing certain defined databases. For example, the premium fee for WestLaw is different than Lexis/Nexis. The INK support computer automatically picks up the change in databases, and computes the premium fee on a variety of methods, either by the hour, part-hour, or by search. Premium fees are the principle means of funding INK and attendant networks.

## VII. BENEFITS TO THE STATE OF KANSAS

In many instances, remote on-line access to state information without need of accessing data through state employees provides the ability of state managers to utilize such employees in more profitable and efficient ventures elsewhere in the agency. Additional benefits to the state include:

- \* local governments and courts can exchange information between themselves and law firms throughout Kansas through state databases, conferences, electronic bulletin board services, messaging, FAX services and electronic newsletters;
- \* much of the state's data will not be directly accessed, which maintains the state's database integrity. INK is responsible for system security, in conjunction with the state's Division of Information Services and Computers and the various state agencies. Consequently there is no need for the state to maintain additional computer equipment.

Additional benefits to users, both public and private whether through trade associations or state library systems include:

- \* private networks are completely private. Only members of the network can access it. In fact, no one else need know it exists.
- \* INK can be made available to any defined group including attorneys, financial institutions, title companies, news media, legislators, insurance agents, or the general public;
- \* INK is accessible worldwide and can access similar state information systems, such as New Mexico's TechNet;
- \* monthly usage reports can be provided on the number of people accessing its services;
- \* network features easy to use menu-driven design customized for purchaser desires. For example, if a user is not authorized into a given database, the INK computer responds with appropriate error codes and on-screen comments.

An outline of the time frame for decision and start-up on the INK system is featured as an appendix hereto.

## VIII. GLOSSARY OF TERMS

Association member networks (AMN): is a term describing sub-menu networks from the main menu on INK. LegalNet, which is a separate database of information to be provided on INK by the Kansas Bar Association, is an example of an AMN which will be primarily accessed and used by lawyers.

DISC: is the Division of Information Services and Computers, the primary hub of computer expertise in Kansas state government.

Electronic media: primarily refers to organizing data through computers, either smaller PC systems or larger mainframe or minis. Access is primarily through modem communications.

INK: stands for "Information Network of Kansas."

NM: Network Manager

Path of Least Resistance: is a phenomenon by information consumers who must decide whether to use existing data retrieval systems from state government (e.g. return mail, telephone, etc.) or use the expanded power the INK network may supply. Cost of the services, availability and completeness of information transfer are all issues which consumers ponder when making the decision.

Proprietary Databases: refers to data in state agencies which is not required to be disclosed under the Open Records Act. INK would not access this information unless authorized by statute or regulation.

## IX. LIST OF APPENDICES

Appendix A - is an example of how the network might look and operate. The main menu will project the state's banner, e.g. Information Network of Kansas. LegalNet then becomes a sub-menu.

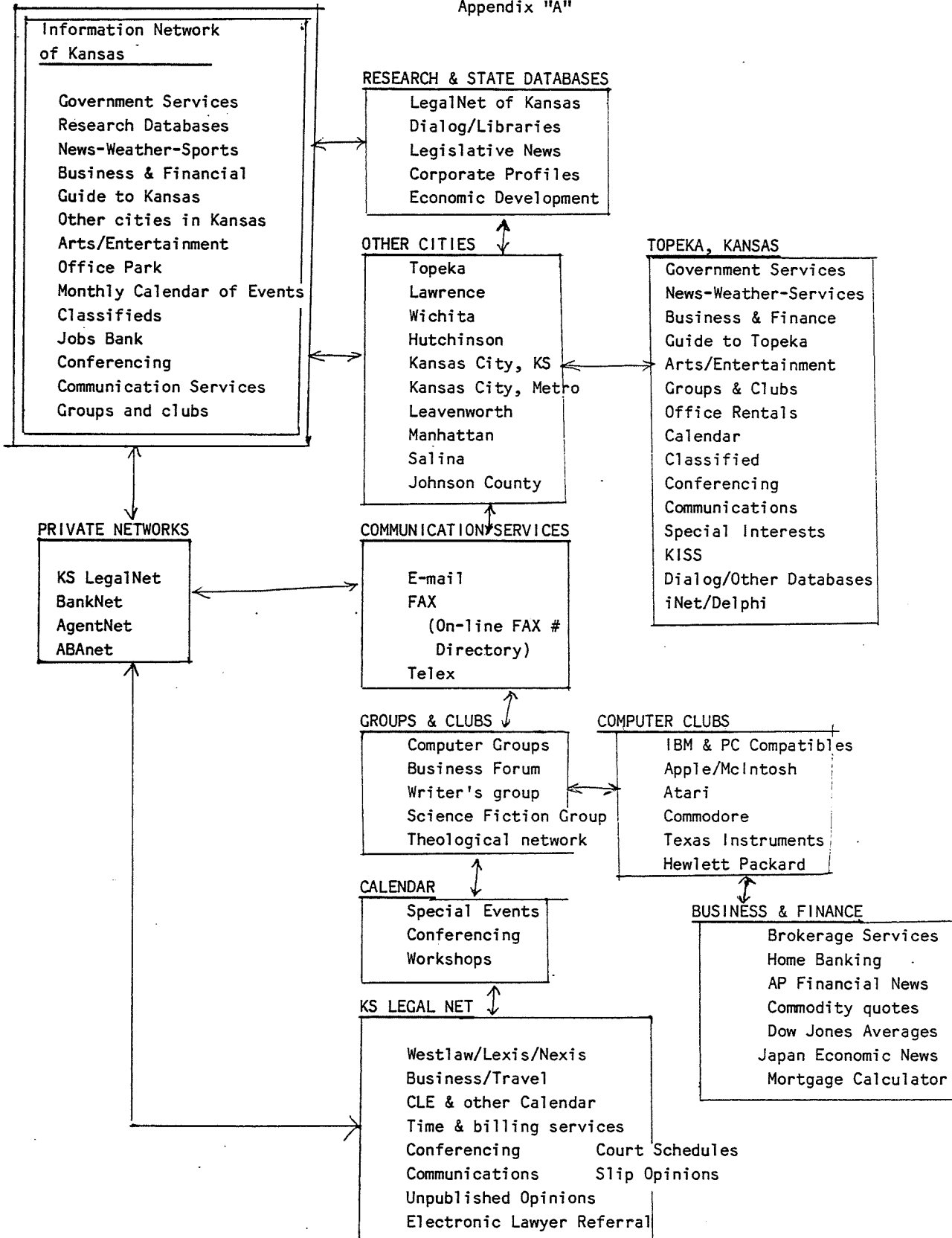
Appendix B - is a suggested timetable for implementing INK.

Appendices C and D - are the hierarchy charts of administration and system configuration of the Mississippi technet system described in this document.

Appendix E - is a copy of the Kansas Data Network being configured by the Division of Information Systems and Computers in the Department of Administration. Through rental of time on this system link, 80% of Kansas users could access INK and state data information with a local telephone call. See the Potential Users section.

Appendix F - consists of relevant recent newspaper articles on the subject of state information data systems.

Information Network of Kansas  
Appendix "A"



Appendix "B"

