

MINUTES OF THE House COMMITTEE ON Communication, Computers and Technology

The meeting was called to order by Representative Mike Meacham at  
Chairperson

3:30 ~~am~~/p.m. on February 17, 1983 in room 522-S of the Capitol.

All members were present except:

Representative Goossen (excused)

Committee staff present:

Marlin L. Rein, Chief Legislative Fiscal Analyst, Committee Staff Director  
Sherry Brown, Fiscal Staff, Research Department  
Chris Stanfield, Fiscal Staff, Research Department  
Arden K. Ensley, Revisor of Statutes  
Betty Ellison, Secretary to the Committee

Conferees appearing before the committee:

Laurence J. Kunkel, Director of Telecommunications  
Department of Administration

Patrick J. Hurley, Secretary  
Department of Administration

Mr. Kunkel continued his testimony of the past two days. He described the KANS-AN system which is a private line system. It is an assemblage of circuits, services, facilities and a switch which comprises a system which only the State of Kansas agencies have access to. This system uses Telpak facilities.

Mr. Kunkel handed out copies of a memorandum regarding tariff rates (Attachment 1), four case studies (Attachment 2), and a map of Kansas showing the projected route of the state system. (Attachment 3) He listed the intangible benefits of the state plan as follows:

1. Increased productivity
2. Savings in personnel travel and visitation time
3. Savings in energy consumption
4. Increasing education for general public through instructional TV

The conferee said that acquisition of the system may be financed through direct general fund appropriation, by a bond issue (which would be least costly with interest rate of 8-9 percent), or lease/purchase.

Mr. Kunkel stated that implementation of the system will require an appropriation of \$450,000 for FY 84 in order to hire a consulting engineering firm to perform detail engineering, specifications preparation, writing of RFQs, and other pre-procurement tasks.

Mr. Don Low of the Kansas Corporation Commission answered a question of Representative Green's regarding Telpak. Mr. Low said that Telpak is a discounted rate for purchases of dedicated private line. The FCC found the rates were unjust and unreasonable and not cost justified. They will be withdrawn at the end of 1985.

Chairman Meacham introduced Mr. Patrick Hurley, Secretary of the Department of Administration. Mr. Hurley said that in going between the Senate and House, he wanted to put in the best layman's sense what we are talking about. He felt that the real single question is:

CONTINUATION SHEET

MINUTES OF THE House COMMITTEE ON Communication, Computers and Technology  
room 522-S, Statehouse, at 3:30 ~~am~~/p.m. on February 17, 1983

Can the State of Kansas acquire its telephone service more cost effectively than it does today? The answer is yes, by going into the competitive free market place to force all vendors to compete for our dollars. By using the service of Southwestern Bell, we have neither choice as to the product nor as to the cost which is set by regulation. Because of the deregulation of the telephone company and the divestiture of the monopoly of AT&T, all users now can take advantage of the competitive market place.

Secretary Hurley gave examples of three areas in which the state has saved money by entering the free market place--copying machines, large computers and telecommunications. As a final example, he cited an experience with Southwestern Bell regarding a Centrex switch serving the Kansas University Medical Center in Kansas City. Southwestern Bell has withdrawn a less expensive offer for this service because they can no longer offer what they were offering prior to divestiture. American Bell is now offering the state the service and equipment previously offered by Southwestern Bell.

It was Mr. Hurley's judgment that for maximum cost savings, maximum efficiency, and maximum benefits to the state, the best approach is for the state to develop a total plan and go out at one time to acquire the basic structure of that plan. (Printed copy of Secretary Hurley's remarks--Attachment 4)

Chairman Meacham advised the committee that for the next two weeks the committee will meet on a four day schedule in order to complete work by the deadline which is March 4.

Representative Chronister moved that the minutes of February 2 and 3 be approved. Representative Adam seconded the motion. The motion carried.

The meeting was adjourned at 4:30 p.m. by the chairman.

The next meeting will be held at 3:30 p.m. on February 21, 1983.



M E M O R A N D U M

DATE: 17 February 1983  
TO: Mr. L. J. Kunkel, Director of Telecommunications  
FROM: James C. Gilbert, Ass't. Director of Telecommunications *JCG*  
SUBJECT: Examples of Background Data Used In Telecommunications.

1. Attached are tariff items which influence the cost data used in the development of Bell System costs in evaluating the State's Telecommunications Plan. These tariff items are examples of major intercity transmission cost items and are not intended to provide complete detail of all tariff rate elements considered.

- a. Enclosure 1 provides the KCC approved Telpak rates as they apply to the KANS-A-N system.
- b. Enclosure 2 provides the Intercity mileage rates for KCC approved private line service. (Referred to as IXC).
- c. Enclosure 3 is the FCC multiple-schedule private line (MPL) tariffs applicable to voice service as used in KANS-A-N.
- d. Enclosure 4 provides the KCC approved WATS tariff rates for the State of Kansas. They became effective on 1 December 1982.
- e. Enclosure 5 provides the FCC approved WATS tariff rates for interstate WATS service.
- f. Enclosure 6 is the KCC approved tariff rates for Long Distance Message Rate service for direct distance dialing within the State of Kansas.

Attachment 1

House Communication, Computers and Technology 2/17/83

No supplement to this tariff will be issued except for the purpose of cancelling this tariff.

SERVICES AND RATES

2.2 DESCRIPTION OF SERVICES (Continued)

(CP) 2.2.4 TELPAK Channels and Services-Series 500 (1) (Continued)

~~C. Shared Use of Facilities (Continued)~~

2. Charges will be computed as though the facilities were furnished to a single customer and, without affecting the ultimate responsibility for payment of charges, will be allocated for billing purposes among the customers in accordance with percentages specified by them, such percentages to remain in effect for a minimum of one month. Such percentages on file on the first day of any month will be used in computing that month's billing.

(RT)

(RT)

(CT)

D. Connection With Certain Facilities of the Western Union Telegraph Company

Channels and services may be connected, when used for voice transmission, with similar channels provided by the Western Union Telegraph Company, under the conditions specified in Section 1, preceding.

(CT)

E. Rates

The rates shown below apply for channels and services involving the Telephone Company exchanges and also for channels and services in exchanges of other companies to the extent specified below.

1. TELPAK Channels

		Per V & H Mile Per Month
TELPAK A (1LKA4)	(CR)	\$29.60
TELPAK B (1LKB4)		39.45
TELPAK C (1LKC4)		49.35
TELPAK D (1LKD4)	(CR)	106.25

(AT) (1) Obsolete - Applicable to existing customers.

*Enclosure 1*

Issued: MAR 01 1982      Effective: MAR 3 1982

By J.E. HAYES, Vice President-Kansas  
 Southwestern Bell Telephone Company  
 Topeka, Kansas

Commissioner  
 PILED  
 12887  
 MAR 2 1982  
 KANSAS  
 TELEPHONE COMMISSION  
 BY *C. J. Johnson*

No supplement to this tariff will be issued except for the purpose of cancelling this tariff.

SERVICES AND RATES

2.2 DESCRIPTION OF SERVICES (Continued)

(CP) 2.2.4 TELPAK Channels and Services-Series 500 (1) (Continued)

(CT) E. Rates (Continued)

2. Mileage Measurements

a. Two-point Service

The interexchange pricing mileage is the V-H mileage (fractional miles being considered as full miles) between the rate centers of the service points or between the rate centers of a service point and the point of connection with the facilities of another company in those cases where "other line" charges of another company are applied. In those cases where "other line" charges are applied, the Telephone Company's maximum interexchange pricing mileage shall be the V-H mileage between the rate centers of the service points.

b. Multi-point Service

The rate mileage is the shortest combination of V-H mileages connecting rate centers of service points in the sequence specified by the customer, each section being determined as specified in 2.2.4 F., 2., a., preceding.

3. Channel Terminals

A channel terminal is required for each channel or service arranged for use by the customer, for each connection of such channel or service to a station, or for termination of such channel in a Telephone Company office for the purpose of establishing a channel in connection with Foreign Exchange Service. Where a channel switching arrangement is provided, each station at the switching point requires a channel terminal for each of the services or channels to which it is connected and which can be operated as a separate service or channel. Where a duplex channel is provided, it is considered one channel and one channel terminal is required per point of termination.

a. For the first station in an exchange or zone of a Metropolitan Exchange or for a termination in a Telephone Company office on each channel or service in use:

	<u>Monthly Rate</u>	<u>Non-Recurring Charge</u>
Per Channel Terminal		
Voice Grade (TP3)(UWP)(DS3)(DV3) (ZUP)(ZUPPX) .....	(CR)\$ 35.55	(CR)\$25.00
Sub Voice Grade (TB3)(TF4)(DD3)(DM3) (SBM)(VWP)(VDG3R)(4MT) .....	(CR) 35.55	(CR) 25.00

(AT) (1) Obsolete - Applicable to existing customers.

Commission Docket Number 128811-3  
 FILED MAR 2 1982  
 THE STATE COMMISSION ON UTILITIES  
 OF KANSAS  
 By *[Signature]*

K	Issued: MAR 01 1982 Effective: MAR 3 1982 By J.E. HAYES, Vice President-Kansas Southwestern Bell Telephone Company Topeka, Kansas
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No supplement to this tariff will be issued except for the purpose of cancelling this tariff.

Private Line Service Tariff  
Section  
3rd Revised Sheet 33  
Replacing 2nd Revised Sheet 33

SERVICES AND RATES

2.2 DESCRIPTION OF SERVICES (Continued)

(CP) 2.2.4 TELPAK Channels and Services-Series 500 (1) (Continued)

(CT) E. Rates (Continued)

3. Channel Terminals (Continued)

b. For the second or subsequent station in an exchange on any individual channel or service:

	<u>Monthly Rate</u>	<u>Non-Recurring Charge</u>
Per Channel Terminal		
Voice Grade (TT3)(6GP)(DU3)(DZ3)(5JP) .(CR)	\$11.80	(CR) \$25.00
Sub Voice Grade (TG3)(TG4)(DE3)(DN3) (WDG3R)(4GP)(7HP)(4OW) .....	(CR) 11.80	(CR) 25.00

4. Connecting Arrangements

A connecting arrangement is required for each connection of a derived channel of a TELPAK channel to an interexchange channel furnished under other sections of this Tariff except where the connection is by means of a switching arrangement.

A connecting arrangement charge equal to the channel terminal charge for the first station on such channel is specified in 2.2.4 E., 3., a., preceding, applies for each such connecting arrangement. Voice - (CD321)(CD322)(CD326)(CD331)(CY4). Sub Voice - (CG311)(CG312)(CG315)(CG316)(CG3D2) (CG3D5)(CG3D6).

