

a nationwide local benchmark rate. Does use of the BCM suggest that the costs calculated by the model would be recovered only through services included in the benchmark rate? Does the BCM require changes to existing separations and access charge rules? Is the model designed to change as those rules are changed? Does the comparison of model costs with a local rate affordability benchmark create an opportunity for over-recovery from universal service support mechanisms?

SWBT supports separate federal and State universal service funds consistent with current jurisdictional definitions. However, if a federal fund is developed based upon unseparated proxy costs, there are three basic components of determining universal service: (i) a measure of costs, (ii) a measure of revenues, and (iii) a measure of support. If the proxy is used to provide the measure of cost (although demonstrably inappropriate) and the benchmark is used to provide the measure of revenues, the measure of support is the costs less the revenues. The support revenues derived from such a fund should be used by the incumbent LEC to reduce, on a revenue neutral basis, the implicit support contained in the interstate and intrastate CCL rates, as well as interstate and intrastate toll rates. The use of any proxy would require changes to the existing Universal Service Fund rules (47 C.F.R. Part 36, Subpart F) and to the section on the limitations in the interstate allocation (47 C.F.R. §36.154(f)). Changes to other sections of 47 C.F.R. Part 36 may be necessary if the proxy results recover what is currently considered to be intrastate costs.

63. Is it feasible and/or advisable to integrate the grid cell structure used in the Cost Proxy Model (CPM) proposed by Pacific Telesis into the BCM for identifying terrain and population in areas where population density is low?

It is difficult to answer questions about the CPM because SWBT has been unable to obtain and evaluate this model. SWBT's position on proxy cost models in general is otherwise set forth herein.

**Cost Proxy Model Proposed by Pacific Telesis**

64. Can the grid cell structure used in the CPM reasonably identify population distribution in sparsely-populated areas?

As to all the questions involving the operation of the CPM, SWBT has not been able to obtain a copy of the model and evaluate the model at this time. It is anticipated that this will be done in the near future and the results of SWBT analysis will be provided to the parties in this proceeding through an ex parte.

65. Can the CPM be modified to identify terrain and soil type by grid cell?

See SWBT's response to Question No. 64.

66. Can the CPM be used on a nationwide basis to estimate the cost of providing basic residential service?

See SWBT's response to Question No. 64.

67. Using the CPM, what costs would be calculated by Census Block Group and by wire center for serving a rural, high-cost state (e.g., Arkansas)?

See SWBT's response to Question No. 64.

68. Is the CPM a self-contained model, or does it rely on other models, and if so, to what extent?

See SWBT's response to Question No. 64.

**SLC/CCLC**

69. If a portion of the CCL charge represents a subsidy to support universal service, what is the total amount of the subsidy? Please provide supporting evidence to substantiate such estimates. Supporting evidence should indicate the cost methodology used to estimate the magnitude of the subsidy (e.g., long-run incremental, short-run incremental, fully-distributed).

The interstate CCL charge recovers a portion of Common Line (primarily loop related)

costs and represents a support to universal service. All of the CCL represents an interservice support from access/toll services to recover actual costs of local exchange services, including pay telephone. In order to appropriately maintain this support, LEC should be allowed to restructure interstate CCL recovery to bulk billing on an interim basis and, in the long term, to increase the interstate EUCL. SWBT has submitted to the Joint Board studies that show that revenues generated from local exchange services do not recover their actual costs. The interstate CCL revenue generated by access services provides support for recovery of local exchange costs. See Attachment 2 to SWBT Comments filed in this proceeding on April 12, 1996.

However, since interexchange carriers pass their access costs to their toll customers, ultimately it is interstate toll customers who are supporting the recovery of local exchange costs. In 1995 the total revenue or support to local exchange services generated from the interstate CCL charge was \$314 million for SWBT. Nationwide, interstate CCL revenues are \$35. billion. \$36 million of SWBT's interstate CCL revenues represent recovery of common line costs of other LECs that SWBT must recover through its interstate CCL rates to satisfy its LTS obligations, thus representing an intercompany support flow. The remaining interstate CCL is necessary to recover SWBT's Common Line costs.

Moreover, interstate CCL support generated in some areas recover non-traffic sensitive loop costs associated with serving other areas. To demonstrate these geographic support flows, SWBT has analyzed the interstate Common Line costs assigned to interstate and the current

interstate common line revenues, including EUCL and CCL, for each of its wire centers.<sup>7</sup>

Following are the results obtained from this analysis.