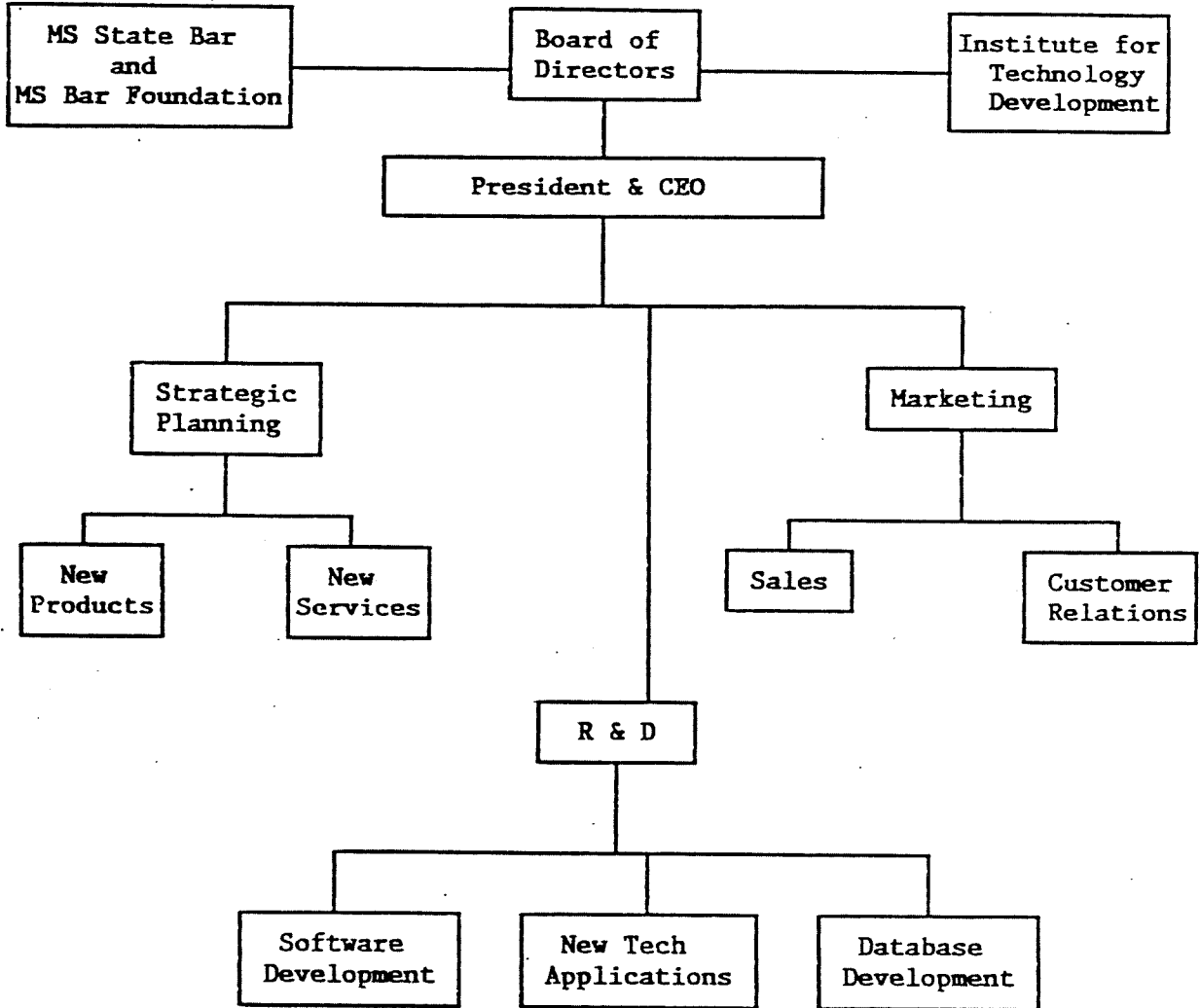
Timetable for Implementing INK

Activity --	(-----MONTH-----)					
	(1	2	3	4	5	6)
a. INK/Network manager consultation meetings	X	X	X	X	X	X
b. APPLICATIONS						
Select target groups of members	X					
Final Interview/survey determining need	X					
Design initial offering		X				
Test acceptance of offering with control groups			X			
Modify initial offering on feedback				X		
Launch offering to targeted audience					X	X
Plan future offerings two years out					X	X
c. TECHNICAL IMPLEMENTATION						
Assemble initial offering	X	X	X			
1) DIALCOM/	X	X	X	X		
2) ABAnet/Bar Services		X	X	X		
3) Other Third Parties		X	X	X		
Design menu and help screens			X	X		
Customize PC communications package			X	X		
d. MARKETING, SALES & ORDER FULFILLMENT						
Plan methods to continually solicit feedback from members		X	X			
Plan dates and objectives for promotions:						
1) Seminars				X	X	
2) Direct Mailings				X	X	
3) Advertisements				X	X	
4) Publicity/Press Releases				X	X	
Design documentation & literature:						
1) Price Sheets/Contracts	X		X			
2) Quick Reference Guides			X	X		
3) Membership Subscription kits			X	X		
4) User documentation			X	X		
5) interest packages				X	X	X
6) Promotional flyers				X	X	X
Production of documentation & literature					X	X
Hire and train Customer Marketing representative				X	X	

Activity --	-----MONTH-----					
	(1	2	3	4	5	6)
Install 800 sales line				X	X	
Establish and automate lead and order tracking			X	X	X	
Design methods for producing management reports			X	X	X	
<b>e. SYSTEM ADMINISTRATION</b>						
Design the Directory and on-line mailing list			X	X	X	
Schedule periodic running of utility reports				X	X	
Schedule production control due dates				X	X	
<b>f. CONTRACTING, BILLING &amp; COLLECTIONS</b>						
Finalize INK/Network management agreement	X	X				
Negotiate 3rd party Dbase agreements:						
1) Mead Data (Lexis)		X	X			
2) West Publishing (WestLaw)		X	X			
3) Others		X	X	X		
Design member agreement		X	X			
Contract with bank for payment system		X	X			
Implement paper, on-line & credit card billing systems			X	X	X	
<b>g. TECHNICAL SUPPORT</b>						
Design PC tutorial package		X	X	X		
Staff and train customer support representatives			X	X	X	
Install 800 support help line			X	X	X	
Establish regular quarterly member training schedules			X	X		
Design telephone training program				X	X	