(CT)

(CT)

5. Switching Arrangements

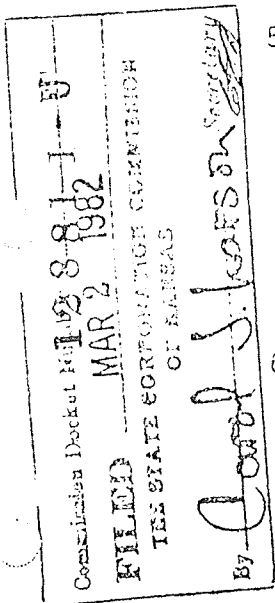
Switching arrangements for use with the following types of derived service and channels are provided as specified in Section 1, paragraph 1.1.7 of this Tariff.

- Series 200
- Series 300
- Series 400

6. Alternate Use Arrangements

Type 1 - for use on a two-point section of a TELPAK A channel to permit the alternate use of the TELPAK channel as a single channel or as a subdivided channel. Requires the channel terminals for the single channel and the channel terminals or connecting arrangements for the derived channels that would be required for both types of operations.

(AT) (1) Obsolete - Applicable to existing customers.



Issued: MAR 01 1982

Effective: MAR 3 1982

By J.E. HAYES, Vice President-Kansas  
Southwestern Bell Telephone Company

K

No supplement to this tariff will be issued except for the purpose of cancelling this tariff.

SERVICES AND RATES

2.2 DESCRIPTION OF SERVICES (Continued)

(CP) 2.2.4 TELPAK Channels and Services-Series 500 (1) (Continued)

(CT) E. Rates (Continued)

6. Alternate Use Arrangements (Continued)

Each terminal of a section so arranged  
TELPAK A (A4U) .....(CR)\$49.35 Monthly Rate

7. Other Items

Station and terminal equipment, signaling, selective calling, selector control and alternate use arrangements are furnished for use with derived services or channels at charges which are the same as those specified in Section 3 of this Tariff.

~~(CP) 2.2.5 Voice Grade Service - Series 600~~

~~A. General~~

~~Series 600 channels are furnished on a two-point or multi-point basis for use with customer-provided terminal equipment for one way, closed circuit Wired Music distribution. These are the only channels expressly provided for transmission of Wired Music signals.~~

~~B. Regulations~~

~~1. Distribution amplifiers are required to receive signals from a source provided by the customer (studio) and to transmit the appropriate signal level to the wired music station locations (patron).~~

~~Telephone Company-provided distribution amplifiers are normally located in a telephone company serving office. However, the telephone company may agree to provide a distribution amplifier at other locations designated by the customer from which point separate channels will be furnished to station location (patrons) of the customer subject to the following.~~

- ~~a. All premises are located in the same building, or,~~
- ~~b. All premises are on the same continuous Property which is owned or operated by a single agency or association, e.g. Malls, Shopping Centers, etc.~~

~~Series 600 channels may be connected to a customer-provided distribution amplifier at a location other than the telephone company serving office from which point the customer will provide channels to station locations (patrons).~~

(AT) (1) Obsolete - Applicable to existing customers.

1-28811-U  
MAR 2 1982  
FILED  
THE STATE CORPORATION COMMISSION  
OF KANSAS  
Carol Johnson

Issued: MAR 01 1982      Effective: MAR 3 1982  
By J.E. HAYES, Vice President-Kansas  
Southwestern Bell Telephone Company  
Topeka, Kansas

K



No supplement to this tariff will be issued except for the purpose of cancelling this tariff.

SERVICES AND RATES

2.2 DESCRIPTION OF SERVICES (Continued)

2.2.3 Voice Grade Service-Series 300 and 400 (Continued)

F. Rates-Interexchange (Continued)

	<u>Monthly Rate</u>	<u>Non Recurring Charge</u>
2. Each additional point of termination of a local channel in different building, the same premises per 1/10 mile (1)(1LPJK)(1L10K)(1L3AK)(1L6BK)(1L6DK)(1LMFK)(1LPWK)(1L1MK)(1L3WK)(1LMGK)(1LMJK)(1LMDK)(1LMKK) .....(CR)	4.50	25.00
Minimum Charge .....	13.50	25.00
3. Each additional point of termination of a local channel in same building (1)(2SE)(M8X)(MUX)(M8X23)(MUXD3)(M8XF3)(M8XG3)(MUXJ3)(M8XK3) .....	4.50	25.00
4. Interoffice Channel  Each V & H mile, per mile or fraction thereof, per channel (1LHBS)(1LJKS)(1LPJS)(1LTBS)(1L10S)(1L3AS)(1L6BS)(1L6DS)(1LMFS) .....	9.65	None
5. Interoffice Channel Terminal, each (two required per interoffice channel) (PMNSS) .....	2.65	None

<i>IXC intercity mileage rate</i>	<u>Monthly Rate</u>	
	0 to 250 miles each mile	Each additional mile over 250
6. Interexchange Channel, each V-H mile, per mile or fraction thereof (1LHU4) .(CR)	\$2.90	\$1.30

	<u>Monthly Rate</u>
7. Interexchange Channel Terminal, each, (two required per Interexchange Channel) (P1NSS) .....	\$30.75
8. Bridging Charge, (Multi-point Service) per bridged channel (BQ7) .....	12.85

G. Conditioning Options - Available for Types 313, 314C, 342, 343, 420 and 422.

1. The types and description of the available conditioning options, at rates found in Section 3 are as follows:

Type C - Conditioning provides assured transmission quality for frequency response and envelope delay distortion as specified below:

(1) Additional points of termination do not apply for Types 342 and 343.

Considered as Packet number 4 20811-1-U  
 FILED MAR 2 1982  
 THE STATE DEPARTMENT OF REVENUE  
 OF KANSAS  
 By Carol J. Haysa

*Attachment 2*

K	Issued: MAR 01 1982 By J.E. HAYES, Vice President-Kansas Southwestern Bell Telephone Company Topeka, Kansas	Effective: MAR 3 1982
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PRIVATE LINE SERVICE

3. CHANNELS (Cont'd)

3.2 Classification and Rates (Cont'd)

J.2.2 Series 2000 Channels (Cont'd)

(C) Rates - Monthly Service (Service 7 days per week, 24 hours per day) (Cont'd)

(1) Interexchange Channels

Par airline mile, per month

(a) Schedule I (applies between a pair of Category "A" rate centers)

Mileage	Charge
1	\$73.56
2-14	\$73.56 + \$2.59 for each mile over 1 mile
15	\$109.82
16-24	\$109.82 + \$2.16 for each mile over 15 miles
25	\$131.42
26-39	\$131.42 + \$1.62 for each mile over 25 miles
40	\$155.72
41-59	\$155.72 + \$1.62 for each mile over 40 miles
60	\$188.12
61-79	\$188.12 + \$1.62 for each mile over 60 miles
80	\$220.52
81-99	\$220.52 + \$1.62 for each mile over 80 miles
100	\$252.92
101-999	\$252.92 + \$.94 for each mile over 100 miles
1000	\$1,098.92
over 1000	\$1,098.92 + \$.58 for each mile over 1000 miles

See Note below.

(b) Schedule II (applies between a pair of rate centers where one rate center is in Category "A" and the other rate center of the same pair of rate centers is in Category "B")

Mileage	Charge
1	\$75.00
2-14	\$75.00 + \$4.77 for each mile over 1 mile
15	\$141.78
16-24	\$141.78 + \$4.47 for each mile over 15 miles
25	\$186.48
26-39	\$186.48 + \$2.89 for each mile over 25 miles
40	\$229.83
41-59	\$229.83 + \$1.95 for each mile over 40 miles
60	\$268.83
61-79	\$268.83 + \$1.95 for each mile over 60 miles
80	\$307.83
81-99	\$307.83 + \$1.95 for each mile over 80 miles
100	\$346.83
101-999	\$346.83 + \$.94 for each mile over 100 miles
1000	\$1,192.83
over 1000	\$1,192.83 + \$.58 for each mile over 1000 miles

See Note below.

(c) Schedule III (applies between a pair of Category "B" rate centers)

Mileage	Charge
1	\$76.43
2-14	\$76.43 + \$6.35 for each mile over 1 mile
15	\$165.33
16-24	\$165.33 + \$5.48 for each mile over 15 miles
25	\$220.13
26-39	\$220.13 + \$4.03 for each mile over 25 miles
40	\$280.58
41-59	\$280.58 + \$3.03 for each mile over 40 miles
60	\$341.18
61-79	\$341.18 + \$2.31 for each mile over 60 miles
80	\$387.38
81-99	\$387.38 + \$1.95 for each mile over 80 miles
100	\$426.38
101-999	\$426.38 + \$.97 for each mile over 100 miles
1000	\$1,299.38
over 1000	\$1,299.38 + \$.58 for each mile over 1000 miles

See Note below.

Note: Where one rate center is an international boundary point, charge is as determined above minus \$36.03.

Where a monthly charge is applicable (in accordance with the provisions of Tariff F.C.C. No. 262 para. 2.2 A.(1)(b)(II.)(B.)(ii).) for the interexchange channel portion of a private line service which traverses a specially constructed interexchange channel section, the charge is as determined above less \$36.03 for each instance it is not connected to specially constructed channel terminating equipment.

PRIVATE LINE SERVICE

3. CHANNELS (Cont'd)

3.1 General (Cont'd)

3.1.6 Category "A" Rate Centers

The rate centers listed in (a) and (b) following are those rate centers to which Schedule I and Schedule II rates may apply as specified for Series 2000 interexchange channels in 3.2.2(C)(1) following and Series 3000 interexchange channels in 3.2.3(C)(1) following.

The rate centers in (a) below are to be used for services furnished to any customer. The rate centers in (b) below are to be used only when service is furnished to a branch or agency of the United States Government. Those rate centers preceded by an asterisk (\*) are international boundary points and may be used only for extending service to or from a point in Canada, Mexico or Alaska. Those rate centers preceded by an ampersand (&) are Category A Rate Centers only for the purpose of providing overseas connecting facilities. Those rate centers preceded by a pound sign (£) are Alaska Connection Points and may only be used for the connection of facilities for services to Alaska.  
 (a) Category "A" Rate Centers for all customers.