- for 93 wire centers, interstate EUCL revenues fully recover or over-recover the wire center's Common Line costs. The average interstate Common Line costs in these areas is approximately \$3.14 per line. Consequently, the \$99 million of CCL revenue generated from switched access services in these areas is used to support the recovery of exchange line costs incurred in other SWBT areas and fund SWBT's LTS obligation.
- 148 wire centers generate combined EUCL and CCL revenues which exceed the wire center's interstate exchange line costs. For this group of wire centers, \$44 million of the CCL is necessary to recover their respective costs and the remaining \$53 million of CCL revenue generated, represents support that flows to other areas. The average interstate Common Line Costs in these areas is approximately \$5.12 per line.
- 994 wire centers have combined EUCL and CCL revenues that fall short of their respective interstate Common Line costs. All of the \$116 million of support generated by interstate CCL in these wire centers is necessary to recover their Common Line costs. The average interstate Common Line Costs in these areas is approximately \$10.04 per line.

The above analysis demonstrates that approximately half of SWBT's CCL revenue is generated in lower-cost, high-volume areas, but is used to support SWBT's higher-cost areas (and Common Line costs of other LECs via the LTS). The remaining CCL revenue is necessary to recover Common Line costs in high-cost wire center areas where both the EUCL and the CCL is necessary, as well as support from other areas to cover the common line costs in those high-cost

---

<sup>7</sup> This analysis assumes the use of interstate costs assigned to the Common Line - Base Factor Portion Elements through the use of 47 C.F.R. Part 36, Separations and Part 69, Access Charge costs methods. Parts 36 and 69 are fully-distributed cost methods. This analysis does not take into account any cost recovery that is generated from intrastate local, access and toll services, but is simply designed to demonstrate the types and the approximate magnitude of the of support flows that are generated by the interstate CCL.

areas.

70. If a portion of the CCL charge represents a contribution to the recovery of loop costs, please identify and discuss alternatives to the CCL charge for recovery of those costs from all interstate telecommunications service providers (e.g., bulk billing, flat rate/per-line charge).

The CCL primarily recovers non-traffic sensitive costs associated with the exchange line or loop and information origination termination equipment (pay telephone and other station equipment). Additionally, the CCL recovers cost support for high cost independent LECs through the LTS additive. Non-traffic sensitive costs are most efficiently recovered on a flat rate basis. The current usage sensitive recovery violates the concept and goals of efficiency. The Commission has acknowledged the need for more efficient pricing for recovery of common line costs:

cost-based telecommunications pricing is well worth achieving because a pricing structure in which most nontraffic-sensitive, common line costs are recovered through usage-based charges poses a substantial danger to the long term viability of our Nation's telecommunication system.

*MTS and WATS Market Structure*, CC Docket Nos. 78-72 and 80-286, Report and Order, 2 FCC Rcd 2953, para. 28 (1987).

There are several options which promote the more efficient recovery of common line costs. These options include:

1. **Shift Cost Recovery to the End User Common Line Charge:** This option would reduce or eliminate the CCL by shifting cost recovery to the cost causer. The per line/month EUCL charge would be increased to the level necessary to fully recover interstate loop costs. EUCL increases could be phased-in, if desired by the Commission.

Recovering a greater portion of end user loop cost from end users through a

rebalancing of the EUCL represents a move toward more efficient pricing which the Commission itself began with the institution of the existing subscriber line charge structure.

2. **Recover Common Line Costs from the New Universal Service Fund:** To the extent that common line costs are not recovered from the end user, those costs should be recovered from the universal service fund established by this proceeding.
3. **Restructure Carrier Common Line Element:** Either during a transition period or if #1 and #2, above, are not implemented, then CCL could be bulk-billed or flat-rated on a competitively neutral basis.
4. **Deaverage Common Line Rates by Zone:** If CCL is retained, the CCL must be deaveraged for more appropriate cost recovery.
5. **Remove Long Term Support Recovery from LEC CCL Rates:** Beyond pricing changes to more efficiently recover LECs' common line costs, LTS , if retained, should be removed from LECs' CCL rates and recovered separately. It should be recovered from all interstate providers in a manner that is completely separate and independent from LECs' access rates.

#### LOW-INCOME CONSUMERS

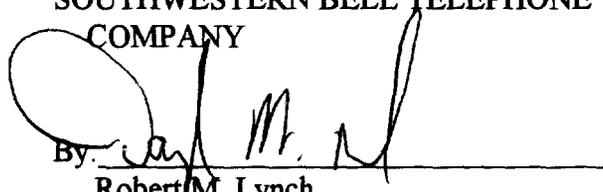
71. Should the new universal service fund provide support for the Lifeline and Linkup programs, in order to make those subsidies technologically and competitively neutral? If so, should the amount of the lifeline subsidy still be tied, as it is now, to the amount of the subscriber line charge?