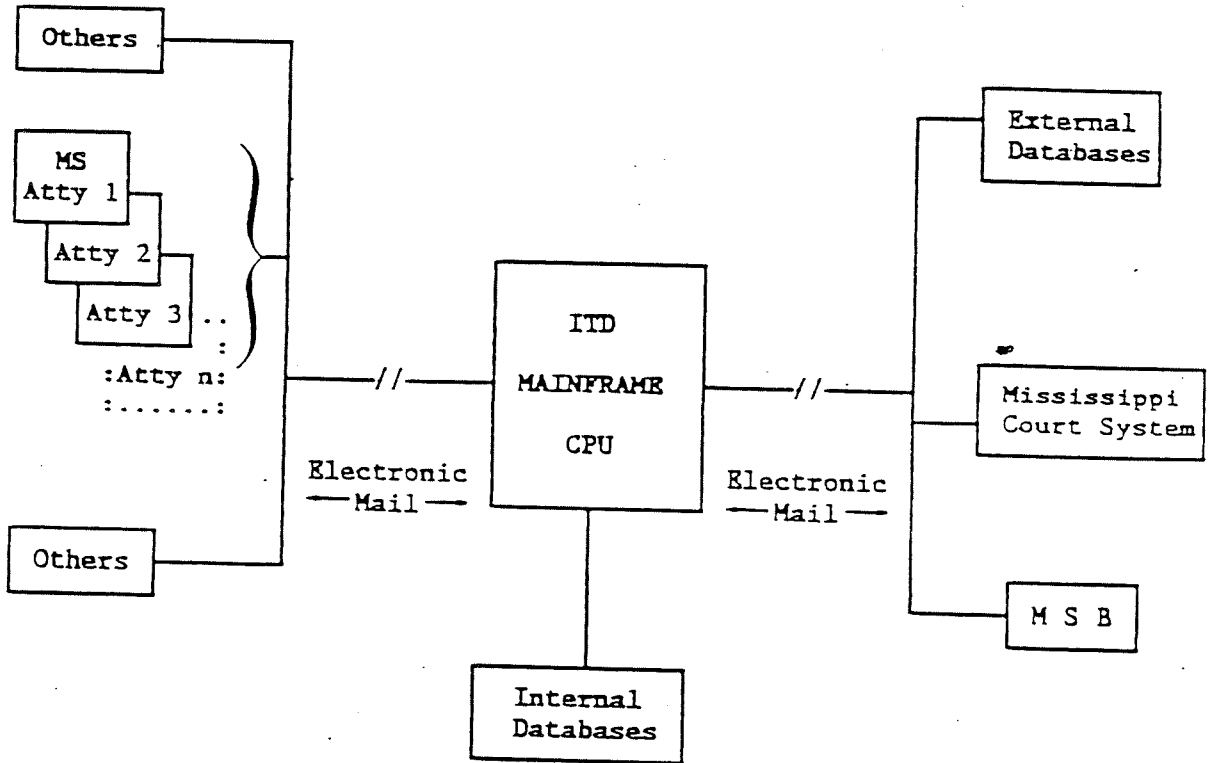


LEGEND SYSTEM CORP  
LEGAL ELECTRONIC NETWORK & DATABASE SYSTEM  
ORGANIZATION STRUCTURE



Board of Directors  
6 members total  
Majority from Mississippi State Bar

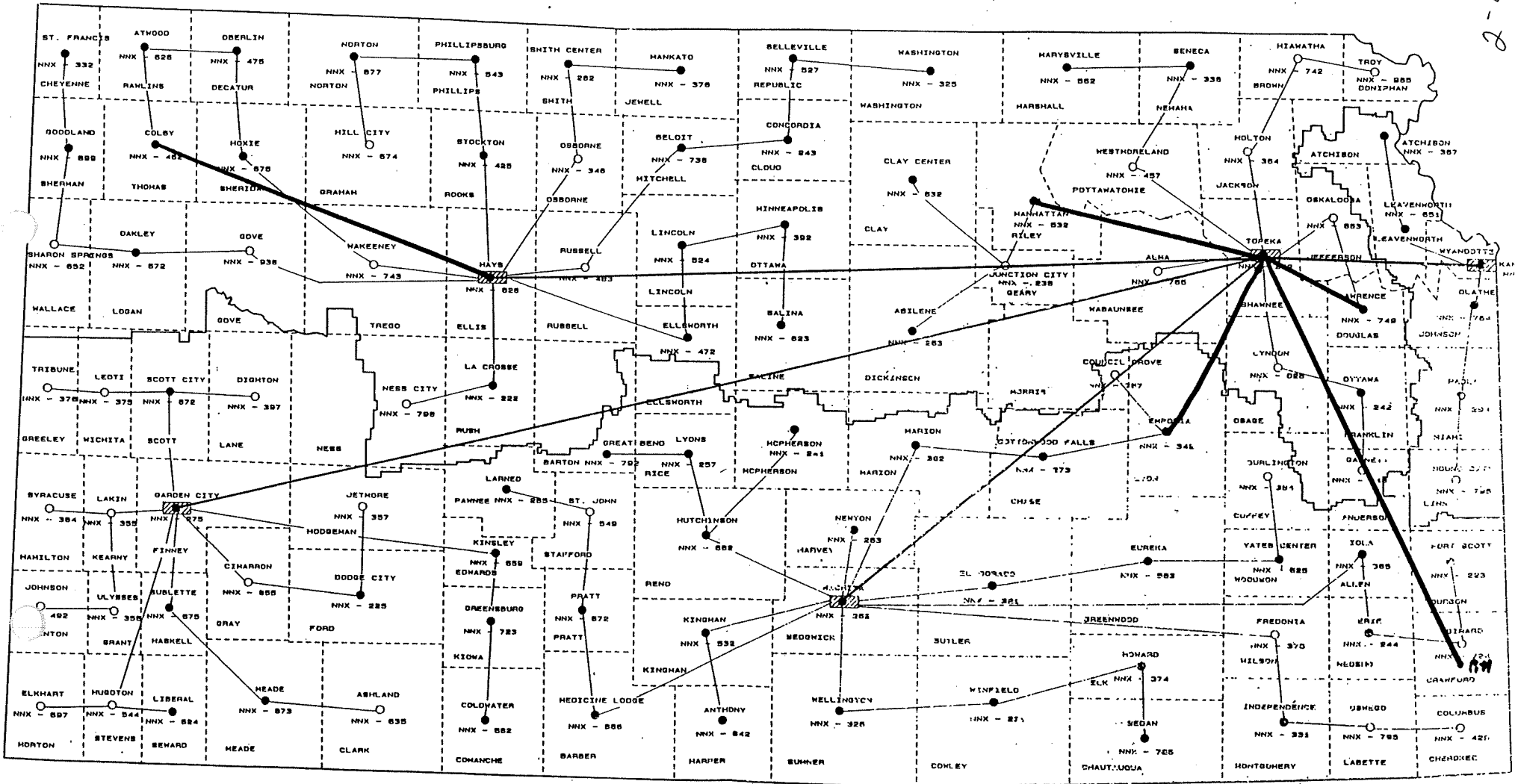
Legend SYSTEM



# STATE OF KANSAS DATA NETWORK

## Appendix "E"

2-29



● S. W. BELL OFFICES  
○ INDEPENDENT CO. OFFICES

8  
2-28

Thursday, May 4, 1989 3-A

Capital-Journal **TOPEKA & SHAWNEE COUNTY**

# Computer program on hazardous materials offered

By BILL BLANKENSHIP  
*Capital-Journal county affairs writer*

A computer program that would provide local disaster officials with readily accessible data on hazardous materials was demonstrated Wednesday at a quarterly meeting of the Shawnee County Hazardous Substances Planning Committee.

Terry Franklin, chief of the Chemical Data Management Unit of the Kansas Department of Health and Environment, tapped the name of a hazardous substance into the keyboard of a portable computer. In a few seconds, the computer screen displayed information about the haz-

ardous material, including health and safety precautions.

Federal law requires businesses, industries and individuals who store, manufacture or use certain categories of harmful substances to submit reports to the KDHE, which collects the information on a computerized data base.

In turn, the portion of that information applicable to a local area, like Shawnee County, can be loaded on a personal computer such as the one Franklin used, which was small enough to be placed on his lap.

Franklin said the county could obtain the software and subscribe to data updates for about \$800.

Floppy disk

Although committee members said they were impressed by the system Franklin demonstrated, they also asked him whether there were better ways for law enforcement, fire departments and other emergency agencies to obtain the information in the KDHE computer.

Topeka Police Lt. Chuck Chiles asked why the KDHE computer could not be linked with an existing state government communications system so that local agencies could tap into the information directly.

The Topeka Emergency Communications Center is developing a computer-assisted dispatch system,

which eventually will include computer terminals in police cars and fire trucks, said Chiles.

If the proper groundwork were established now, it would be possible for law enforcement officers and firefighters to obtain information about toxic substances from their vehicles, he said.

Franklin told Chiles and the others that they raised exciting possibilities that may or may not be feasible but were worth investigating.

Meanwhile, Committee Chairman Gary Middleton, who is assistant director of the Topeka-Shawnee County Emergency Preparedness office, said the program offered by KDHE would be worth the \$800 investment.

It would be quicker than the current system of looking for chemical names in paper manuals, he said. Also, Franklin demonstrated how

the computer data base recognizes several synonyms for one chemical, easing the search.

The committee will consider purchasing the computer program when it meets in August.

On Wednesday, the committee also discussed a proposed city-county law that would make those responsible for causing hazardous spills liable for reimbursing local emergency agencies for cleaning them up.

Assistant County Counselor David N. Holstead, also a committee member, said he was working with the city attorney's office to draft the proposed city ordinance and county resolution.

Middleton also appointed a committee to plan a hazardous spill training exercise before the end of June. The committee will determine whether the exercise will be a tabletop one or a field exercise.

# Jackson County court files go on-line, accessible to lawyers

BY LOLA BUTCHER

In the first such experiment in Missouri, Jackson County Circuit Court is installing computer equipment that will allow lawyers — and eventually, members of the public — to tap into court records from computers at their homes or offices. The equipment is expected to go on-line this week or next.

Nearly a dozen law firms, coordinated through the Kansas City Metropolitan Bar Association, contributed \$1,000 each to pay for the new computer equipment, said Bobbie Nailling, the association's executive director.

Those firms will be the first to experiment with the court-file access, but the computerized files eventually will be available to anyone equipped with an IBM-compatible personal computer and the appropriate modem.

The move is expected to free lawyers and their assistants from many time-consuming trips to the Jackson County Courthouse. Further, it will provide 24-hour access to records that currently are available for public viewing only during normal business hours.

"They can get certain information they would have had to come down to the court and get," said court administrator Austin Van Buskirk. "We think it will be real popular."

Among the records available through the new program will be "action files" that record court filings such as what docket a case has been assigned to, whether service has been made to defendants and whether a party has filed an answer to a complaint or motion.

Additionally, Van Buskirk said, the files that indicate what, if any, lawsuits have been filed by or against a person or company will be made available.

The experiment follows a trend across the country in which court officials are trying to make some records more accessi-

ble. Presiding Judge Gene Martin said the Jackson County move in this direction started more than a year ago when Judge Mike Coburn was serving as presiding judge.

Van Buskirk said a survey indicated that some counties — most notably, Montgomery County, Pa., and Fairfax County, Va. — have made extensive court records and other county documents such as those kept by the recorder of deeds and property assessment officials available 24 hours a day through computers.

Van Buskirk hopes that Jackson County's first step into remote access will be followed by a computerized program to give child-support payment recipients more access to information about those payments.

The court collected \$22 million in child-support payments and distributed those payments to their recipients last year, up from \$500,000 when the court was first appointed as a go-between between payee and payer in 1974.

That court function, Van Buskirk said, prompts many telephone inquiries from recipients wanting to know if the payment has been received and when it will be dispatched. Because of the level of calls, the court in recent years has limited the call-in time to from 3 p.m. to 4:30 p.m. on workdays.

"These people are needing their money. They flood us with phone calls and we really can't handle it," he said. Some recipients can't call during the court's limited hours and thus have no access to information about their payments.

He has proposed a \$30,000 purchase of computer equipment that would give child-support recipients access to the information 24 hours a day. The equipment would give callers a computerized "voice response" that would give information about their files.

Appendix "F"

# Advocacy + Automation = Computerized Transcripts

BY GAIL DIANE COX  
National Law Journal Staff Reporter

IT WAS CRUNCH time, the cross-examination of a key government witness in a six-month drug trial, and Jose A. de la Vara says it was like shooting fish in a barrel.

"As soon as I could see where Larry was going, I punched in the search," recalls Mr. de la Vara, who was sitting at the defense table representing one of

many defendants in the complex case, *U.S. v. Estay*, while his co-counsel, Larry L. Debus, questioned the witness. It was 1987, and U.S. District Judge Roger V. Strand of Phoenix, Ariz., was presiding in a courtroom that was one of three in the nation that had just been outfitted with computers as an experiment by the National Shorthand Reporters Association.