<u>Alabama</u>	<u>California (Cont'd)</u>	<u>Florida (Cont'd)</u>	<u>Indiana (Cont'd)</u>
Anniston	&San Luis Obispo	Panama City	New Albany
Birmingham	Overseas Con-	Pensacola	South Bend
Decatur	nection Point	St. Petersburg	Terre Haute
Huntsville	Santa Monica	Sarasota	
Mobile	Santa Rosa	Tallahassee	<u>Iowa</u>
Montgomery	Stockton	Tampa	Boone
Troy	Sunnyvale	West Palm Beach	Burlington
	Ukiah	Winter Garden	Cedar Rapids
<u>Arizona</u>	Van Nuys	Winter Haven	Davenport
Flagstaff			Des Moines
Phoenix	<u>Colorado</u>	<u>Georgia</u>	Dubuque
Prescott	Colorado Springs	Albany	Iowa City
Tucson	Denver	Atlanta	Sioux City
Yuma	Fort Collins	Augusta	Waterloo
	Fort Morgan	Brunswick	
<u>Arkansas</u>	Glenwood Springs	Columbus	<u>Kansas</u>
Fayetteville	Grand Junction	Conyers	Dodge City
Forrest City	Greeley	Dublin	Hutchinson
Hot Springs	Montrose	Fitzgerald	Kansas City
Jonesboro	Pueblo	Macon	Manhattan
Little Rock		Rome	Salina
Pine Bluff	<u>Connecticut</u>	Savannah	Topeka
Searcy	Bridgeport	Thomasville	Wichita
	Hartford	Waycross	
<u>California</u>	New Haven		<u>Kentucky</u>
&Agoura Overseas	New London	<u>Idaho</u>	Danville
Connection Point	Stamford	Boise	Frankfort
Anaheim		Pocatello	Louisville
Bakersfield	<u>Delaware</u>	Twin Falls	Madisonville
Chico	Wilmington		Paducah
&Carmel Valley		<u>Illinois</u>	Winchester
Overseas Con-	<u>District of Columbia</u>	Centralia	
nection Point	Washington Zone 1	Champaign-Urbana	<u>Louisiana</u>
Eureka		Chicago	Alexandria
Fresno	<u>Florida</u>	(all city zones)	Baton Rouge
Gardena	Chipley	Collinsville	Lafayette
Hayward	Clearwater	De Kalb	Lake Charles
Long Beach	Cocoa	Hinsdale	Monroe
Los Angeles	Crestview	Joliet	New Orleans
(all city zones)	Daytona Beach	Marion	Shreveport
Oakland	Fort Lauderdale	Mattoon	
(all city zones)	Fort Meyers	Newark	
*Point Reyes	Fort Pierce	Northbrook	<u>Maine</u>
Alaska	Fort Walton Beach	Peoria	&Andover
Connection Point	Gainesville	Rockford	Overseas Con-
Redwood City	Homestead	Rock Island	nection Point
Sacramento	Overseas Con-	Springfield	Augusta
Salinas	nection Point	Woodstock	*Calais Int. Bdry.
San Bernardino	Jacksonville		Leviston
San Diego	Key West	<u>Indiana</u>	Portland
San Francisco	Lake City	Bloomington	
(all city zones)	Miami	Evansville	<u>Maryland</u>
San Jose	Ocala	Fort Wayne	Baltimore
San Luis Obispo	Orlando	Indianapolis	Washington Zone 3
		Muncie	

(x) Footnote deleted, filed under authority of Special Permission No. 80-379 of the Federal Communications Commission.

will be issued except for the purpose of cancelling this tariff.

*INTRASTATE WATS*

WIDE AREA TELECOMMUNICATIONS SERVICE

1.4 RATES

1.4.1 Rates

(CP)

- A. Each WATS access line will be arranged, at the option of the customer, for either outward service or 800 service but not both.
- B. Rates and charges for jacks, terminal equipment and multiline terminating systems provided by the Telephone Company will be those set forth in the General Exchange Tariff.

C. Rate Periods

Rates applicable are based on the time of day, day of week as follows:

1. Business Day Period

8 a.m. to 5 p.m. Monday through Friday. The Business Day Period for holidays (New Year's Day, Independence Day, Thanksgiving Day, Labor Day, Christmas Day, or resulting legal holidays) is charged at Evening Period Rates.

2. Evening Period

5 p.m. to 11 p.m. Sunday through Friday.

3. Night/Weekend Period

11 p.m. to 8 a.m. all days  
8 a.m. to 11 p.m. Saturday  
8 a.m. to 5 p.m. Sunday

D. Minimum Average Time Requirement (MATR)

Usage is subject to an average of one minute per completed call in each rate period for each billing period. This means that if the average duration per call in any rate period during each billing cycle is less than one minute, billing will be based on an average duration of one minute per call.

(CP)

Commissioner File No. 820212  
 NOTED & FILED NOV 3 1982  
 THE STATE OF KANSAS  
 BY *[Signature]*

*Enclosure 4*

Issued: MAR 01 1982      Effective: DEC 1 1982  
 By E.E. WHITACRE, JR., Vice President-Kansas  
 Southwestern Bell Telephone Company  
 Topeka, Kansas

K

WIDE AREA TELECOMMUNICATIONS SERVICE

1.4 RATES (Continued)

1.4.1 Rates (Continued)

(CP) E. Access Lines - Inward WATS (800 Service) or Outward WATS

1. Inward WATS (800 Service)

- a. Access Line, each (8L9) ..... \$83.00
- b. Monthly Usage Rate Table, per hour

	<u>Day</u>	<u>Evening</u>	<u>Night/Weekend</u>
First 15 Hours	\$16.13	\$11.30	\$6.45
Next 25 Hours	\$14.73	\$10.31	\$6.45
Next 40 Hours	\$13.21	\$ 9.25	\$6.45
Over 80 Hours	\$11.62	\$ 8.13	\$6.45

2. Outward WATS

- a. Access Line, each (WAX) ..... \$73.00
- b. Monthly Usage Rate Table, per hour

	<u>Day</u>	<u>Evening</u>	<u>Night/Weekend</u>
First 15 Hours	\$16.82	\$10.76	\$5.55
Next 25 Hours	\$14.97	\$ 9.58	\$5.55
Next 40 Hours	\$12.99	\$ 8.31	\$5.55
Over 80 Hours	\$10.93	\$ 7.00	\$5.55

1.4.2 Method of Determining Monthly Charges

A. Access Lines Equipped for Time-of-Day Recording

For all WATS access lines on which usage is recorded by the Telephone Company by time-of-day rate periods, the usage charge is determined using steps 1. through 9. following:

1. Determine the total number of completed calls for each rate period for each service group.
2. Apply the Minimum Average Time Requirement of one minute by dividing the number of completed calls for each rate period in each service group by 60. (1 call = 1 minute).

320212  
NOV 3 1982

*[Handwritten Signature]*

Issued: MAR 01 1982      Effective: DEC 1 1982  
 By E.E. WHITACRE, JR., Vice President-Kansas  
 Southwestern Bell Telephone Company  
 Topeka, Kansas

No supplement to this tariff  
will be issued except for the  
purpose of cancelling this  
tariff.

WIDE AREA TELECOMMUNICATIONS SERVICE

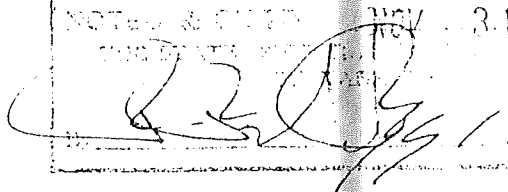
1.4 RATES (Continued)

1.4.2 Method of Determining Monthly Charges (Continued)

(CP) A. Access Lines Equipped for Time-of-Day Recording (Continued)

3. Determine the total actual hours used for each rate period for each service group.
4. Determine the total chargeable hours for each rate period for each service group. This is the greater of (2) or (3) above, rounded to the nearest tenth (one decimal place).
5. Determine the number of access lines, within each service group, in service during the month. Access lines in service for a fraction of a month are based on the number of days in service divided by 30 days. The result is rounded to the nearest hundredth (two decimal places). The same number of access lines is used for each rate period.
6. Determine the average usage for each rate period for each access line in each service group by dividing the chargeable hours for each rate period in 4. above by the number of access lines in 5. above.
7. Determine the usage charge per rate period for each access line by applying the rates shown in the rate table in Section 1.4.1.E for Outward WATS or 800 Service.
8. Determine the total usage charge for each rate period for each service group by multiplying the usage charge per rate period in 7. above by the number of access lines in 5. above.
9. Determine the total usage charge for all rate periods in each service group by adding the results of 8. above.

(CP)

Commission File Number	820212
NOTED & FILED	NOV 3 1982
	

K	Issued: MAR 01 1982	Effective: DEC 1 1982
	By E.E. WHITACRE, JR., Vice President-Kansas Southwestern Bell Telephone Company Topeka, Kansas	

# INTERSTATE WATS

## WIDE AREA TELECOMMUNICATIONS SERVICE

### 1. RATES (Cont'd)

#### 1.1 Monthly Charges (Cont'd)

##### 1.1.6 Outward WATS

(A) Access line charge  
 A monthly charge of \$31.65 applies to each Outward WATS access line.

(I)

(B) Rate Step Table  
 Home Rate  
 State

Home Rate State	Rate Step						Home Rate State	Rate Step					
	SA1	SA2	SA3	SA4	SA5	SA6		SA1	SA2	SA3	SA4	SA5	SA6
ALABAMA	4	7	9	11	17	22	NEVADA	5	8	13	16	18	20
ARIZONA	6	9	12	15	18	20	NEW HAMPSHIRE	2	7	11	15	18	22
ARKANSAS	4	7	9	11	15	21	NEW JERSEY	1	5	9	13	18	22
CALIFORNIA-N	8	12	15	17	18	20	NEW MEXICO	6	8	10	13	17	21
CALIFORNIA-S	7	11	15	17	18	20	NEW YORK-NE	3	7	10	14	18	22
COLORADO	7	8	10	12	16	21	NEW YORK-SE	1	7	10	14	18	22
CONNECTICUT	1	7	10	14	18	22	NEW YORK-W	3	5	10	14	18	22
DELAWARE	1	5	9	13	18	22	NORTH CAROLINA	4	7	8	12	18	22
DIST. OF COLUMBIA	1	4	8	12	18	22	NORTH DAKOTA	6	9	11	14	15	21
FLORIDA	7	10	12	13	18	22	OHIO-N	3	5	7	10	17	22
GEORGIA	4	7	10	12	18	22	OHIO-S	3	5	8	10	17	22
IDAHO	5	9	13	15	18	19	OKLAHOMA	5	7	9	12	15	21
ILLINOIS-N	3	6	8	10	15	21	OREGON	5	9	15	17	18	19
ILLINOIS-S	3	6	8	10	15	21	PENNSYLVANIA-E	1	5	8	12	18	22
INDIANA	3	6	8	10	16	21	PENNSYLVANIA-W	3	5	8	12	18	22
IOWA	4	7	9	11	14	21	RHODE ISLAND	1	6	11	14	18	22
KANSAS	5	7	9	12	14	21	SOUTH CAROLINA	4	7	9	12	18	22
KENTUCKY	3	5	8	10	17	22	SOUTH DAKOTA	5	8	10	12	15	21
LOUISIANA	5	8	10	13	16	21	TENNESSEE	5	6	8	10	17	22
MAINE	6	9	12	16	18	22	TEXAS-E	6	9	11	14	16	21
MARYLAND	2	5	9	12	18	22	TEXAS-S	8	11	12	14	16	21
MASSACHUSETTS	2	7	11	14	18	22	TEXAS-W	7	9	11	14	16	21
MICHIGAN-N	5	8	9	12	17	21	UTAH	6	7	11	14	18	20
MICHIGAN-S	4	7	9	12	17	21	VERMONT	2	7	11	14	18	22
MINNESOTA	6	8	10	12	15	21	VIRGINIA	3	5	8	11	18	22
MISSISSIPPI	5	7	9	11	16	22	WASHINGTON	8	11	15	17	18	19
MISSOURI	5	7	8	10	15	21	WEST VIRGINIA	2	5	7	11	18	22
MONTANA	7	10	12	14	17	20	WISCONSIN	3	7	9	11	16	21
NEBRASKA	5	8	9	12	14	21	WYOMING	5	9	10	13	16	21