Funding for Lifeline and Linkup should be explicit. Inasmuch as the purpose of Lifeline and Linkup seeks to address the specific needs of low-income customers, not necessarily high-cost recovery, SWBT recommends establishing a separate support mechanism to identify the amount of support required to provide service to qualifying low-income subscribers. Low-income support for the carrier serving the qualifying customer should be equal to the offset rates normally charged to other customers served by that carrier.

The current rules for Lifeline would have to be modified for any changes in the prescribed cap on the subscriber line charge (SLC), but it would continue to be reasonable to associate the Lifeline amount with the SLC.

Respectfully submitted,

SOUTHWESTERN BELL TELEPHONE  
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August 2, 1996

<b>Which Cost is Right?</b>							
	<b>Actual Costs</b> (per loop, per month)	<b>Original Hatfield</b> (per HH, per mo.)	<b>New Hatfield</b> (per HH, per mo.)	<b>Benchmark Cost Model #1</b> (per HH, per mo.)		<b>Benchmark Cost Model #2</b> (per HH, per mo.)	<b>Cost Proxy Model</b> (per line, per mo.)  "Pacific Bell Model"
				Expenses based on			
				ARMIS	Hatfield		
<b>Nationwide</b>							
USF Loop costs only	\$20.17			\$15.59	\$11.31		
Loop + switch costs	\$38.83	\$21.36		\$23.04	\$16.71	\$29.88	
<b>SWBT - Texas</b>							
USF Loop costs only	\$19.93			\$13.36	\$9.69		
Loop + switch costs	\$37.03			\$20.73	\$15.03		Est. \$34.00
<b>TOTAL - Texas</b>							
USF Loop costs only	\$22.20		\$11.55	\$16.97	\$12.31		
Loop + switch costs			\$15.41	\$25.14	\$18.23	\$29.98	
<b>SOURCE:</b>	9/95 USF data submission of 1993 data; SWBT Study	MCI/Hatfield 7/94 study	MCI Filing 7/7/96 CC Docket No. 96-45	Joint Sponsors (US West/SPRINT/ NYNEX/MCI), 12/1/95 CC Docket No. 80-286; SWBT Ex parte, 2/22/95		US West/Sprint Ex Parte, 7/3/96, CC Docket No. 96-45	Preliminary results of Texas data run by Indetec for SWBT

Blanks indicate that data is not currently available for that particular model/cost .

## **SUMMARY OF STATE LEGISLATIVE AND REGULATORY INITIATIVES IN DISTANCE LEARNING AND TELEMEDICINE IN SWBT STATES**

### **ARKANSAS**

The most recent Arkansas Stipulation and Agreement called for the following:

"SWBT shall commit the necessary investment and expenses to establish a Distance Learning Network linking over 675 educational institutions and locations in SWBT exchanges through the state. This network will provide video and/or digital data connectivity to the state's 18 four-year colleges, 31 two-year colleges, technical, and vocational schools, 39 continuing education centers, 137 high schools, and 453 K-8 schools which are located in SWBT territory. In addition, SWBT shall commit the necessary investment and expenses to establish a Rural Medical Network that will link approximately 55 regional and rural hospitals and health care facilities located in SWBT territory via digital technology." This will enhance the existing T1 compressed video applications being used by the UMAS teaching facility for medical training applications in remote locations.

### **KANSAS**

In the legislative extension of TeleKansas SWBT was ordered to make the following improvements for education and medicine:

Capital expenditures above normal construction investment, of not less than \$64,000,000, in a manner and amount to be determined between SWBT and the Commission. Such additional capital expenditures shall include, but not be limited to the completion of a fiber optic network for public high schools in the areas served by SWBT in Kansas.