The witness's prior testimony from a hearing flashed onto Mr. de la Vara's monitor. "I turned the monitor so

*Continued from page 1*

Larry could just cock his head to see it. He set the guy up.

"When the contradiction came, there was no way to deny it, because with one stroke, everyone — the judge and the prosecution — had the earlier testimony on their screens too."

## Moment in History

The judge swiveled his monitor around so the witness could see. It was what enthusiasts for computer-integrated courtrooms call the moment in history when Perry Mason met Buck Rogers.

Mr. de la Vara, who has since joined the Maricopa County, Ariz., prosecutor's office, and Mr. Debus, of Phoenix's Debus, Bradford and Kazan Ltd., credit the technology for the judge's dismissal of several counts. When the government won convictions on the remainder, new appellate counsel used the computerized trial transcript — immediately available and infinitely cross-referenceable — to get the sentences reduced.

The defense attorneys in the *Estay* case do not think their advantage was unfair — not as long as both sides had the same technology available.

Outfitting computers in courtrooms across the nation has become a personal crusade of the judge in the *Estay* case. Using words such as "awesome," Judge Strand gives frequent demonstrations with his reporter of 14 years, Marilyn Sanchez, to groups of court administrators, attorneys and judges.

Bolstered by a Strand videotape, the Columbus Bar Association has become the first group of lawyers in the country to pay jointly (with Ohio's state association of courtroom reporters) to outfit a courtroom.

## Booting Up in Columbus

Start-up costs are about \$40,000. When the Columbus state courtroom boots up this month, it will join the original three — in federal courts in Phoenix and Chicago, and a state superior court in Detroit — and a handful of new installations in Texas, Illinois, Kentucky, Washington, California and Michigan.

The sponsors of the program, the shorthand reporters, have quit calling their project "Courtroom of the Future" and started predicting a fivefold increase in the next two years. Judge Strand is among those who suggest that big law firms may be among the patrons, given that the costs are small change in the context of complex litigation.

In the meantime, the shorthand reporters admittedly have an interest in footing as much of the bill as their national and state organizations can afford. Since the 1970s, they have been fighting court technology — electronic recording devices and videotapes — that some would like to see replace them altogether.

The computer-integrated courtroom is an alternative that puts the reporter centerstage, with new responsibilities and prestige as an information manager.

Perhaps the flashiest new responsibility is "real-time," a process by which stenographic strokes go into an electronic dictionary that translates them back into English on monitors for everyone to see.

## Deaf Litigants

Almost three out of four reporters in the federal courts already have electronic dictionaries that they use after the court day to produce computer-assisted transcripts — CAT — a widespread practice since the early 1980s. The real learning hump is behind them, says B.J. Shorak, director of research and technology for the national association. "But the next step, to real-time, can be scary. We tell them: Grow, or lose it."

The most obvious benefit of real-time is for non-English speaking and hearing-impaired litigants. Stanley T. Dobry, a Detroit sole practitioner, tried a "messy" divorce case with child custody complications and two deaf parents. Mr. Dobry is a convert. "I found I was following the screens too, because the sign language translators were subvocalizing so I couldn't hear," Mr. Dobry recalls. He adds that most lawyers have been in courtrooms with poor acoustics where they would welcome a glance at what is going into the transcript.

Judges who have used the systems say they, too, are not above depending on the screens, especially when they hear the word, "Objection!"

## Short Attention Spans

A judge whose attention may have strayed doesn't hear the question, much less have a basis on which to rule on an objection, notes Circuit Judge Stephen M. Shewmaker, who started using the system in his Danville, Ky., courtroom last fall. The judge can ask to hear it again, and the difference on any given question "might not be significant," Judge Shewmaker says. But "as a trial unfolds day after day or week after week, and the court is called upon to make an infinite number of rulings, the ability to have the precise formulation of the question before the court when you need it is going to enhance the quality of the rulings."

The two- to five-second delay between when the word is spoken and when it appears on the monitor can take some getting used to, according to state District Judge Frank Andrews in Dallas, who inaugurated his computerized courtroom about the same time as Kentucky's. But the benefits soon had him joking that his only real disappointment was that he couldn't just "scroll ahead and read a verdict without listening to the entire trial."

Phoenix's Judge Strand stresses that real-time is the icing on the cake, and that a tailor-made data base that puts daily testimony at everyone's fingertips can be jury-rigged by attorneys who bring laptop computers into courtrooms with them.

## Taking the Next Step

Not only can witnesses be impeached or rehabilitated with superhuman accuracy, but "at the close of the opposition's case, it is miraculous what I have seen an attorney be able to do marshaling an argument for a directed verdict," he says. In Phoenix, with the cooperation of his hardware supplier, San Diego-based Xscribe Corp., Judge Strand is taking the next step: integrating terminals in his chambers and at the clerk's station, tying into calendaring and performing assorted bookkeeping functions. The system also reaches outside the courtroom

Appendix "F"

2-30

into information systems, including legal research data bases.

A 1988 assessment of the system by a Washington, D.C., consulting group, however, revealed the two other pioneer courtrooms are greatly underutilized. The study, paid for by the shorthand reporters, disclosed that only six cases had used the technology in Detroit, despite Judge Robert J. Colombo's "team concept of management," and it put much of the blame on lack of courthouse communication about what is available.

In the Chicago pioneer courtroom of retiring U.S. District Court Judge Prentice H. Marshall, the study found only a slightly higher rate of usage — and complaints by the judge that both he and the attorneys needed more training.

The study and anecdotal evidence hint that lawyers themselves may be a weak link. Half the participating lawyers interviewed by the study said they had received no training before dealing with the system and would attend a program if it were available. The study also found that when pre-trial seminars — typically 30 minutes — are offered, attendance is poor.

When speaking anonymously, some lawyers say they are worried the mechanics of the system can be distracting and there is a risk of getting mesmerized by the technology.

#### Increasing Billable Hours

Kathryn A. Keeler, a Cleveland shorthand reporter who heads her Ohio state organization, says lawyers' sentiments correlate to age. "There's a

senior partner and a junior associate, and the senior partner, 45 years and up, has no interest," says Ms. Keeler. She adds that if she is able to sway the senior partner, say by showing how billable hours can be increased, "they'll say to tell the associate."

That's why Ms. Keeler and others see the Columbus bar's co-sponsorship as a breakthrough with value beyond money. There will be extensive orientation and publicity provided by the bar, which intends to encourage the same from other bar associations.

At the national shorthand reporters group, officials admit that Mr. de la Vara's glee over what he was able to do in his Phoenix drug trial did set off some soul-searching. It led to a not-for-attribution survey of two dozen attorneys who have tried at least one case in a computer-integrated courtroom. The association released the results last month, including positive and negative comments elicited when pollsters provided various courtroom scenarios.

Overwhelmingly, more than 90 percent of the two dozen veterans said they would use a computer-integrated courtroom again to help them search transcripts, identify inconsistencies, and the like. The only substantial resistance came when the pollsters switched scenarios, asking not about mere information processing, but rather computer analysis.

For example: How would the lawyers feel about having a computer analyze the strength of the other sides' opening argument and "give it a rating based on probable juror impact?" Only 17 percent said they would be willing to at least try it. "That's nonsense," was one retort. "If you were dealing with a young lawyer, it could intimidate him needlessly. If you were dealing with an old codger, he isn't going to give a damn anyway."

But such futuristic choices are not the immediate concern for enthusiasts, struggling to install just the basics of information processing. "You can't believe what we've gone through, talking to vendors about programs that it turned out didn't exist," moans Ms. Keeler, regarding the Columbus courtroom. "Instead of 'software,' we started referring to 'ghost ware.'"

And according to Judge Shewmaker, the biggest problem getting the system going in Danville came from those lawyers who have been in practice for a while.

"They take you aside and say they don't want to learn the new computer stuff," he says, "and then they want to make sure the other side won't take advantage of them."

Information Network of Kansas (INK)

Volume II

A Feasibility Study For A Subscriber Based  
Computer Information Network



## KANSAS INC.

Kansas Inc. is a public-private partnership created by the 1986 Kansas Legislature. The organization, through objective research and analysis, seeks to provide the Kansas leaders and decision-makers with policy direction that can improve the economic competitiveness of Kansas. Kansas Inc. serves as advisor to the Cabinet and Legislature, analyzing the State's tax, regulatory, and economic development policies. It conducts research and recommends actions to produce a growing Kansas.

A Board of Directors of 15 members directs the activity of Kansas Inc. The Board is Co-chaired by Governor Mike Hayden and Mr. Eric Jager of Kansas City. Board composition is defined by statute and contains a majority of private sector membership from the following industries: oil and gas, financial; aviation; agriculture; and, a value-added manufacturing firm. Additional membership comes from labor, the Board of Regents, the Commanding General of the Kansas Cavalry, the Secretary of the Department of Commerce, and holders of the four Legislative Leadership posts.