(C) Monthly Usage Rate Table  
 The hourly rates apply to the average use for each rate period, rounded to the nearest tenth of an hour, for each access line within a service group (See "Service Group" definition in 2.5 preceding).

#### PER HOUR OF USE PER RATE PERIOD PER ACCESS LINE

Rate Steps	First 15 Hours		Next 25 Hours		Next 40 Hours		Over 80 Hours		All Hours Night/Weekend
	Business Day	Evening	Business Day	Evening	Business Day	Evening	Business Day	Evening	
1	\$17.41	\$11.31	\$15.48	\$10.07	\$13.56	\$8.81	\$11.48	\$7.46	\$6.05 (I)
2	\$18.29	\$11.90	\$16.29	\$10.59	\$14.27	\$9.29	\$12.08	\$7.86	\$6.36
3	\$18.72	\$12.17	\$16.67	\$10.84	\$14.61	\$9.50	\$12.35	\$8.02	\$6.51
4	\$19.06	\$12.39	\$16.97	\$11.03	\$14.88	\$9.66	\$12.58	\$8.17	\$6.62
5	\$19.35	\$12.58	\$17.22	\$11.19	\$15.09	\$9.82	\$12.77	\$8.31	\$6.71
X 6	\$19.60	\$12.74	\$17.45	\$11.35	\$15.30	\$9.95	\$12.94	\$8.41	\$6.81
7	\$19.92	\$12.95	\$17.74	\$11.52	\$15.55	\$10.11	\$13.15	\$8.55	\$6.92
8	\$20.29	\$13.19	\$18.05	\$11.73	\$15.82	\$10.29	\$13.39	\$8.70	\$7.05
9	\$20.59	\$13.39	\$18.33	\$11.92	\$16.07	\$10.44	\$13.60	\$8.84	\$7.15
10	\$20.86	\$13.56	\$18.58	\$12.08	\$16.28	\$10.59	\$13.77	\$8.95	\$7.26
11	\$21.10	\$13.71	\$18.78	\$12.20	\$16.47	\$10.71	\$13.93	\$9.06	\$7.33
12	\$21.32	\$13.85	\$18.97	\$12.34	\$16.62	\$10.81	\$14.06	\$9.14	\$7.40
13	\$21.51	\$13.99	\$19.14	\$12.45	\$16.78	\$10.91	\$14.20	\$9.22	\$7.47
14	\$21.73	\$14.13	\$19.34	\$12.58	\$16.96	\$11.02	\$14.34	\$9.33	\$7.55
X 15	\$21.95	\$14.27	\$19.56	\$12.71	\$17.13	\$11.15	\$14.49	\$9.42	\$7.63
16	\$22.21	\$14.44	\$19.77	\$12.85	\$17.32	\$11.26	\$14.66	\$9.53	\$7.71
17	\$22.46	\$14.59	\$19.99	\$13.00	\$17.52	\$11.39	\$14.82	\$9.64	\$7.80
18	\$22.90	\$14.89	\$20.37	\$13.24	\$17.56	\$11.61	\$15.10	\$9.82	\$7.96 (I)
19	\$23.96	\$15.57	\$21.32	\$13.86	\$18.69	\$12.15	\$15.81	\$10.28	\$8.39
20	\$25.82	\$16.78	\$22.98	\$14.94	\$20.14	\$13.09	\$17.04	\$11.08	\$9.04
21	\$26.96	\$17.52	\$23.99	\$15.59	\$21.03	\$13.67	\$17.79	\$11.56	\$9.44
22	\$29.04	\$18.88	\$25.85	\$16.80	\$22.65	\$14.72	\$19.17	\$12.46	\$10.16

Business Day, Evening and Night/Weekend Rate Periods are shown in 3.1.1 preceding

(D) Uniform Service Order Code  
 USOC WT1 Service Area 1  
 USOC WT2 Service Area 2

USOC WT3 Service Area 3  
 USOC WT4 Service Area 4

USOC WT5 Service Area 5  
 USOC WT6 Service Area 6

X = USED IN KANSAS-N

INTERSTATE WATS

TARIFF F.C.C. NO. 259  
 10th Revised Page 14.2  
 Cancels 9th Revised Page 14.2  
 Effective: March 3, 1982

WIDE AREA TELECOMMUNICATIONS SERVICE

3. RATES (Cont'd)

3.2 Monthly Charges (Cont'd)

3.2.7 800 Service

(A) Access line charge  
 A monthly charge of \$36.80 applies to each 800 Service access line. (IN-WATS) (I)

(B) Rate Step Table

Home Rate State	Rate Step						Home Rate State	Rate Step					
	SA1	SA2	SA3	SA4	SA5	SA6		SA1	SA2	SA3	SA4	SA5	SA6
ALABAMA	4	7	9	11	17	22	NEVADA	5	8	13	16	18	20
ARIZONA	6	9	12	15	18	20	NEW HAMPSHIRE	2	7	11	15	18	22
ARKANSAS	4	7	9	11	15	21	NEW JERSEY	1	5	9	13	18	22
CALIFORNIA-N	8	12	15	17	18	20	NEW MEXICO	6	8	10	13	17	21
CALIFORNIA-S	7	11	15	17	18	20	NEW YORK-NE	3	7	10	14	18	22
COLORADO	7	8	10	12	16	21	NEW YORK-SE	1	7	10	14	18	22
CONNECTICUT	1	7	10	14	18	22	NEW YORK-W	3	5	10	14	18	22
DELAWARE	1	5	9	13	18	22	NORTH CAROLINA	4	7	8	12	18	22
DIST. OF COLUMBIA	1	4	8	12	18	22	NORTH DAKOTA	6	9	11	14	15	21
FLORIDA	7	10	12	13	18	22	OHIO-N	3	5	7	10	17	22
GEORGIA	4	7	10	12	18	22	OHIO-S	3	5	8	10	17	22
IDAHO	5	9	13	15	18	19	OKLAHOMA	5	7	9	12	15	21
ILLINOIS-N	3	6	8	10	15	21	OREGON	5	9	15	17	18	19
ILLINOIS-S	3	6	8	10	15	21	PENNSYLVANIA-E	1	5	8	12	18	22
INDIANA	3	6	8	10	16	21	PENNSYLVANIA-W	3	5	8	12	18	22
IOWA	4	7	9	11	14	21	RHODE ISLAND	1	6	11	14	18	22
KANSAS	5	7	9	12	14	21	SOUTH CAROLINA	4	7	9	12	18	22
KENTUCKY	3	5	8	10	17	22	SOUTH DAKOTA	5	8	10	12	15	21
LOUISIANA	5	8	10	13	16	21	TENNESSEE	5	6	8	10	17	22
MAINE	6	9	12	16	18	22	TEXAS-E	6	9	11	14	16	21
MARYLAND	2	5	9	12	18	22	TEXAS-S	8	11	12	14	16	21
MASSACHUSETTS	2	7	11	14	18	22	TEXAS-W	7	9	11	14	16	21
MICHIGAN-N	5	8	9	12	17	21	UTAH	6	7	11	14	18	20
MICHIGAN-S	4	7	9	12	17	21	VERMONT	2	7	11	14	18	22
MINNESOTA	6	8	10	12	15	21	VIRGINIA	3	5	8	11	18	22
MISSISSIPPI	5	7	9	11	16	22	WASHINGTON	8	11	15	17	18	19
MISSOURI	5	7	8	10	15	21	WEST VIRGINIA	2	5	7	11	18	22
MONTANA	7	10	12	14	17	20	WISCONSIN	3	7	9	11	16	21
NEBRASKA	5	8	9	12	14	21	WYOMING	5	9	10	13	16	21

(C) Monthly Usage Rate Table

The hourly rates apply to the average use for each rate period, rounded to the nearest tenth of an hour, for each access line within a service group (See "Service Group" definition in 2.5 preceding).