In the proposed Kansas legislation, currently being debated in the House, the bill calls for:

the development of a statewide telecommunications infrastructure that is capable of supporting applications, such as public safety, TeleMedicine, services for persons with special needs, distance learning, public library services, access to Internet providers and others.

the bill also states that:

the Commission shall authorize all telecommunications service providers to provide residential customers, educational institutions and public libraries lacking toll-free access to the Kansas City, Wichita or Topeka metropolitan areas, dial-up access to one Internet provider within the calling customers LATA for a flat monthly fee. The dial-up access provided shall support at least 28.8 kilobit per-second service to all public libraries, public education institutions, the dial-up access to all other customers shall support at least 14.4

kilobits per-second service. Customers may request either off-peak or twenty-four hour service. For off-peak users, the flat monthly fee shall apply to access between the hours of 5 p.m. and 7:59 a.m. weekdays and all hours on weekends and federal holidays. The flat monthly fee shall not exceed \$15 per-line per-month. For customers who subscribe to twenty-four hour service, the flat-monthly fee for unlimited use shall not exceed \$30 per-line per-month.

At the present time many of the school districts are using analog video on fiber and satellite uplinks to Kansas State University to enhance their facilities.

### **MISSOURI**

The settlement agreement reached between SWBT and the Commission calls for the following:

The agreement calls for the company to invest \$275M a year, of which \$35M will be earmarked to create a fiber optic cable network in every community it serves and bring distance learning and TeleMedicine applications to as many as 75 accredited schools or hospitals each year. SWBT will also create at least five TeleCommunity centers for interactive video telecommunications before 1999.

Several trials are taking place dealing with distance learning and TeleMedicine, and the first TeleCommunity center is scheduled to open this year.

The current bill in the House calls for:

In order to facilitate or complement telecommunications, local exchange telecommunications companies may file with the commission tariffs for the provision of local service to public school districts, library districts and accredited primary and secondary private schools, to be at rates less than charged for business and residential service in effect when the tariff is filed, provided that the proposed rates may not be below the actual cost of providing the service.

### **OKLAHOMA**

The settlement agreement reached between SWBT and the Commission calls for:

- Free long-distance access to Internet connections for up to three years for schools, libraries, and universities, totaling about 30M
- Contributions of \$1M a year for three years to a state-administered education fund to purchase services for distance learning
- \$1.9M for the establishment of at least 20 telecommunications centers throughout the state

The State of Oklahoma already has several distance learning project underway with Oklahoma

State University satellite and fiber-optic network, and school districts in Broken Arrow, Duncan, and Grady County.

There are a number of TeleMedicine projects in planning or underway in Oklahoma linking rural hospitals and medical centers to larger hospitals in the urban areas.

## **TEXAS**

The recent legislation passed in Texas calls for:

A commitment to offer services on a special contract basis to certain public entities (e.g., schools, hospitals, libraries). The electing company is required upon request, to provide services at 105% of Long Run Incremental Cost, including installation. There is no absolute dollar figure for this commitment. A toll-free dialing arrangement for Internet access is also provided.

There are several private telecommunication networks delivering educational services and information to the school districts. Most deal with the community colleges and universities.

There are also several TeleMedicine programs in progress.

**REVISIONS TO 2/14/96 EX PARTE BY SWBT**

Attached is a complete revision of the material presented by Southwestern Bell in the Ex Parte contact made with members of the FCC Staff on February 14, 1996. During the course of that meeting, several questions were asked regarding zeros on the summary pages and apparent inconsistencies between the summary pages and the detail information included as Attachments. This revision reflects the correction of that data and the correction of certain formulas used to carry forward the data to the summaries.

All pages included with this complete revision include the statement "Revised 2/19/96" in the lower right hand corner.

**COMPARISON OF  
USF LOOP INVESTMENT PER LOOP  
TO  
BCM LOOP INVESTMENT PER HOUSEHOLD**

**BCM RESULTS SUMMARIZED TO PROVIDE LOOP INVESTMENT BY COMPANY**

**COMPARED TO USF DATA FOR 1993 - DATA SUBMISSION WAS MADE IN  
SEPTEMBER, 1995**

**RESULTS:**

	<u>COMPANIES</u>	<u>% COMPANIES</u>
<b>-100% &lt; BCM DIFF. &lt;= -50%<sup>1</sup></b>	<b>55</b>	<b>4%</b>
<b>-50% &lt; BCM DIFF. &lt;= 0%</b>	<b>280</b>	<b>19%</b>
<b>0% &lt; BCM DIFF. &lt;=50%</b>	<b>939</b>	<b>62%</b>
<b>50% &lt; BCM DIFF. &lt;= 100%</b>	<b>130</b>	<b>9%</b>
<b>100% &lt; BCM DIFF.</b>	<b>107</b>	<b>7%</b>