Kansas Inc. is funded two-thirds by the State of Kansas and one-third through private sector investment.

## ACKNOWLEDGEMENTS

Kansas Inc. would like to acknowledge the work of Dr. John Shoemaker with Capital Research Services, Inc. Dr. Shoemaker under contract with Kansas Inc. conducted the research and has written this feasibility report.

In addition, Kansas Inc. would like to thank the representatives of the state agencies, private businesses, and associations who were interviewed during the project research. Mr. Terry Boulanger, Marketing Director for the New Mexico Technet system deserves particular note for his willingness to respond to questions and suggest further areas of research. Other people who have helped with this project include: William Bradley, Ron Smith, and Marcia Poell with the Kansas Bar Association; Russell Getter, Director of the Division of Information Systems and Communication; Duane Johnson, State Librarian; and John Vine, in the Secretary of State's Office.

This feasibility study is only the first step in a continuing effort to bring a system of computer information sharing with and between the state's private and public sectors.

Charles R. Warren  
President

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## I. INTRODUCTION

In response to an initiative from the Kansas Bar Association, Kansas Inc. investigated the feasibility of establishing a statewide subscriber supported information system. During the course of this research, Kansas Inc. became aware of the New Mexico Technet system. Technet is a subscriber system for private sector users that provides public access to non-proprietary information generated by state agencies. This information is made available on a statewide computer network. Kansas Inc. authorized this feasibility study to determine the feasibility of establishing a similar system in the State of Kansas.

The primary focus of this research project is on the feasibility of making economic development data generated by state agencies available to the public through a statewide computer network. The objectives of this study are:

1. To determine the feasibility of developing a subscriber supported information system;
2. To determine the potential demand by private sector users for public information available from state agencies; and,
3. To assess the feasibility of creating a subscriber system similar to New Mexico's Technet.

In order to obtain this information, in-depth interviews were conducted with representatives of the various state agencies deemed by Kansas Inc. to have significant amounts of information of interest to the public and representatives of consumer groups who might be interested in obtaining this information electronically via a statewide computer network.

Potential users in the private sector were identified:

1. based on reported users of the Technet system in New Mexico. These industries were identified as a result of a telephone call to Terry Boulanger, the Director of Marketing for the Technet system, and
2. by respondents in provider agencies.

Interviews were arranged with representatives from the agencies identified as providers of information of interest to private sector users and with representatives from private sector organizations which currently use significant amounts of state generated information. Cooperation was excellent from agency personnel and representatives of private sector organizations.

## II. TECHNICAL REQUIREMENTS

The State of Kansas has been working for a number of years to develop a statewide computer network. This network is expected to be completed in 1989. It will link up computers across the state with Topeka and with each other. The online information service proposed in this study would utilize this network. Dr. Russell Getter, Director, of the Division of Information Systems and Communication estimates that approximately 80% of the state's population would be able to access this network with a local telephone call.

Although there are a number of ways in which such a system could be configured, it would probably make most sense to set the system up so that incoming requests were routed to the appropriate database within the agency that maintains the information. A decentralized system would avoid the problems of duplication, the need to update and transfer databases between computers, etc.

A public access computer network will require a mini computer, system software and a staff. With respect to the computer, several data processing people recommended an IBM AS 400 although most any make should work. The choice will probably be influenced more by financial considerations than anything else.

In addition to the hardware requirements, there will need to be a significant investment in software development. The majority of subscribers are not likely to be sophisticated computer users. The system must be extremely user friendly if it is to attract a significant number of users. The system software must be menu driven and intuitively understandable.

Several agencies currently maintain online databases, though these databases are not currently accessible by the public. The problem with public access is that they are not designed for use by non-agency personnel. In order to access these databases, users must log on and traverse a number of screens to reach the database. Access procedures must be simplified.

Moreover, many of the data bases currently on line, contain a mixture of public and proprietary information. The software must ensure that the user is locked out of the proprietary information. Many of the databases also contain codes which are not self-explanatory. Some additional programming will need to be done to in order to make these databases intelligible to the user who has accessed them.

A number of technical concerns were expressed during the course of the interviews. First, several agencies have databases

which may have some appeal to the public but because of their size it is unlikely that they would be put on a computer. Some are so large that the data entry task would be enormous and because of their size they exceed the agency's online storage capabilities.

Most databases are not so large that data entry or storage pose a problem. As new low cost, high density storage devices become available, larger databases can be put online. Data storage technology is changing very rapidly. With the development of computer scanners, the cost of data entry may also diminish greatly within the near future. These devices make it possible to enter hard copy data directly into the computer. Several state agencies already have scanners although they are not yet widely used.

Second, several data processing personnel expressed concern over the effect of public access on the performance of their system. They believe that a large number of users would significantly slow the performance of their system. Moreover, with limited access capabilities, state employees might find themselves competing with the public for access to these databases. This could have a negative impact on work productivity within agencies maintaining online databases.

These technical issues are raised not because they represent major obstacles to the establishment of a statewide public access database network but because they are issues that must be addressed during the design and implementation of the project. The solutions may be simply a matter of cost. They are not problems which require conceptually difficult solutions.

### III. STATE DATABASES

#### A. Kansas Department of Health & Environment (KDHE):

The KDHE has a considerable number of databases though many of them contain data not subject to the Open Records Act. This is particularly true for the health data, because much of this information deals with proprietary aspects of individual lives. Birth certificates, for example, fall into this category. Most of the environmental data, on the other hand, is subject to public access.

In order to satisfy the demand for health information, the Department of Health and Environment has developed a number of aggregate reports which summarize the information contained in proprietary databases. The Summary of Vital Statistics, for example, is a summary of the data taken from both the open and proprietary portions of the birth records.

Requests for this information are substantial. Many of these requests are satisfied by the Summary of Vital Statistics which was first developed to satisfy routine requests for information. As the state licensing agent for hospitals and nursing homes, the Department has a great deal of information about these institutions. Much, though not all of this information is subject to the Open Records Act. There are also considerable requests for this information.

The requests for health information come from a number of sources. These include the federal government, local units of government, other state agencies, legislators, health care providers, consultants, the press, private industry and the general public. The department does not keep records on the number of requests but Jim Staehli, Chief of the Research and Analysis Section, estimated that 25% of the division's time is used to respond to requests for this information.

On the environmental side, the Department has a number of databases subject to public access. These include permits (drilling, digging, etc. ) and information about the use and storage of hazardous materials. This information is currently rather fragmented although the department is in the process of consolidating it. Most of the information currently resides in databases on department microcomputers and would, therefore, not be difficult to centralize.

In order to comply with Title III of the Emergency Planning and Community Right-To-Know Act, KDHE is establishing a statewide database system. This database which includes information about the storage, use and manufacture of harmful substances is available to local governments on CD-ROM or floppy disk. The majority of requests for environmental information come from fire, police, and civil defense agencies and individuals who are concerned about the safety of their work place.

Although the number of requests for environmental information is not large, it appears to be growing. Department personnel believe that if this information were available online there would be more interest in it. Regardless of the level of interest, however, the federal government has mandated that it be made available to the public. Although this can be done in a number of ways, uploading it to an online system would certainly satisfy that requirement.

Staehli believes that putting the information on a computer network would probably save enough staff time to justify the effort. He pointed out, however, that online access would not eliminate requests for information. There would still be questions regarding how the information was collected, what it means, etc.

B. Department of Human Resources:

The Department of Human Resources probably maintains more databases than any other state agency. Like the Department of Health and Environment, most of the information contained in these databases is not subject to the Open Records Act. Many of these databases consist of information about specific individuals and are, therefore, proprietary.

The Department does, however, issue a number of monthly and annual reports which summarize this information. The reports could easily be made available to the public on a computer data network.

The databases maintained by the Department of Human Resources include:

- Occupational employment information;
- Plant closings;
- Job openings and job placements;
- Job Corps information;
- Test scores for job service applicants;
- Information on labor disputes (wage claims, etc.);
- Workers compensation information;
- Industrial safety inspections; and,
- Labor relations.

The databases which would probably have the most public appeal are the job openings, labor market information, and monthly employment statistics. Based on potential usage by the public, all of these databases would probably generate sufficient revenue to cover their costs.

In addition, the Department of Human Resources prints an employer handbook (59,000 copies) as well as numerous pamphlets and brochures. Putting these online would reduce the demand for printed copies and result in a significant cost savings over a period of time.

Department personnel estimated that a significant amount of time is spent responding to inquiries from the public. Because of the specific nature of many of these requests, it is difficult to estimate the savings in staff time that would result from putting department databases online.