PER HOUR OF USE PER RATE PERIOD PER ACCESS LINE

Rate Steps	First 15 Hours		Next 25 Hours		Next 40 Hours		Over 80 Hours		All Hours Night/Weekend
	Business Day		Business Evening		Business Day		Business Evening		
	Day	Evening	Day	Evening	Day	Evening	Day	Evening	
1	\$17.38	\$12.51	\$15.86	\$11.42	\$14.37	\$10.34	\$12.72	\$9.16	\$8.29
2	\$17.93	\$12.91	\$16.36	\$11.79	\$14.82	\$10.67	\$13.13	\$9.45	\$8.54
3	\$18.18	\$13.09	\$16.60	\$11.95	\$15.03	\$10.83	\$13.30	\$9.58	\$8.66
4	\$18.38	\$13.24	\$16.78	\$12.08	\$15.20	\$10.94	\$13.46	\$9.68	\$8.75
5	\$18.55	\$13.36	\$16.95	\$12.20	\$15.34	\$11.05	\$13.57	\$9.77	\$8.84
6	\$18.71	\$13.47	\$17.08	\$12.29	\$15.46	\$11.14	\$13.69	\$9.86	\$8.91
7	\$18.88	\$13.60	\$17.26	\$12.42	\$15.63	\$11.25	\$13.83	\$9.96	\$8.99
8	\$19.10	\$13.76	\$17.45	\$12.56	\$15.80	\$11.38	\$13.99	\$10.08	\$9.11
9	\$19.29	\$13.89	\$17.62	\$12.69	\$15.96	\$11.49	\$14.13	\$10.17	\$9.19
10	\$19.44	\$14.00	\$17.75	\$12.78	\$16.07	\$11.58	\$14.23	\$10.25	\$9.26
11	\$19.58	\$14.10	\$17.88	\$12.89	\$16.20	\$11.66	\$14.33	\$10.32	\$9.32
12	\$19.70	\$14.18	\$17.99	\$12.95	\$16.29	\$11.73	\$14.43	\$10.39	\$9.39
13	\$19.81	\$14.26	\$18.09	\$13.03	\$16.39	\$11.79	\$14.49	\$10.43	\$9.43
14	\$19.92	\$14.34	\$18.21	\$13.12	\$16.48	\$11.87	\$14.59	\$10.51	\$9.49
15	\$20.06	\$14.45	\$18.33	\$13.21	\$16.58	\$11.94	\$14.69	\$10.57	\$9.56
16	\$20.21	\$14.55	\$18.45	\$13.28	\$16.72	\$12.03	\$14.79	\$10.65	\$9.63
17	\$20.35	\$14.66	\$18.59	\$13.39	\$16.82	\$12.12	\$14.90	\$10.72	\$9.70
18	\$20.59	\$14.82	\$18.81	\$13.54	\$17.02	\$12.26	\$15.08	\$10.86	\$9.82
19	\$21.56	\$15.52	\$19.62	\$14.13	\$17.89	\$12.88	\$15.74	\$11.33	\$10.35
20	\$23.24	\$16.73	\$21.15	\$15.23	\$19.29	\$13.89	\$16.97	\$12.22	\$11.16
21	\$24.26	\$17.47	\$22.08	\$15.90	\$20.14	\$14.50	\$17.71	\$12.75	\$11.65
22	\$26.14	\$18.82	\$23.79	\$17.13	\$21.70	\$15.62	\$19.08	\$13.74	\$12.55

Business Day, Evening and Night/Weekend Rate Periods are shown in 3.1.1 preceding.

(D) Uniform Service Order Code

USOC 8L1 Service Area 1    USOC 8L3 Service Area 3    USOC 8L5 Service Area 5  
 USOC 8L2 Service Area 2    USOC 8L4 Service Area 4    USOC 8L6 Service Area 6

X = USED IN KANSAS

TELECOMMUNICATIONS OFFICE  
 NOV 9 1982



No supplement to this tariff will be issued except for the purpose of cancelling this tariff.

Long Distance Message  
Telecommunications Service Tar  
7th Revised Sheet 21  
Replacing 6th Revised Sheet 21

LONG DISTANCE MESSAGE TELECOMMUNICATIONS SERVICE

1.5 TWO-POINT SERVICE (Continued)

1.5.5 Rate and Charge Application (Continued)

C. Rate Table

A. Dial Station-to-Station. (1)

RATE MILEAGE	DAY	
	Initial Period 1 Minute	Each Additional Minute
1-12	(CR) \$ .16	(CR) \$ .07
13-16	.20	.11
17-20	.25	.14
21-25	.33	.18
26-30	.37	.21
31-40	.40	.24
41-55	.44	.27
56-70	.47	.30
71-85	.49	.32
86-105	.51	.34
106-170	.53	.36
171&Over	(CR) .56	(CR) .38

82U8

Consolidated Docket Number 12881 100

FILED MAR 2 1982

THE STATE CORPORATION COMMISSION  
OF KANSAS

By *Carol Johnson*

(CT) (1) See 1.5.5, B., preceding for Service Charges applicable to Dial Credit Card Station-to-Station, Operator Station-to-Station and Person-to-Person calls.

*Continued to*

K

Issued: MAR 01 1982

Effective: MAR 3 1982

By J.E. HAYES, Vice President-Kansas  
Southwestern Bell Telephone Company  
Topeka, Kansas

CASE 1 (Part 1)

ASSUMPTIONS AND EXPLANATIONS

COMBINED STATE OWNED AND TELCO SERVICE SYSTEM

Data requested is provided on a line for line basis as indicated.

Capital Cost Payback. Total Capital

Cost is \$19,000,000 and a 10 year lease/purchase contract is used as the method of acquisition. Since the leasing company will carry the state for necessary progress payments before system cutover, this amounts to \$712,500 for a total capital repayment amount of \$19,712,500.

Leasing companies will finance the state at 1½ to 2% above the state bond rate which is conservatively established at 8 or 9% based on similar rates for municipal and state bonds recently issued in Kansas and Missouri.

A rate of 15% was used for financing in this cost comparison because it is conservative, with only an outside chance that rates will reach this level. It represents the worst case condition for the state and is intended to provide low range data for cost avoidance purposes.

The total payback, with interest, is \$38,160,000.

System Engineering

\$450,000 is the estimate for the detail engineering and pre-contract award work before acquisition can proceed. It includes consultant engineer costs for the Kansas City, Topeka, and Wichita switches and the fiber optic transmission system.

Recurring Costs

Telco Service

Intercity (KANS-A-N) - Telpak continues indefinitely.

See enclosure 1 for a complete discussion of assumptions and cost data.

Local

(Centrex Rates)

This data represents the projected costs for Centrex service at Kansas City, Topeka, and Wichita, which is to be replaced in FY 87.

A stabilized rate tariff is used, based on data provided by SWB for Texas. Similar tariffs are now in place in many other states. See Enclosure 2.

Current SWB proposed Centrex rate (non-stabilized) are at the \$23.00 per line level. We expect that on a stabilized 3 year basis this rate will be \$30 per line or more and we have been told that it may reach \$48 per line. Therefore, this \$30 is a conservative estimate and represents a best case for the telco.

The stabilized portion, Switch (Exchange) and Intercom, of the rate is escalated at 25% each three year period and constitutes an annual rate of between 7 and 8% which is again conservative.

The variable portion, Local Exchange (Area) Access, of the cost is escalated at 10% per year which is conservative in the light of the historical record.

Miscellaneous

Constitutes payment for trunks, Direct in Dialing (DID), touch tone access, Intercity access charges of \$5 per access per month (telco estimate), off premise extensions, switch feature charges, and other miscellaneous items.

Escalated at 10% per year.

CPE AND PBX's

Customer Premise Equipment (telephone and other associated equipment) and PBX's (on premise switches), which are to be replaced under this initial segment of the plan.

Escalated at 10%

State Costs

Support and Overhead.

A proportion of the Telecommunications Office budget applicable to managing and controlling that part of the system represented by the switches at Kansas City, Topeka, and Wichita, along with the fiber optic transmission system. 11 total personnel FY 84, 16 total personnel FY 85, 32 total personnel in FY 87.

Escalated at 10% per year.

Contract O&M (Beginning in FY 87)

Combined State and Telco System

\$30 per switch port per year for 14,5000 switch ports. 10% of capital cost (\$547,000) of local area (microwave nets). 3% of equipment capital costs (\$1548,000) for spare ports, and 5% of transmission system capital costs of (\$5,474,000). Total \$813,000 rounded.

Telco Tax Revenue Lost

9% of the difference between telephone company gross revenue, a total telco leased system, and the combined state and telco system.

CASE 1 (Part 2)

ASSUMPTIONS AND EXPLANATIONS

TELCO SERVICE CONTINUED INDEFINITELY

Capital Cost.

CPE is now deregulated and must ultimately be purchased in any event. During FY 84 thru FY 86 rental from American Bell is possible and is contemplated. However, the age, trouble record, and cost of this equipment does not make it an acceptable candidate for purchase, and acquisition of new CPE is contemplated. CPE acquisition is costed on one for one replacement basis at \$554 per line for key systems and \$75 for line (both include installation costs). A total of \$3,720,000 of CPE is estimated and acquisition is contemplated on a lease/purchase basis again at 15%, which is the high range carrying charges. This costing, at 15% is consistent with Part 1 acquisition.

Recurring Costs.

Telco Service

Intercity (KANS-A-N) escalated at 10% (see enclosure 1) full 1983 costs are the basis for all costs in succeeding years.

Local Service

Same as Part 1 FY 84 thru 86 and continued under the stabilized rate tariff for succeeding years. Escalation is the same as in Part 1. Miscellaneous charges continue on for each succeeding year past FY 86 at 10%. CPE and PBX's are replaced as described above.

State Costs

Support and Overhead

Proportioned to system replaced in Part 1 to be consistent.

Escalated at 10%.

Contract O&M.

\$3.50 per line/month includes maintenance, moves, and changes for 7,500 lines which is the present quantity of Centrex service in Kansas City, Topeka, and Wichita.

CASE 2 (Part 1)

ASSUMPTIONS AND EXPLANATIONS

COMBINED STATE AND TELCO SYSTEMS.

Capital Cost Payback.

Same as Case 1, Part 1, but at 10% for 5 years due smaller capital amount involved.

System Engineer.

\$450,000 same as Case 1.

Recurring Costs.

Telco Service

Intercity (KANS-A-N use mix of IXC (K.C.C.) and MPL (AT&T).

See enclosure 1.

Local Service

Same as Case 1, Part 1, but Variable exchange area access rates, Misc., CPE, and PBX (FY 84 thru FY 86) are escalated at 15% per year in accordance with the historical record and industry average.

State Costs.

Same as Case 1, Part 1. (Escalated at 10%).

Tax Revenue Lost.

Same as Case, Part 1, based on reduced Telco gross income.



CASE 2 (Part 2)

ASSUMPTIONS AND EXPLANATIONS

TELCO SERVICE CONTINUED INDEFINITELY

Capital Cost Payback.

Same as Case 1, Part 2 but at 10% for 5 years.

Recurring Costs.

Intercity. Same as Case 2, Part 1, except that full FY 83 charges are carried through cost comparison period. See Enclosure 1, Case 2. Escalation is at 15%, based on historical record and industry average.

Local. Same as Case 2, Part 1, but stabilized rates are extended across whole study period. Miscellaneous charges are similarly extended. CPE and PBX's are replaced.

State Costs.

Same basis and rationale as Case 1, Part 2.

CASE 3 (Part 1)

ASSUMPTIONS AND EXPLANATION

COMBINED STATE AND TELCO SYSTEMS

Capital Cost Payback.

Same as Case 1, Part 1, except a 12% carrying charge is used. This is still high and conservative but not beyond the realm of possibility.

System Engineer.

Same as Case 1, Part 1.

Recurring Costs.