**SUMMARY:**

**RESULTS VARY SIGNIFICANTLY FROM COMPANY TO COMPANY**

**APPLICATION OF BCM WOULD CREATE WINNERS AND LOSERS**

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<sup>1</sup> **DIFFERENCE BETWEEN BCM AVERAGE INVESTMENT PER  
HOUSEHOLD AND USF AVERAGE INVESTMENT PER LOOP WAS BETWEEN  
100% AND 50% LESS THAN USF AVG. INV./LOOP**

**UNIVERSAL SERVICE FUND DATA  
COMPARED TO  
BENCHMARK COST MODEL**

<b>Cost OR Avg</b>		<b>USE LOOP INV/ LOOP</b>	<b>BCM LOOP INV/ HOUSEHOLD</b>	<b>Difference Compared To USF</b>	<b>% Difference Compared To USF</b>
		<b>LOOP ONLY - EXCLUDES SWITCHING</b>			
	<b>Total ALABAMA</b>	1,097.20	895.49	-371.71	-34.0%
	<b>Total ALASKA</b>				
	<b>Total ARIZONA</b>	912.71	514.49	-398.22	-43.6%
	<b>Total ARKANSAS</b>	1,216.86	913.68	-303.18	-24.9%
	<b>Total CALIFORNIA</b>	733.66	416.09	-317.59	-43.3%
	<b>Total COLORADO</b>	817.06	675.29	-141.79	-0.17
	<b>Total CONNECTICUT</b>	731.88	436.93	-314.95	-41.8%
	<b>Total DELAWARE</b>	727.96	549.03	-178.93	-24.6%
	<b>Total DISTRICT OF COLUMBIA</b>	233.64	160.93	-72.72	-31.1%
	<b>Total FLORIDA</b>	1050.13	500.99	-549.14	-52.3%
	<b>Total GEORGIA</b>	1144.95	748.69	-396.26	-34.6%
	<b>Total HAWAII</b>	798.04	421.42	-374.62	-47.1%
	<b>Total IDAHO</b>	1067.97	1183.60	95.63	8.8%
	<b>Total ILLINOIS</b>	519.74	478.48	-41.26	-7.9%
	<b>Total INDIANA</b>	772.13	463.98	-308.15	-39.8%
	<b>Total IOWA</b>	679.00	778.31	99.31	14.6%
	<b>Total KANSAS</b>	909.18	856.82	-52.36	-5.8%
	<b>Total KENTUCKY</b>	1047.53	646.04	-401.50	-38.3%
	<b>Total LOUISIANA</b>	1130.63	699.47	-431.16	-38.1%
	<b>Total MAINE</b>	1075.03	916.01	-159.02	-14.8%
	<b>Total MARYLAND</b>	674.78	424.63	-250.15	-37.1%
	<b>Total MASSACHUSETTS</b>	702.14	217.90	-484.24	-69.0%
	<b>Total MICHIGAN</b>	763.53	570.18	-193.36	-25.3%
	<b>Total MINNESOTA</b>	770.30	769.23	-1.07	-0.1%
	<b>Total MISSISSIPPI</b>	1278.47	894.01	-382.47	-30.0%
	<b>Total MISSOURI</b>	916.49	738.37	-178.12	-19.4%
	<b>Total MONTANA</b>	1160.42	1624.66	464.26	40.0%
	<b>Total NEBRASKA</b>	781.16	952.56	171.40	21.9%
	<b>Total NEVADA</b>	652.69	802.14	149.25	22.9%
	<b>Total NEW HAMPSHIRE</b>	1181.46	734.55	-456.91	-38.3%