C. Kansas Corporation Commission:

The Kansas Corporation Commission (KCC) collects a significant amount of commercial information. Most of this information has to do with regulated industries such as utilities, transportation, etc. Information subject to the Open Records Act include the commission calendar, annual reports, load management reports, fuel cost reports, commission orders (official proceedings), pre-filed written direct testimony, and information about a variety issues provided to them by regulated industries.

The Corporation Commission is not one of the more computerized of the state agencies although computerization has a relatively high priority at this point. The Corporation Commission currently has a great deal of information on microcomputers throughout the agency. It is in the process of centralizing this information on a mainframe. Much of this information could easily be made available to a public access system.

The KCC's immediate priority is the development of a case tracking system. They are also putting complaint data on the computer. Computerization of corporate annual reports also has a high priority.

Requests for data come from a wide variety of sources, including: attorneys, utilities, investors, stock brokers, lobbyists, trade associations, other state agencies, and the general public.

The number of requests varies considerably depending on the calendar of events. During rate hearings, the number increases significantly. For example, the Wolf Creek hearings in 1984 and 1985 created a large backlog of requests for information as a result of public interest in the case. Although the demand for KCC type of information is frequently significant, the amount of storage required to put it online would probably make it impractical to do so. Summaries or extracts of KCC specific information might, however, be useful and could easily be made available on computer.

Corporation Commission representatives indicated that if the types of information requested most frequently were online it would save considerable staff time. Given a lack of data on requests for information, they could not be more specific.

D. Department of Commerce:

The Department of Commerce is currently developing an online database entitled "KEDS" (Kansas Economic Development System).

This is a menu driven database which contains economic development data (available industrial buildings and sites, office space, etc.) obtained from cities and counties across the state. Although this database could easily be made available to the public, it contains a number of codes which would make it difficult for untrained users to understand the data.

Building and site data is used by companies seeking to expand or to open branch offices, and is also of interest to developers, Chambers of Commerce, city and county planners and others involved in economic development.

The number of requests has not been great, but this is largely because this database is relatively new and its availability is not widely known. Based on similar experiences in Missouri, Department of Commerce personnel expect to see a large increase in the number of users as the database expands and becomes better known.

The Department also maintains community profiles for each community in Kansas. These profiles contain local information of interest to developers and companies seeking new sites for expansion of existing business or the start-up of a new business. Although this information is easy to obtain, users may find the ability to browse this information useful.

#### E. Department of Revenue:

The Department of Revenue has some of the most important and frequently used public domain databases. These include information about sales tax collections, reappraisal data, individual driving records, motor vehicle registrations, and information on the sale of alcoholic beverages.

The databases maintained by the Department of Revenue are used by a wide variety of users. Cities and counties frequently request information about sales tax collections. Individuals, employers, and insurance companies are among those who most frequently request information about individual driving records and vehicle registrations.

The Internal Revenue Service has already begun to experiment with the electronic filing of corporate income taxes. In the future, much of the information collected by the Department of Revenue will also be transmitted electronically. This information will not have to be keyed in to the computer in order to make them available to online users. It can, therefore, be made available to the public more quickly and economically than is currently possible.

The Department of Revenue is also a major user of

information from other state agencies. They routinely obtain information from the Department of Human Resources (employer ID numbers), the Kansas Corporation Commission (supporting information on mineral tax collections), and the Department of Transportation, and exchange their own data with other agencies.

F. Secretary of State's Office:

The Secretary of State's Office has considerable information of commercial value. These include Uniform Commercial Code, corporate information (corporate name, resident agent, annual report), and lien information.

This information generates significant numbers of requests primarily from bankers and attorneys, though these databases appear to interest a wide variety of people.

According to representatives of the Secretary of State's Office, 41% of the agency's revenue is derived from fee services. The majority of these fees are derived from requests for information. This reflects their strong service orientation with respect to the information they collect and the groups that use it.

As a part of the federal agricultural program, the federal government does frequent lien search on state agricultural properties. The Secretary of State's Office is expecting to go online with the federal government within the foreseeable future.

Although much of the information collected by the Secretary of State's Office is not currently computerized, it is of such commercial value that significant parts of it may well be put on computer in the near future in order to better satisfy user demands.

G. Insurance Commissioner's Office:

The Insurance Commissioner's Office maintains a number of databases related to the insurance industry. These include an agent file, a directory of insurance companies authorized to do business in Kansas, non-admitted insurers, insurance company annual reports and information about the Fire Fighters' Relief Fund.

Although they receive a number of data requests, representatives of the Insurance Commissioner's Office indicated that a number of these requests are screened out because the intended use violates the commercial use restrictions contained in the Open Records Act.

The majority of valid requests come from attorneys and

members of the general public. Those requests which are denied tend to come from people who want to sell their products or services to insurance agents or companies.

Most of the information collected by the commissioner's office is not on computer. There does not appear to be sufficient interest from the public to justify computerizing the Insurance Office's data. Based on discussions with insurance department personnel, it does not appear that the information they collect has much commercial value and probably would not be worth putting online.

#### H. State Library:

The State Library has a card catalog which contains listings for all libraries within the state. It is currently available on CD-ROM at the State Library. This is a database that would undoubtedly receive heavy use from a wide variety of prospective users.

The State Library also provides a legislative bill service. They provide summaries of all bills that have been filed in the State Legislature. It is already available on computer and would be easy to put on an computerized information service. This information is currently accessed by telephone by lobbyists, representatives of state agencies, cities, county and school board representatives, lawyers, bankers, and anyone else affected by state legislative action.

The State Library is a repository for federal documents including U. S. Census data. While this information is not on computer it may well be possible to put parts of it online as necessary to meet consumer demand.

As a repository for a wide variety of types of information, the State Library may be able to make available other types of information generated at all levels of government. With the decreasing cost of computer storage devices and scanners, it will be less costly to transfer information from hard copy to computer database and maintain it online.

#### IV. AGENCY ATTITUDES

All of the representatives from the state agencies expressed positive attitudes toward the establishment of a state data network although levels of enthusiasm vary considerably. Several state agencies, the Secretary of State's Office in particular, perceive the dissemination of information as an important part of their job. Many believe that this is an inevitable development though opinions differ with respect to how soon it will become a reality.

Despite the generally enthusiastic attitudes, there were some concerns. Many of the respondents interviewed in this survey expressed some concerns about the Open Records Act. Many feel that they have tighter control over the use of the information when they have to individually respond to personal requests for information. The Insurance Commissioner's office indicated that many of the requests made to their department are not honored because the intended use of the information would violate the provisions of this act.

Several of the providers interviewed expressed concern over the liability issue. The Secretary of State's Office, for example, was recently sued over a records search which provided incorrect or outdated information. The fear is that if the data made available online to the public is not frequently updated or there are inaccuracies in the information they might be subject to similar liabilities.

It has been pointed out, however, that if the public is allowed to do its own computer searches of the database, the burden of liability is shifted to the user. In other words, state employees can no longer be held liable for reading from the wrong record or incorrectly reporting the information requested. The failure to find a record will likewise not be the responsibility of the state agency providing the information. The user will assume a greater responsibility for finding the information and correctly transcribing it.

In addition to the timeliness and accuracy issue, several providers expressed concern over the fact that their data bases contained data that is not subject to the Open Records Act and that inadvertent access to the public would subject them to law suits. Two directors of separate state agency communications divisions indicate, however, that it is technically feasible to restrict access to the public domain information. This point may need to be emphasized to agencies which have concerns in this area.

A related concern expressed by several agencies, the Insurance Commissioner's Office in particular, is that violations

of the Open Records Act would be more difficult to prevent when the data is accessible via computer from a database. The Open Records Act specifically prohibits the use of public information for the purpose of soliciting business. Many agencies currently screen requests. Most require those requesting information to sign an Open Records statement of compliance. Several agencies felt that control over the improper use of state information would diminish if the information were available online.

While these concerns are real and must therefore be addressed, the development of online systems will probably have little impact on the improper use of public domain information. Since the system is likely to be supported by subscribers, a statement of compliance could be required as a condition of use. Abusers could be locked out of the system.

Although the data to be considered for online access is subject to the Open Records Act and is therefore currently available to the public, there was some concern expressed about increasing the ease of access. Some public domain information is considered sensitive by some segments of the public. For example, donors to political campaigns are usually not anxious to have the names of the candidates and the amount of their contributions made public. Likewise, companies that store or use hazardous chemicals are not anxious to have that information become widely known. To the extent that consumer groups, newspapers and others have greater access to this information the project could become controversial.

One respondent suggested that perhaps the Open Records Act be amended to remove the limitations on the commercial use of the information. The state is in the business of providing information to the public even though many in state agencies do not yet see that as an important part of their job or as a function of their agency. A statewide network might be a good way to make this information more accessible to the public while generating revenue for provider agencies.

It is entirely likely that as attitudes in state agencies become increasingly service oriented and the system begins to win acceptance among potential users many agencies may begin to examine the commercial value of their data. They may even begin to research un-met consumer needs for the purpose of improving the services they offer. In other words, agencies may begin to look at the network not only as a means of serving customers but as a source of revenue and therefore generate new databases specifically designed for online access.