Telco Service

Intercity. MPL/AT&T tariff is used for KANS-A-N. See abbreviation for Multi-schedule Private Line service.

Service is sold on a per circuit basis, not in bulk.

Escalation is at 10%.

Local Service. Same as Case 1, Part 1. Escalation is 10%/year.

State Costs.

Same basis and rationale as Case 1, Part 1.

Telco Tax Revenue Lost.

Same basis as Case 1, Part 1.

CASE 3 (Part 2)

ASSUMPTIONS AND EXPLANATION

TELCO SERVICE CONTINUED INDEFINITELY

Capital Payback.

Same as Case 2, Part 2 but at 12% vice 10%.

Recurring Costs.

Telco Service

Intercity.

Same as Case 3, Part 1, but FY 84 costs extended over period of study at 10%/year.

Local Service

Same as Case 3, Part 1 but extended over period of study at 10%/year.

State Costs.

Same as Case 2, Part 2.

CASE 4 (Part 1)

ASSUMPTIONS AND EXPLANATION

COMBINED STATE AND TELCO SYSTEMS

All data same as Case 3, except Bond issue at 9% for 10 years is used for acquisition.

CASE 4 (Part 1)

Same as Case 3, Part 2.

CASES 5 and 6

ASSUMPTIONS AND EXPLANATIONS

COMBINED STATE AND TELCO SYSTEM

Capital Payback.

Cases 5 and 6 are identical, except that a Bond Issue at 9% for 10 years is used in Case 5, and Lease/Purchase at 12% for 10 years is used in Case 6.

Cases 5 and 6 deal with the total system as designed and costed in the Booz-Allen plan.

In considering total telephone system usage, all CPE must be replaced since the state will have to buy it eventually in any case. The cost of the residual CPE (that not already included in the Booz-Allen study) is \$9,955,000 on a one for one replacement basis.

All other costs are applied on the same basis as for Cases 1 through 4, Parts 1 and 2 as appropriate.

M E M O R A N D U M

DATE: 18 January 1983  
TO: Mr. L. J. Kunkel, Director of Telecommunications  
FROM: James C. Gilbert, Ass't. Director of Telecommunications *JCG*  
SUBJECT: State Plan KANS-A-N Cost Data Update.

This memorandum provides updated cost data applicable to KANS-A-N service under various conditions of divestiture of AT&T, both before and after the acquisition of a Kansas City, Topeka to Wichita Telecommunications System by the state. The attached enclosures represent three separate conditions under which the state may be leasing the KANS-A-N system from the telephone industry before and after the acquisition of a state owned system. The first example assumes TELPAK will continue to be available and provided by Southwestern Bell, regulated by KCC tariffs. The second case assumes TELPAK will be discontinued and replaced by private line service provided by SWB in the 913 area code part of the state, and the CCSA switch with all circuits to the 316 area and the Kansas City exchange area being provided by AT&T under FCC regulation. It further assumes the use of intralata circuits provided by SWB after the state acquires the fiber optics system. The third case assumes TELPAK will be discontinued and replaced by private line service provided by AT&T and regulated by the FCC, both before and after the state acquires its own system.

In developing each case, assumptions were made which were common to all three. These assumptions and conditions are as follows:

1. All three cases were developed using tariffs which were in effect in January 1983.
2. Each case assumed service would continue to be provided at the same level it was in January 1983. Service will continue to be provided to all locations which were either on the KANS-A-N network or on order by January 1983.
3. No cost or growth increases were projected.
4. The residual service represents private line KANS-A-N service to locations presently having direct KANS-A-N access that will not be on the state's fiber optic cable route. These costs are based on tariff rates in effect in January 1983.

*Enclosure 1*

5. Costs associated with service provided by Southwestern Bell are those contained in current billing data from SWB and the Private Line Service Tariff and the Wide Area Telecommunications Service Tariff as approved by the KCC. Usage data as shown on billing data and as presented in a SWB proposal submitted in June 1982 were used to develop WATS costs which are usage sensitive
6. Costs associated with service provided by AT&T are those contained in tariff FCC No. 260, Private Line Service and in SWB billing data for WATS. Where a cost was not available for AT&T service, an estimate was made based on comparable service in the KCC approved tariff for Private Line or General Exchange Service.

The cases represented by the three attached enclosures are:

1. Case #1. TELPAK, as presently available from SWB, will continue to be available during the period under consideration. All residual telco provided service will be provided on an intralata basis, using TELPAK to the closest state cable access point using V&H mileage as defined in current KCC Private Line Tariff.
2. Case #2. This assumes TELPAK will be discontinued, before the state can acquire its system, and that AT&T will assume responsibility for the CCSA switch. The KANS-A-N transmission system will become a split responsibility with all circuits in the 913 area being provided on an intralata basis, controlled by the KCC tariffs. All circuits from the CCSA switch in Topeka to the 316 area and to the Kansas City exchange area will be provided by AT&T and controlled by the FCC tariffs as interlata circuits. After the state acquires its Kansas City, Topeka, Wichita switching and transmission system the residual service provided by commercial carriers will be provided on an intralata basis. All residual circuits will be homed on the closest access point on the state's system without crossing a LATA boundary and will be provided by SWB under KCC regulation.
3. Case #3. This assumes the TELPAK will be discontinued and AT&T will own and operate the entire KANS-A-N CCSA network. The entire network's switching and transmission system will be considered interlata and will be regulated by the FCC. After the state acquires its switching and transmission system the residual telco provided service will continue to be provided by AT&T and regulated by the FCC.
4. Case #4. Same as Case #3.

JCG:mmb

Atchs.

Cases #5, #6, and #7. The primary difference between cases 1, 2, 3, and 4 and cases 5, 6, and 7 is the size of the state's system. 5, 6, and 7 assume the state will acquire the entire fiber optic transmission system as proposed in the Telecommunications System Implementation Plan by Booz-Allen. This approach assumes the ownership of a state wide fiber optic transmission system and a minimum of dependence upon the common carriers.

Case #5, 6, and 7, as with Cases #3 and 4 assumes the TELPAK will be discontinued and the CCSA and all KANS-A-N circuits will become tariffed as inter-LATA circuits belonging to AT&T. After FY 1987, all residual intercity circuits will also be provided by AT&T as inter-LATA MPL circuits.



CASE 1

TELPAK CONTINUES

RECURRING COST SUMMARY  
Leased KANS-A-N  
Voice/Data System vs.  
State Owned Transmission System

	<u>FY 83 KANS-A-N Leased Facilities &amp; Service Charges</u>	<u>Residual Charges for Telco Services not Possible or Economical Thru State System</u>	<u>Cost of Telco Facilities Avoided by State System Cost Avoidance</u>
TELPAK	\$ 104,966	\$ 66,154	\$ 38,812
WATS			
Intrastate	67,094	67,094	- 0 -
Interstate	105,484	105,484	- 0 -
Misc. Circuit Eqpt.	121,872	79,713	42,159
Message Accounting	6,000	-	6,000
ASTRA	18,418	17,088	1,330
TELENET	3,929	3,640	289
MONTHLY COSTS	<u>\$ 427,763</u>	<u>\$ 339,173</u>	<u>\$ 88,590</u>
ANNUAL COSTS	\$5,133,156	\$4,070,076	\$1,063,080

CASE 2

MPL/IXC 1983 - 86 INTRALATA 1987 and BEYOND

	FY 83 KANS-A-N Leased Facilities and Leased Service Charges	Residual Charges Summary for Telco Service not Possible or Economical Thru State System	Cost of Telco Facilities Avoided by State System
ICX/MPL Tariff Cost	\$ 238,957	\$ 104,544	\$ 134,413
WATS			
Intrastate	67,094	67,094	- 0 -
Interstate	105,484	105,484	- 0 -
Misc. Ckt. Equip.	179,525	80,029	99,496
Message Accounting	16,200	- 0 -	16,200
ASTRA	23,827	20,314	3,515
TELENET	7,552	6,680	872
MONTHLY COST	<u>\$ 638,639</u>	<u>\$ 384,145</u>	<u>\$ 254,494</u>
ANNUAL COSTS	\$7,663,668	\$4,609,740	\$3,053,928

CASES 3 & 4

FCC TARIFF

RECURRING COST SUMMARY  
Leased KANS-A-N  
Voice/Data System vs.  
State Owned Transmission System

	<u>Fy 83: KANS-A-N Leased Facilities &amp; Service Charges</u>	<u>Residual Charges for Telco Services not Possible or Economical thru State System</u>	<u>Cost of Telco Facilities Avoided by State System Cost Avoidance</u>
MPL Ckt Costs	\$245,485	\$125,425	\$120,060
WATS			
Intrastate	67,094	67,094	- 0 -
Interstate	105,484	105,484	- 0 -
Misc. Circuit Eqpt.	186,349	87,069	99,280
Message Acct.	16,200	- 0 -	16,200
ASTRA	23,572	20,034	3,538
TELENET	7,381	6,416	965
MONTHLY COSTS	<u>\$651,565</u>	<u>\$411,522</u>	<u>\$240,043</u>
ANNUAL COSTS:	\$7,818,780	\$4,938,264	\$2,881,716

CASES 5, 6 & 7

MPL UNDER FCC TARIFF WITH COMPLETE PLAN IMPLEMENTATION

RECURRING COST SUMMARY  
Leased KANS-A-N  
Voice/Data System vs.  
State Owned Transmission System

	✓ <u>FY 83 KANS-A-N Leased Facilities &amp; Service Charges</u>	✓ <u>Residual Charges for Telco Services not Possible or Economical thru State System</u>	<u>Cost of Telco Facilities Avoided by State System Cost Avoidance</u>
MPL Ckt Costs	\$ 245,485	\$ 72,893	\$ 172,592
WATS			
Intrastate	67,094	67,094	0
Interstate	105,484	105,484	0
Misc. Circuit Eqpt.	186,349	96,342	90,007
Message Acct.	16,200	0	16,200
ASTRA	23,572	19,315	4,257
TELENET	7,381	5,091	2,290
MONTHLY COSTS	<u>\$ 651,565</u>	<u>\$ 366,219</u>	<u>\$ 285,346</u>
ANNUAL COSTS	\$7,818,780	\$4,394,628	\$3,424,152

## RATE STABILITY PLAN OVERVIEW

### General

The Optional Rate Stability Plan will be a contractual type agreement that guarantees specific rates for equipment and services against Company-initiated rate increases for a period of three (3) years. At the end of the fixed payment period, the customer will have the option (1) to disconnect the entire service; in which case, no termination charges apply, (2) to continue the service under the prevailing month-to-month tariff rates, (3) to renew the agreement for any fixed payment period then offered. Existing Centrex customers may elect to convert to the new payment option. A new 3 year contract will be required and any existing B.T.A. will not be applied.