UNIVERSAL SERVICE FUND DATA  
COMPARED TO  
BENCHMARK COST MODEL

Cost OR Avg	USF LOOP INV/ LOOP	BCM LOOP INV/ HOUSEHOLD	Difference Compared To USF	% Difference Compared To USF
	<b>LOOP ONLY - EXCLUDES SWITCHING</b>			
Total NEW JERSEY	628.20	369.32	-258.89	-41.2%
Total NEW MEXICO	1117.49	987.52	-129.97	-11.6%
Total NEW YORK	690.67	348.69	-341.99	-49.5%
Total NORTH CAROLINA	1013.05	736.62	-276.44	-27.3%
Total NORTH DAKOTA	1129.67	1382.15	252.48	22.3%
Total OHIO	699.71	510.04	-189.67	-27.1%
Total OKLAHOMA	1036.98	692.21	-344.77	-33.3%
Total OREGON	914.32	748.42	-165.90	-18.1%
Total PENNSYLVANIA	687.30	472.09	-215.21	-31.3%
Total RHODE ISLAND	673.53	400.99	-272.53	-40.5%
Total SOUTH CAROLINA	1216.90	779.75	-437.15	-35.9%
Total SOUTH DAKOTA	1093.35	1453.07	359.72	32.9%
Total TENNESSEE	889.28	734.91	-154.37	-17.4%
Total TEXAS	984.93	642.99	-341.94	-34.7%
Total UTAH	753.04	749.75	-3.29	-0.4%
Total VERMONT	1288.52	961.26	-327.26	-25.4%
Total VIRGINIA	829.27	452.58	-376.69	-45.4%
Total WASHINGTON	866.11	595.26	-270.84	-31.3%
Total WEST VIRGINIA	1122.70	859.07	-263.63	-23.5%
Total WISCONSIN	761.51	697.30	-64.21	-8.4%
Total WYOMING	1697.26	1456.37	-240.90	-14.2%
<b>SUBTOTAL 49 STATES</b>	829.33	570.58	-258.75	-31.2%
Excludes Alaska; Includes DC				
<b>TOTAL SUBSET 1</b>	778.76	456.15	-322.61	-41.4%
<b>TOTAL SUBSET 2</b>	985.09	758.23	-226.86	-23.0%
<b>TOTAL SUBSET 3</b>	1,403.27	1,570.57	167.30	11.9%
<b>TOTAL ALL SUBSETS</b>	829.33	566.31	-263.01	-31.7%

# COMPARISON OF USF AVERAGE COST PER LOOP TO BCM AVERAGE COST PER HOUSEHOLD

BCM RESULTS SUMMARIZED TO PROVIDE AVERAGE COST PER HOUSEHOLD (AVG. COST/HH) BY COMPANY

COMPARED TO USF DATA FOR 1993 - DATA SUBMISSION WAS MADE IN SEPTEMBER, 1995 - USF REVENUE REQUIREMENT PER LOOP (RR/LOOP)

## RESULTS:

DIFFERENCE BETWEEN BCM AVG COST/HH AND USF RR/LOOP COMPARED TO USF RR/LOOP	<u>ARMIS</u> <u>ANN. COST</u> <u>FACTOR</u>		<u>MCI/HATFIELD</u> <u>ANN. COST</u> <u>FACTOR</u>	
	<u>COS</u>	<u>% COS.</u>	<u>COS</u>	<u>% COS.</u>
-100% < BCM DIFF <= -10%	85	6%	161	11%
-50% < BCM DIFF <= 0%	284	19%	481	32%
0% < BCM DIFF <= 50%	447	30%	559	37%
50% < BCM DIFF <= 100%	336	22%	204	14%
100% < BCM DIFF	359	24%	106	7%

## SUMMARY:

RESULTS VARY SIGNIFICANTLY FROM COMPANY TO COMPANY

APPLICATION OF BCM WOULD CREATE WINNERS AND LOSERS

NEED TO DETERMINE WHY SOME COMPANIES COULD RECEIVE SIGNIFICANTLY LESS AND SOME COMPANIES SIGNIFICANTLY MORE BEFORE PROXY IS CONSIDERED FOR IMPLEMENTATION