Some agencies, the Insurance Commissioner's Office in particular, expressed the belief that even if the information is available online, the majority of requests will be directed to staff members as they are now. When people want information

about insurance and insurance companies, they will always call the Insurance Commissioner's Office. They believe that only a small number of people will attempt to obtain the information from a computer information network.

This may be true at first. People are used to requesting certain kinds of information from particular state agencies. Moreover, most people who request information from the state do not have a computer, modem and communications software. This will change, however, and perhaps faster than many expect.

There are several reasons to expect that most people seeking information from state agencies will eventually look to a computerized information service rather than the state agency which originated the information. First, though the majority of users may be slow to accept a computerized information service, heavy users will more quickly find it advantageous for them to go online to obtain public domain information. Second, to the extent the local public libraries are tied into the network, the general public will have access to the system and will be helped and encouraged to use it by library personnel.

This process could be accelerated by agencies' information processing policies, financial incentives, and an aggressive marketing strategy.

## V. PRIVATE AND NON-PROFIT SECTOR DEMAND

None of the personnel interviewed at the various state agencies had any hard figures about the number of requests from the public for information subject to the Open Records Act. None had any procedures for keeping track of the number of requests for information. In some cases the number of requests is so large that it would require additional staff just to maintain an accurate count. Moreover, most of these agencies consist of more than one division so there is no one person through whom such requests are channeled. This makes it difficult to even estimate the number of requests for information.

Because of the lack of information concerning the number of requests for public domain information or the amount time it takes to process these requests, none of the agencies involved in this study had any idea how much money they spend providing information to the public. Several agencies (Department of Commerce and the Secretary of State's Office), however, indicated that the volume of requests for information was sufficiently large to require the full-time efforts of two or three staff persons. One respondent at the Department of Health and Environment estimated that 25% of the staff time in his division was spent processing requests for information.

The following sections discuss the demand for information (type of information, source, and the amount) by various users in the private and non-profit sectors of the Kansas economy.

A. Financial Institutions:

Financial institutions (banks, savings and loan associations, credit unions and insurance companies) were identified as important users of state public domain information. As lending institutions, they are particularly concerned with ensuring the proper execution of liens against property held as collateral, and frequently request information from the Secretary of State's Office.

This is particularly problematic in the case of car loans. According to Dennis Hadley, Senior Loan Officer at Highland Park Bank and Trust, the lag time between the approval of the loan and the registration of the car can cause the bank some anxious moments. Hadley is interested in a system in which he could directly register the lien on the vehicle with the Division of Motor Vehicles in the Department of Revenue at the time the loan is made.

With respect to the other information which bankers often request from the Secretary of State's Office, Hadley believes they provide good service. Although online service might be somewhat faster, it would be of minimal value to him. Financial lenders are currently able to get the information they need within an hour. The information is sent to them by fax machine with a mail follow-up.

Insurance companies and their agents are major users of Division of Motor Vehicles information (DMV). In order to determine insurability, they check drivers' records with the DMV. One respondent indicated that it would be nice to be able to make that determination online while the prospective client was filling out the paperwork.

Insurance companies check these records yearly for each driver they insure to determine rate adjustments. The ability to dump this information directly into their computer would be an important asset.

B. Attorneys:

Attorneys are potentially a major user group for a statewide database network. Not only are there important state databases that they regularly access during the course of doing business, but the Kansas Bar Association has been a major player in the drive to establish a subscriber supported information system.



The databases most widely used by attorneys are those maintained by the Secretary of State's Office. These include the Uniform Commercial Code, Articles of Incorporation and lien information. These databases contain information about Kansas chartered corporations, their corporate name, address, officers, stockholders, resident agent and whether the corporation is in good standing.

Trial lawyers are also interested in court calendars and appellate court opinions. Although this information is not difficult to get, it is often not as up to date as many attorneys would like. The ability to obtain this information online rather than waiting for it to be published would be a significant advantage for many attorneys.

#### C. Cities & Counties:

The Kansas League of Municipalities and its members are important consumers of information provided by the state. Much of this information is processed by the League for dissemination to its members. Many cities (and counties) request additional information directly from state agencies.

The type of information requested by the League and its members varies widely. Probably the most widely requested types of information would fall into the economic development category. This information includes data on tax rates and mill levies, community profiles, sales tax collections, etc. The majority of this information is located at the Department of Commerce and the Department of Revenue.

Cities and counties are also interested in other state generated information which impacts on their operations. This includes information from the Department of Transportation about highway planning and construction, information from the Department of Corrections on prison planning and construction, community corrections, and the KDHE's hazardous material database.

Larger cities, counties and school districts that lobby the State Legislature are also interested in legislative calendars, bill summaries, interim committee reports, and other relevant information generated by the legislature. Much of this information is currently compiled by the State Library.

#### D. Chambers of Commerce:

The Greater Topeka Chamber of Commerce frequently requests information from state agencies about issues related to economic development. In order to develop proposals for businesses

interested in relocating or establishing new offices/facilities, it is important to know how the local economy compares with respect to other cities around the state that might be competing for new business. It is also important to have information about the mill levy, the tax rate, and the assessed valuation in other cities.

The Topeka Chamber of Commerce frequently requests this information. Sometimes they get this information through the Kansas Chamber of Commerce and Industry. Sometimes they obtain it from the Kansas League of Municipalities and sometimes directly from the Department of Revenue.

Some economic development information is obtained from the Department of Commerce. The Chamber also requests information from the Department of Transportation from time to time about the status of construction projects, plans for new projects, etc.

Most of the demand currently comes from Chambers in the larger cities, although as the information becomes more accessible the demand from smaller Chambers of Commerce could be expected to grow.

#### E. Developers:

Developers, both commercial and residential, use economic and demographic information to determine the potential demand for various types of construction. Although some developers collect large amounts of information in the process of conducting sophisticated feasibility studies, the majority of developers in Kansas rely largely on traffic counts and population projections.

The reason for the relative lack of demand for economic data by local developers is that:

1. many projects are obviously feasible; and,
2. banks do not demand sophisticated feasibility studies.

Gordon Garrett, a local developer believes, however, that demand for economic and demographic information will increase over the next few years. This expectation is based on a number of observations about the construction industry in Kansas. First, many developers are not aware of what kinds of information are available from the state and from private corporations. As knowledge of this information becomes more common, demand will increase. Second, commercial development is becoming an increasingly competitive field. Developers will increasingly look for information that will help them to maximize their profits and/or minimize their risks. The number of real estate developers in Kansas is not large. Therefore despite expected

increases in information demands by group, developers will probably not constitute an primary group of users for a state data system.

#### F. Health Care Providers & Consultants:

Several years ago the State of Kansas abolished the Certificate of Need requirement for the development of new programs, construction of new facilities or the purchase of capital equipment. The burden has been shifted to the health care provider. As a result, hospitals and health care consultants must now do studies to determine the economic feasibility of these projects. This requires access to demographic data and health care statistics.

The most commonly utilized information includes the Kansas Summary of Vital Statistics, obtained from KDHE. As the state licensing agency for health care facilities, KDHE also receive requests from providers and consultants for information about services currently available and the facilities authorized to provide them.

Although health care providers and consultants probably constitute a small market for information services, their professional organizations may be interested in a contractual agreement to obtain health care data on an ongoing basis from KDHE. Their biggest complaint is that the information they get is often inaccurate and out of date.

#### G. Business:

Businesses are another source of demand for information about the economy. Businesses seeking to expand or to develop new sites need hard data on the economic climate of the site targeted for development or expansion. The majority of this information is collected by the Department of Revenue. It includes sales tax collections and other indicators of business activity. Some information is also requested from the Department of Commerce. Their KEDS system contains a great deal of information of value to business contemplating a move or expansion.

Expansion or relocation feasibility studies also require considerable amounts of demographic data. While some of this information is available from various state agencies, many business prefer to work with federal census data. While this is not information generated by any state agency, there is no doubt considerable demand for federal census data and ,if it could be accessed online, the information would potentially be used more often by business people, developers, consultants and others.

#### H. General Public:

The general public was mentioned as an information consumer by representatives of virtually all state agencies. While they would not be a major user of most databases, there are several for which they appear to be among the most frequent requesters. These include:

- Library card catalogs;
- Division of Motor Vehicle records;
- Hazardous waste storage and handling; and,
- State legislative calendars.

#### VI. FINANCIAL CONSIDERATIONS

Most respondents expressed some concern over the financial arrangements under which the information would be provided to the public. From the provider side, concerns centered on the cost of setting up the data bases for public access and the cost of maintaining them.

Jim Kent (Department of Commerce) indicated that his division had neither the staff nor the budget to do the estimated \$8,000 to \$12,000 that it would take to prepare their data bases for public access. Neither he nor any of the other data processing people interviewed for this study expected increased budget allocations for a project like this.