### Plan Features

1. Items not subject to Company-initiated increase
  - Intercom and Exchange Access Line portions of the main station rate (approximately 65% of total rate)
  - Attendant Console
  - Optional features
  - Tie Line and CCSA Terminals
2. Items subject to Company-initiated increase
  - Local Exchange Access portion of main station rate (tied to future changes in PBX trunk rate)
  - Dorm stations (tied to changes in IFR rate)
3. Termination liability will be equal to 80 percent of the present worth of the remaining monthly payments in the 36 month term.
4. Deferred installation charges will be offered.
5. Minimum station requirements will be reduced from 100 on primaries and 50 on secondaries to 30.
6. Station additions may be made under either the Stability or Month-To-Month option.
7. Termination charges will apply if the customer partially disconnects more than 20 percent of working stations.

Example of Main Station Rate Structure - Texas

Current Structure

<u>Intercom</u>	<u>Exchange Access</u>	<u>Total</u>
\$7.70	\$15.55	\$23.25

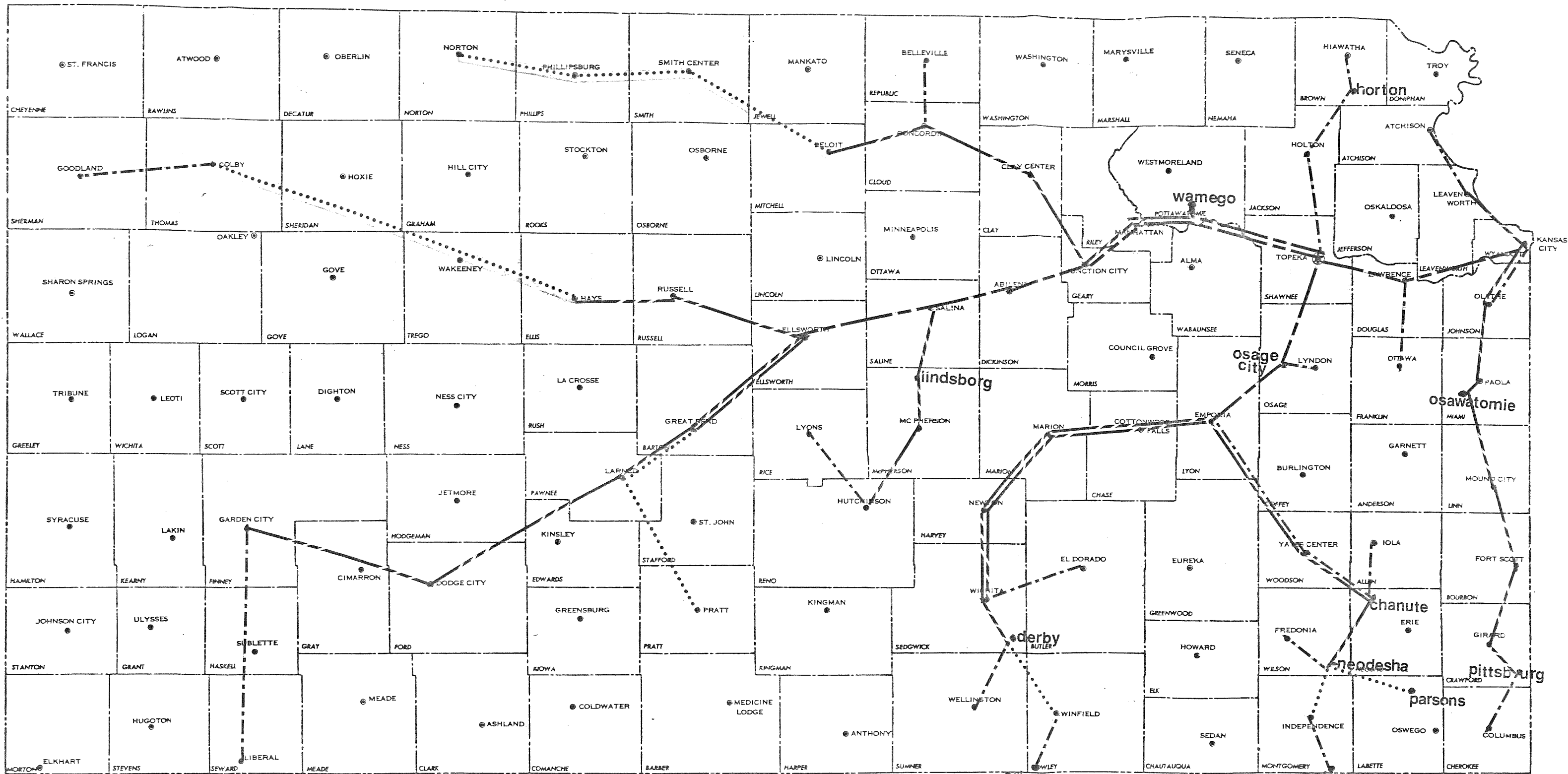
Rate Stability Structure

<u>Intercom</u> (1)	<u>Exchange Access Line</u> (1)	<u>Local Exchange Access</u> (2)	<u>Total</u>
\$7.70	\$7.65	\$7.90	\$23.25

(1) Not subject to Company-initiated increase

(2) Subject to Company-initiated increase

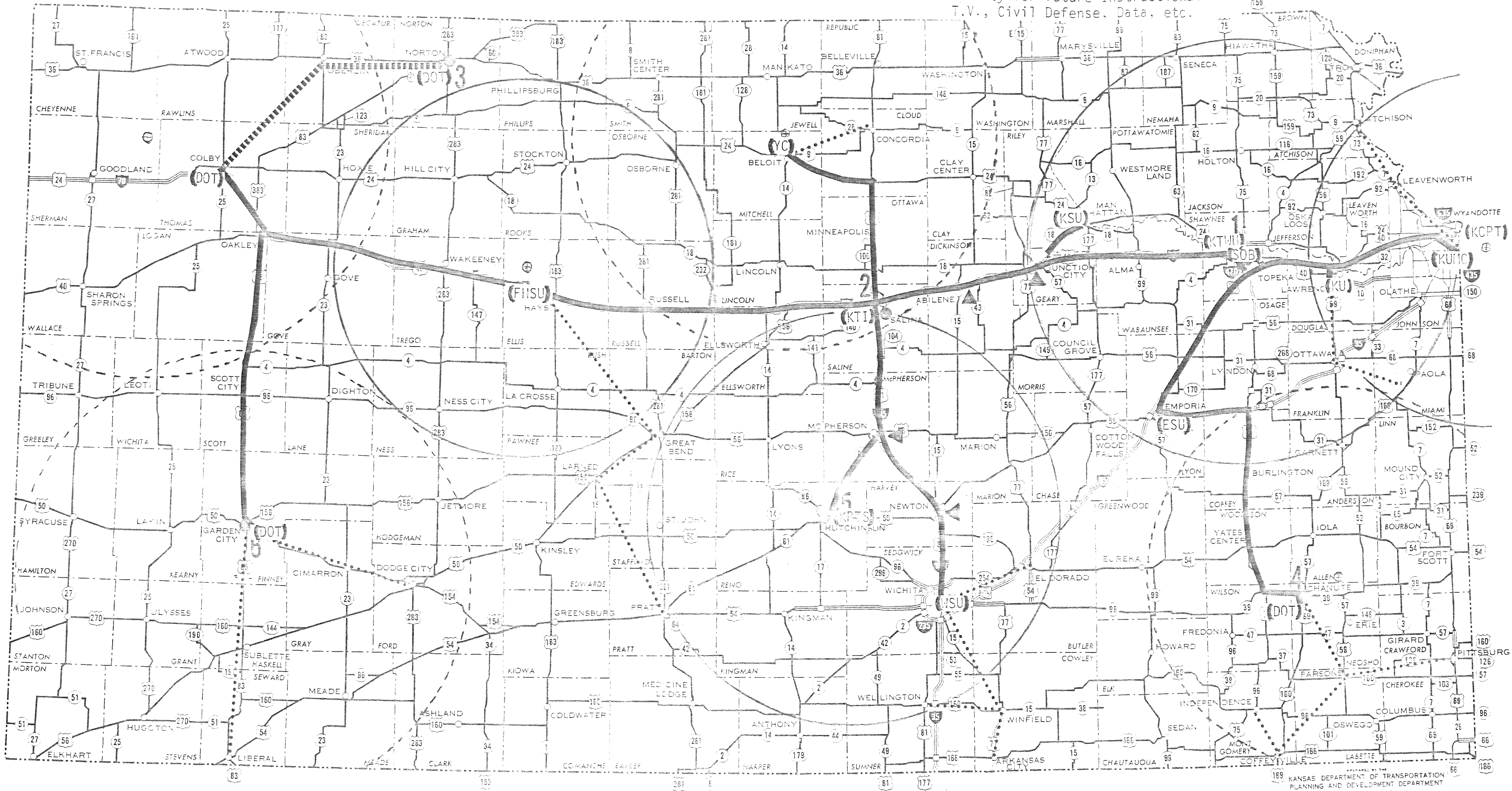
# KANSAS



--- A ---  
 ..... B .....  
 ——— C ———  
 - - - - D - - - -

# KANSAS

Capacity for future Instructional  
T.V., Civil Defense, Data, etc.



- LIGHTWAVE (Fiber Optics)
- MICROWAVE (2GHz existing)
- ..... LEASED MESSAGE (Tel. Co.)
- ▲ CITY ENTRANCE LINKS (1 hop 18 Ghz Microwave)

APPROVED BY THE  
KANSAS DEPARTMENT OF TRANSPORTATION  
PLANNING AND DEVELOPMENT DEPARTMENT  
IN COOPERATION WITH THE  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION



TESTIMONY TO HOUSE COMMUNICATION, COMPUTERS  
AND TECHNOLOGY COMMITTEE BY  
PATRICK J. HURLEY  
SECRETARY OF ADMINISTRATION

After all these hours and days of very complicated, and often confusing, testimony, I would like to try to put the real issue into perspective for you.

The real question is this - can the State of Kansas acquire its telephone service more cost effectively than it does today; that is to say, telecommunications is costing the State of Kansas millions and millions of dollars each year - can we get this service more cheaply?

The answer is yes, and the procedure is simple, go into the competitive free market place.

Force all vendors to compete for our dollars and thereby get the best product for the least dollars.

Quite simply, in the past we got most of that service from a regulated monopoly - Southwestern Bell. As such we have had neither choice as to the product (we are already on their system), nor as to the cost (it is set in tariffs by regulation).