**UNIVERSAL SERVICE FUND DATA  
COMPARED TO  
BENCHMARK COST MODEL**

Cost OR Avg	USF AVG COST PER LOOP	BENCHMARK COST MODEL			BENCHMARK COST MODEL		
		BCM AVG COST 1 PER HH	Difference Compared To USF	% Difference Compared To USF	BCM AVG COST 2 PER HH	Difference Compared To USF	% Difference Compared To USF
Total ALABAMA	270.20	220.31	(49.89)	-18.5%	159.75	(110.45)	-40.9%
Total ALASKA			0.00	N/A		0.00	N/A
Total ARIZONA	257.87	162.97	(94.90)	-36.8%	118.18	(139.70)	-54.2%
Total ARKANSAS	335.79	289.42	(46.36)	-13.8%	209.87	(125.91)	-37.5%
Total CALIFORNIA	212.36	131.80	(80.55)	-37.9%	95.58	(116.78)	-55.0%
Total COLORADO	223.12	213.91	(9.21)	-4.1%	155.11	(68.00)	-30.5%
Total CONNECTICUT	231.89	138.40	(93.49)	-40.3%	100.36	(131.53)	-56.7%
Total DELAWARE	208.04	173.91	(34.12)	-16.4%	126.11	(81.92)	-39.4%
Total DISTRICT OF COLUMBIA	76.13	50.98	(25.15)	-33.0%	36.98	(39.16)	-51.4%
Total FLORIDA	305.45	158.70	(146.78)	-48.0%	115.08	(190.38)	-62.3%
Total GEORGIA	311.12	237.16	(73.96)	-23.8%	171.97	(139.14)	-44.7%
Total HAWAII	239.05	133.49	(105.56)	-44.2%	96.80	(142.25)	-59.5%
Total IDAHO	300.25	374.92	74.67	24.9%	271.87	(28.38)	-9.5%
Total ILLINOIS	162.92	151.57	(11.35)	-7.0%	109.91	(53.01)	-32.5%
Total INDIANA	227.15	146.97	(80.18)	-35.3%	106.58	(120.57)	-53.1%
Total IOWA	197.93	246.54	48.61	24.6%	178.78	(19.15)	-9.7%
Total KANSAS	274.50	271.41	(3.09)	-1.1%	196.81	(77.69)	-28.3%
Total KENTUCKY	285.41	204.64	(80.77)	-28.3%	148.39	(137.02)	-48.0%
Total LOUISIANA	311.18	221.57	(89.61)	-28.8%	160.67	(150.51)	-48.4%
Total MAINE	319.89	290.16	(29.73)	-9.3%	210.41	(109.49)	-34.2%
Total MARYLAND	199.89	134.51	(65.38)	-32.7%	97.54	(102.36)	-51.2%
Total MASSACHUSETTS	221.22	69.02	(152.20)	-68.8%	50.05	(171.17)	-77.4%
Total MICHIGAN	223.16	180.61	(42.55)	-19.1%	130.97	(92.19)	-41.3%
Total MINNESOTA	212.83	243.67	30.83	14.5%	176.69	(36.14)	-17.0%
Total MISSISSIPPI	343.16	283.19	(59.97)	-17.5%	205.35	(137.81)	-40.2%
Total MISSOURI	257.23	233.89	(23.34)	-9.1%	169.80	(87.63)	-34.1%
Total MONTANA	304.65	514.64	209.99	68.9%	373.19	68.54	22.5%
Total NEBRASKA	206.65	301.74	95.09	46.0%	218.80	12.15	5.9%
Total NEVADA	189.84	254.09	64.25	33.8%	184.25	(5.59)	-2.9%
Total NEW HAMPSHIRE	332.02	232.68	(99.34)	-29.9%	168.73	(163.29)	-49.2%

**UNIVERSAL SERVICE FUND DATA  
COMPARED TO  
BENCHMARK COST MODEL**

<b>Cost OR Avg</b>	<b>USF AVG COST PER LOOP</b>
Total NEW JERSEY	193.50
Total NEW MEXICO	294.31
Total NEW YORK	248.24
Total NORTH CAROLINA	294.78
Total NORTH DAKOTA	256.68
Total OHIO	216.58
Total OKLAHOMA	278.88
Total OREGON	266.45
Total PENNSYLVANIA	203.23
Total RHODE ISLAND	214.77
Total SOUTH CAROLINA	353.76
Total SOUTH DAKOTA	247.54
Total TENNESSEE	258.98
Total TEXAS	266.41
Total UTAH	195.36
Total VERMONT	378.68
Total VIRGINIA	244.63
Total WASHINGTON	234.87
Total WEST VIRGINIA	357.70
Total WISCONSIN	223.41
Total WYOMING	361.91
<b>SUBTOTAL 49 STATES</b>	<b>242.00</b>
Excludes Alaska; Includes DC	
<b>TOTAL SUBSET 1</b>	<b>226.13</b>
<b>TOTAL SUBSET 2</b>	<b>558.50</b>
<b>TOTAL SUBSET 3</b>	<b>328.90</b>
<b>TOTAL ALL SUBSETS</b>	<b>242.00</b>

<b>BCM AVG COST 1 PER HH</b>	<b>Difference Compared To USF</b>	<b>% Difference Compared To USF</b>
116.99	(76.51)	-39.5%
312.81	18.50	6.3%
198.92	(49.32)	-19.9%
233.33	(61.44)	-20.8%
437.82	181.14	70.6%
161.56	(55.01)	-25.4%
206.62	(70.27)	-25.4%
237.07	(29.38)	-11.0%
149.54	(53.69)	-26.4%
127.02	(87.75)	-40.9%
247.00	(106.77)	-30.2%
460.28	212.74	85.9%
232.79	(26.18)	-10.1%
203.68	(62.73)	-23.5%
237.50	42.14	21.6%
304.49	(74.19)	-19.6%
143.36	(101.26)	-41.4%
188.56	(46.31)	-19.7%
272.12	(85.58)	-23.9%
220.88	(2.53)	-1.1%
461.33	99.42	27.5%
187.13	(54.87)	-22.7%
151.98	(74.15)	-32.8%
243.50	(315.00)	-56.4%
501.92	173.02	52.6%
185.82	(56.18)	-23.2%