In New Mexico, these costs were borne in large part by the Technet system. It received a grant from the State of New Mexico to purchase equipment and a number of federal grants to cover operational costs. Users also helped to underwrite the cost of putting databases online. The operation and maintenance of the system was entirely self supporting within 16 months.

From the user side, concerns centered on the cost of obtaining the information. Much of the information respondents currently obtain from state agencies is free or involves only a minimal cost. The prospect of obtaining this information more quickly and conveniently, though worth something to most users, was for many not worth more than a modest charge.

## VII. DATA TRANSMISSION

The focus of this research project is on the transmission of data from provider to recipient, i.e. , from the state agencies which originate the information to the private sector users. Several providers, however, indicated that they were beginning to collect information electronically. The KDHE, for example, collects birth records from the major hospitals in the state in this manner. The hospitals key the data into a Lotus file and send it to the state on a floppy disk.

A recent article on the implementation of this system appeared in the March 27th issue of the Wichita Business Journal. In this article, Charlene Satzler of the Department of Health and Environment pointed out that this system has a built-in editing device that allows users to check for errors while entering the data. That data is therefore more accurate as well as being more timely.

With this system, parents get their child's birth certificate more quickly and can even request a social security card at the time of birth. If this system is as successful, as it appears it will be, it may be extended to all hospitals throughout the state. The next step would be to send it via a computer network.

The electronic collection of data by the state through a computer network has already begun in New Mexico. In New Mexico, automobile dealerships are required to collect sales tax from purchasers and to register their vehicles via computer terminal with the state Department of Motor Vehicles. With this system, vehicle registration records are constantly kept up to date. With the present system in Kansas, vehicles may not be registered with the state for as long as a month or two.

There is no reason why the electronic registration of motor vehicles should not be possible in Kansas. The advantage to the buyer, the lender, and the state are obvious. Experience in New Mexico indicates that it is advantageous for the automobile dealers as well. Because vehicles are registered daily, dealers receive payment from the lending institutions much more quickly than they did when buyers were required to register their vehicles with the county courthouse.

Ultimately, it should be possible for state agencies to collect a large percentage of the data they obtain from the private sector via a computer network. As noted earlier in this report, several state agencies are already beginning to collect information on disk. A number of those interviewed for this project consider the electronic collection of information an inevitable development. In their view, it is only a matter of

time before the federal, state, and local governments are exchanging data with the private sector and with each other via computer networks.

#### VIII. ADVANTAGES TO STATE AGENCIES

The value of online access via a statewide computer network is obvious to some but is an idea that will probably need to be sold to others. The most obvious advantages include:

1. the ability to collect as well as to transmit data from users;
2. a subscriber based system would stabilize an agency's cost to revenue ratio;
3. online access would provide an important source of revenue for agencies with commercially useful databases; and,
4. online access would allow agencies to shift staff to more productive pursuits.

In New Mexico, the Technet system started with 3 databases. As the system became more established, state agencies began to request access to it. Due to the amount of work involved in adding databases to the system, there is actually a waiting period with some agencies unable to put databases on the system for a number of months.

#### IX. ADVANTAGES TO THE USER

The use of a computer network to obtain public domain information from the state would have a number of advantages over personal requests directed to agency personnel. These include:

1. immediate response to requests;
2. ability to search and browse data;
3. information could be loaded into a database, spreadsheet or word processor without re-keying; and,
4. ability to obtain information during non-working hours.

A public access information network would also provide advantages for user groups. The New Mexico Bar Association, for example, has a bulletin board on the Technet system which can be

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accessed through a sub-menu. This bulletin board contains information about the association's activities and other information of importance to its members. This may prove to be an important method by which agencies can communicate with their information consumers. Likewise, important user groups could also use it to communicate with state agencies, their members or the general public.

Despite the fact that there is a strong consensus among providers and potential users that the development of such a system would be advantageous, initial use may be limited to specific groups through professional organizations.

Initial use will probably be limited largely to experimenters and early adopters, groups which traditionally make up a only a small proportion of potential users. Although the advantages of a computerized information network may be obvious to some, there is no doubt that its value will need to be demonstrated to most potential users.

Studies of the diffusion of technological innovations indicate that the use of new technologies increases at a very uneven rate. Sociologists refer to the initial users as experimenters, people who like to play with almost any new gadget, experience or style. Experimenters are followed by early adopters who like to put new things to practical use. The next group are "pragmatists" who adopt the new technology after it has established itself. The last group to adopt a new technology are the resistors who use it only after it is forced on them.

Use by the general public will be limited not only by current attitudes toward the use of computers but by the fact that a large majority of households still do not have computers. The use of an online system requires a modem and telecommunications software as well. While this is not a major expense, the cost of the entire system is still well beyond the advantage most households could expect to receive from an investment in this equipment.

In order to increase usage among the public, computers capable of accessing the system should be located in the various public libraries around the state. This would solve the hardware availability issue. Librarians trained in the use of the system would also help to overcome some of the problems people often have in dealing with computers.

## X. CONCLUSION

The primary objective of this study is to determine the feasibility (both technologically and economically) of the establishment of an online system capable of accessing public domain data generated by state agencies. Based on the information collected in the process of preparing this report, there is absolutely no doubt that this is a "doable" project. This conclusion is based on the following observations.

### A. Lack of Technical Obstacles:

The establishment of an online database accessible through a statewide computer network presents no major technical obstacles. There are some issues that will need to be worked out but these are rather routine in nature. The software situation is similar. There needs to be a user friendly menu system to guide users through the data bases to the information they are requesting. Although the development of this software may be somewhat expensive, it presents no major difficulties.

### B. Initial Client Base:

Because of the lack of experience with online data bases both by providers and users, initial use will probably be limited to a small number of databases by a small core of heavy users. Dr. Getter believes that a contract between the Kansas Bar Association and the state would be sufficient to establish a Kansas equivalent of the Technet system. In order to expand beyond that point, the network will need to be marketed both to providers and users.

### C. Availability of Computer Databases:

There are a number of currently computerized state databases which are sufficiently used to merit consideration as initial databases for the network. These include individual driving records, vehicle registration records, city and county sales tax collections, job service center listings, monthly employment statistics, articles of incorporation, and lien information. There are undoubtedly other databases that could be added as the network becomes established.



#### D. Finances:

As a subscriber system, the proposed project should be able to generate a steady cash flow sufficiently large to cover operational costs at a minimal level. As a subscriber system, it will also simplify accounting procedures and allow more control over access to the data. If additional revenues are needed to fund start-up costs, they should be recoverable over a reasonably short period of time.

In order to cover start-up costs it will probably be necessary to obtain some funding from the State of Kansas. Federal grants and contractual agreements with user groups such as the Kansas Bar Association and automobile dealers will also help to cover early operational expenses.

Given the differential cost of setting up and maintaining databases, the use of some databases may require additional access charges. In order to ensure as broad a user base as possible, however, it might be advisable to allow some minimum number of requests before assessing an additional charge for access to these databases. There should be, where possible, an economic incentive to access the information online. Requests for hard copy or an oral response should reflect the greater cost of staff time.

The use of the public access portion of the network for bulletin boards by groups and associations would also be an additional source of income which could be used to offset some of the start-up and operational costs experienced by participating agencies.

#### E. Location and Staff:

Given the modest size at start-up, the operation would require minimal space and a relatively small staff. Preliminary discussions focused on the advantages of a state agency operation versus a profit or non-profit private sector corporation. The Kansas Bar Association has decided to pursue the option of creating a non-profit enterprise, Kansas Information Systems & Service. The organization will serve as a computer information link between public sector, selected professional associations, and the general public.

Although opinions, expressed during the research, regarding staff size and composition varied, there is a consensus among respondents that one or two people could effectively establish and maintain the system, particularly at start-up. This assumes, however, that the programming necessary to implement this project is done by each state division or that mutually acceptable arrangements for contracting out the work can be reached.

As the demand for information increases, it may be necessary to increase the number of staff within the organization. Technet, for example, has a staff of 10. These people serve a variety of functions including administrative, programming and marketing.

It is clear from the information obtained in the interviews summarized in this report that there is a great deal of public domain information that is of interest and of value to private sector companies, non-profit corporation and the general public. The accessibility of this information will undoubtedly increase not only the ease with which users will be able to obtain this information but the consumption of public domain information is likely to increase as well.

In short, the interviews and background research upon which this report is based suggest that the development of a statewide computer network providing online access to information generated by the State of Kansas is a very feasible project. State agencies are interested in the concept. In fact, many have already taken steps in that direction. There appears to be sufficient demand to get the project started and demand is expected to increase dramatically over time. Although a pricing structure will need to be worked out, this study did not find any major financial obstacles to the development of the system. In light of these findings the implementation of the project should proceed.