All we are telling you is that in the area of telecommunications, tomorrow has come. Because of the deregulation of the telephone industry and the divestiture of the monopoly of A. T. & T., all users - from the largest to the smallest - whether it is for a

Attachment 4

total system or a single telephone - every single user can now take advantage of the competitive market place and choose the vendor, the product and the price.

Let me give you examples in the three areas under my authority as Secretary of Administration where the State has benefitted significantly by abandoning the monopolistic practice of dealing with a single vendor and has entered the free market place:

1. In the area of reprographics - or in laymen's terms - copying machines. Previously the State had a policy of allowing agencies statewide to obtain copying machines by indiscriminately selecting the vendor of their choice. The result was that two companies had a monopoly on this business and the effect was that agencies spent far more for copiers than they needed to. Today we strictly control the acquisition of copiers under a single state contract. We require all vendors to bid competitively in ten different categories of copiers based on size, volume and specialized equipment.

The low bidder in each category becomes the supplier for that size and type of copier. All agencies have been assigned one of these categories based upon the needs of the agency. In less than three years, we will have saved almost two million dollars as a result of forcing competitive bidding in this area.

2. In the area of large computers, previously we had a single vendor policy which meant that each time we went out to acquire a new piece of computer hardware,

only one company could bid. We abrogated that monopolistic policy, and the first time we put out a proposal that allowed more than one vendor to bid we received three bids, two of which were twice and three times as low as the bid from the vendor that previously held the monopoly. We saved over \$600,000 on that one bid alone, and have since continued to generate similar savings by this practice.

Finally, in the area of telecommunications, by law we are in fact required to competitively bid in every instance where we can. However, previously the policy of the State of Kansas was to never competitively bid any telecommunications acquisitions.

In the last year, however, we have begun bidding, and let me share with you some interesting results. Attachment A shows that our five year savings from bidding telecommunications equipment for seven offices is in excess of \$1,200,000.00.

Finally, let me give you one last real example in the area of telecommunications of how we stand to continue to benefit if we competitively bid.

You have heard us say a number of times in our testimony that we are presently on Southwestern Bell's system of Centrex switches located on Southwestern Bell's premises in each of the large cities serving large state installations, such as here in Topeka.

In Kansas City one such Centrex switch serves the University of Kansas Medical Center. For a year Southwestern Bell has been proposing to the Regents and

to the State of Kansas that we abandon that Centrex switch and to do an on-site switch called "The Bell Dimension System." Southwestern Bell has maintained that it was the best technology that Bell had to offer, that it was better than the Centrex switch, and that it would cost less money even while regulated.

Today Southwestern Bell is no longer offering the Medical Center or the State that system or those cost savings. Today Southwestern Bell wants us to stay on the Centrex switch in Kansas City under regulated costs. Why - because they can no longer offer what they in fact were offering prior to divestiture, and what, prior to divestiture, they had been bidding again and again, that is Bell's current best product, "the Bell Dimension System."

Let me now complete this story, I am today in receipt of a proposal for an on-site switch for the University of Kansas Medical Center that we can consider if we want to go out for competitive bids for a new system at the University of Kansas Medical Center. Let me describe this actual proposal to you and its attendant cost savings.

It proposes the State discontinue utilizing the Centrex switching service that currently is utilized at the Medical Center. It also proposes the State purchase the station equipment currently leased from Southwestern Bell. The proposal could be implemented without any increase in the Medical Center's telecommunications

budget, and in the first year alone, a savings in excess of \$100,000 would be realized. Every year thereafter the savings would be in excess of \$600,000. (See Attachment B.)

Q-1. Do you know what the name of that system is - "Bell Dimension PBX Telephone System."

Q-2. Do you know the name of the company that is offering that system to us as the best product available in the Bell system - "American Bell."

Q-3. In fact you would be interested to know that the representative of American Bell who is offering that system to us today competitively is the same person who has been preparing that offer and proposing it to the State for almost a year as Southwestern Bell's representative.

This example is the best illustration we can give you of what we have been trying to explain through all of this testimony.

Therefore you may say why are we asking for you to approve anything if we can achieve the same results some day by following the law and competitively bidding all of these matters in a piecemeal fashion as they come along.

The answer to the question is that we can probably in fact do just that. However, it is our judgment that for maximum cost savings, maximum efficiency, and maximum benefits to the State, the best approach to that

goal is the one we have proposed, that is for the State to develop a total plan and go out at one time to acquire the basic structure of that plan.

That is the only question before the Legislature--not should we competitively bid the acquisition of our future telephone equipment and service--that is required by state law and only enhanced by divestiture and deregulation.

The only question for the Legislature to decide is how do we get there.

Should we proceed piecemeal without a plan, or should we follow a plan to manage as effectively as possible the future of telecommunications for the State of Kansas?

We recommend the latter course. We are asking you only to provide the funds for the technical design work on the plan which cannot be done in-house by our own staff. This will then allow us to request bids from all vendors including Southwestern Bell if they care to bid. There are many companies anxiously awaiting the opportunity to bid on this plan. One of those is American Bell. Others that we know of are GTE and Centel. In fact, I've arranged to have representatives from each of those three vendors testify Monday before the Senate Ways and Means Committee.

Our course has been set by a combination of State law and acts by the Federal government, and the Federal courts. It is no longer a question of should we proceed, but simply how do we proceed? That decision is

yours. I encourage you to hear from more than one telecommunications provider in order to have the maximum amount of information before you to assist in your decision making process.

NEW STATE OWNED TELEPHONE SYSTEMS AS OF JANUARY, 1983

DATE PLACED IN SERVICE	AGENCY	CAPITOL COST	PROJECTED STATE OWNED 5 YEAR COSTS (Inclds capital payback)	PROJECTED TELCO LEASED 5 YEAR COSTS	5 YEAR SAVINGS	LOW BIDDER	SWB BID
08-21-81	Human Resources 1430 S. Topeka Topeka, Kansas PBX	\$ 85,168.00	\$223,241.00	\$448,343.00	\$225,102.00	\$ 85,168	\$148,880
10-01-81	SRS Office Key Pratt, Kansas System	\$ 18,576.00	\$ 31,115.00	\$ 60,799.00	\$ 29,684.00	\$ 28,098	\$ 70,761
08-02-82	KPERS Key Topeka, Kansas System	\$ 23,950.00	\$ 53,333.00	\$127,000.00	\$ 73,667.00	\$ 23,950	\$ 81,246
08-02-82	SRS Office Key Emporia, Kansas System	\$ 19,950.00	\$ 52,661.00	\$104,927.00	\$ 52,266.00	\$ 19,950	\$ 93,709
12-01-82	SRS Office Lawrence, Kansas PBX	\$ 53,476.00	\$ 91,144.00	\$195,325.00	\$104,181.00	\$ 66,916	\$ 86,458
10-16-81	KSIR Hutchinson, Kansas PBX	\$ 88,107.00	\$153,937.00 (Large upgrade in service)	\$408,869.00	\$254,932.00	\$ 88,107	\$241,648
11-27-82	OSH Osawatomie, Kansas PBX	\$246,612.00	\$325,637.00 (Large upgrade in service)	United Telephone Co. (No telco bid to compare)		\$246,612	No Bid
12-10-82	KSP Lansing, Kansas PBX	\$311,228.00	\$415,256.00 (Large upgrade in service)	\$912,879.00	\$497,623.00	\$311,228	\$762,346
	TOTALS	\$847,067.00	\$1,346,324.00	\$2,258,142.00	<u>\$1,237,455.00</u>		

ATTACHMENT "A"



2702 Rock Creek Parkway  
North Kansas City, Missouri 64117  
Phone (816) 346-1000

February 8, 1983

Facilities Operations  
K.U. Medical Center  
39th and Rainbow  
Kansas City, Kansas 66112

Dear Sirs:

*over*  
The enclosed document discusses the replacement of your Centrex service with American Bells Dimension PBX Telephone System. There are several reasons why this proposal warrants your serious consideration.

First and foremost the Dimension could provide substantial cost saving when compared to Centrex. The Dimension will save \$28,000 a month and will pay for its self in 8 to 9 months. This Dimension proposal will directly address Secretary of Administration, Partick Hurley's August 24, 1982 memo asking for telephone expense reductions.

Second, this is an interum solution for the Medical Center focusing on cost reduction. The proposal is not in lieu of the system planned for the Medical Center under the State plan, telecommunications but a step towards such a plan. It moves the Medical Center closer to the state plan by getting the station side and wiring plan on line today. At such time when the state telecommunications plan is funded, the Medical Center would need only to change out the PBX. We would recommend an extremely short lease period for such a system or the ability to terminate the lease arrangement on a month to month basis. This will allow the Medical Center to lower their communications cost, maintain high level of service through the Bell System and finally the flexibility to move towards the state plan on short notice.

American Bell stands ready to implement this proposal upon receiving your commitment. If you have any questions please call on 346-1287.

Sincerely,

*[Signature]*  
Don R. Hoven  
Account Executive

K.U. MEDICAL CENTER  
MONTHLY EQUIPMENT BREAKDOWN  
LEASING DIMENSION -PURCHASE STATION EQUIPMENT

	Centrex (Mon.)	Dimen (Mon.)	Dimen I.C.	Trunks (Mon.)	Key & Misc.	756 & CKT's	DID	Purchase of Stat.	Total (Mon.)	Total (I.C.)
Centrex	69,040	----	----	----	27,476	3,489	----	-----	100,005	----
Dimension	----	28,835	157,000	9,872	----	3,489	3,805	300,000	45,384	550,000

Monthly Savings

\$ 54,621

*.112*

Payback Period =  $\frac{550,000}{54,621} = 10$  months

655,452

First Year Savings = \$109,242

Every Year Thereafter = \$655,452

K.U. MEDICAL CENTER  
MONTHLY EQUIPMENT BREAKDOWN  
LEASING DIMENSION -LEASING STATION EQUIPMENT

	Centrex (Mon.)	Dimen (Mon.)	Dimen I.C.	Trunks (Mon.)	Key & Misc.	756 & CKT's	DID	Purchase of Stat.	Total (Mon.)	Total (I.C.)
Centrex	69,040	----	----	----	27,476	3,489	----	-----	100,005	----
Dimension	----	28,835	157,000	9,872	27,476	3,489	3,805	-----	73,477	255,200

Monthly Savings

\$ 26,528  
x 12  
-----  
318,336

Payback Period =  $\frac{255,200}{26,528} = 9.6$  months

$\frac{26,528}{x}$

First Year Savings = \$ 63,667

Every Year Thereafter = \$318,336