<b>BCM AVG COST 2 PER HH</b>	<b>Difference Compared To USF</b>	<b>% Difference Compared To USF</b>
84.83	(106.67)	-56.2%
226.83	(67.48)	-22.9%
144.25	(104.00)	-41.9%
169.20	(125.57)	-42.6%
317.48	80.80	23.7%
117.16	(99.42)	-45.9%
149.83	(127.06)	-45.9%
171.91	(94.54)	-35.5%
108.44	(94.79)	46.6%
92.11	(122.66)	-57.1%
179.11	(174.65)	-49.4%
333.77	86.23	34.8%
168.81	(90.17)	-34.8%
147.69	(118.71)	-44.6%
172.22	(23.14)	-11.8%
220.80	(157.88)	-41.7%
103.96	(140.67)	-57.5%
136.73	(98.14)	-41.8%
197.33	(160.37)	-44.8%
160.17	(63.24)	-28.3%
334.53	(27.38)	-7.6%
135.70	(106.30)	-43.9%
110.20	(115.92)	-51.3%
176.57	(381.93)	-68.4%
363.96	35.06	10.7%
134.75	(107.26)	-44.3%

**COMPARISON OF USF ANNUAL PAYMENT  
TO  
BCM SUPPORT  
\$20 BENCHMARK & ARMIS COST FACTOR  
\$40 BENCHMARK & MCI/HATFIELD COST FACTOR**

**BCM RECALCULATED TO EXCLUDE SWITCHING COMPONENTS AND  
SUMMARIZED TO PROVIDE LOOP SUPPORT AMOUNT BY COMPANY**

**COMPARED TO USF DATA FOR 1993 - DATA SUBMISSION WAS MADE IN  
SEPTEMBER, 1995 - USF ANNUAL PAYMENT**

**RESULTS:**

	<b>USF ANN. PAYMENT</b>	<b>\$20 BENCHMARK ARMIS</b>	<b>\$40 BENCHMARK MCI/HATFIELD</b>
<b>SUBSET 1</b>	<b>\$63,873,648</b>	<b>\$1,949,132,991</b>	<b>\$309,047,037</b>
<b>SUBSET 2</b>	<b>\$426,682,765</b>	<b>\$1,772,898,743</b>	<b>\$269,801,698</b>
<b>SUBSET 3</b>	<b>\$195,507,557</b>	<b>\$1,010,647,306</b>	<b>\$268,829,227</b>
<b>TOTAL</b>	<b>\$686,063,970</b>	<b>\$4,732,679,040</b>	<b>\$847,677,963</b>

**SUMMARY:**

**LARGE INCREASE IN AMOUNT OF SUPPORT IDENTIFIED. EVEN THOUGH  
LARGE OVERALL INCREASE SOME COMPANIES (WALNUT HILL -  
ARKANSAS) WOULD RECEIVE LESS WITH BCM**

**DISTRIBUTION AMONG COMPANIES CHANGES SIGNIFICANTLY - SEE  
ATTACHED CHART**

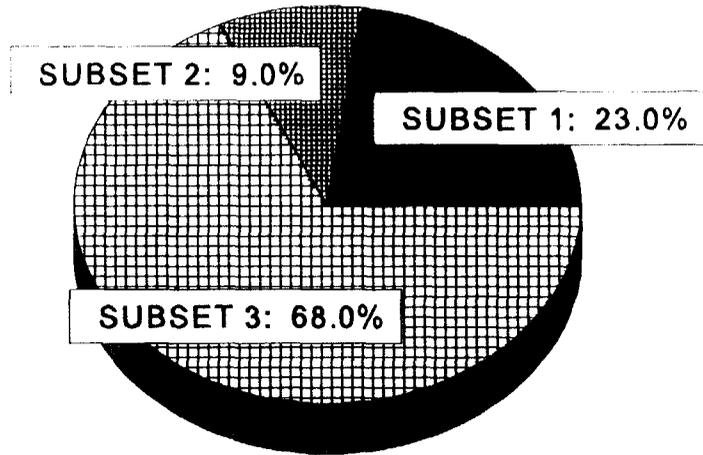
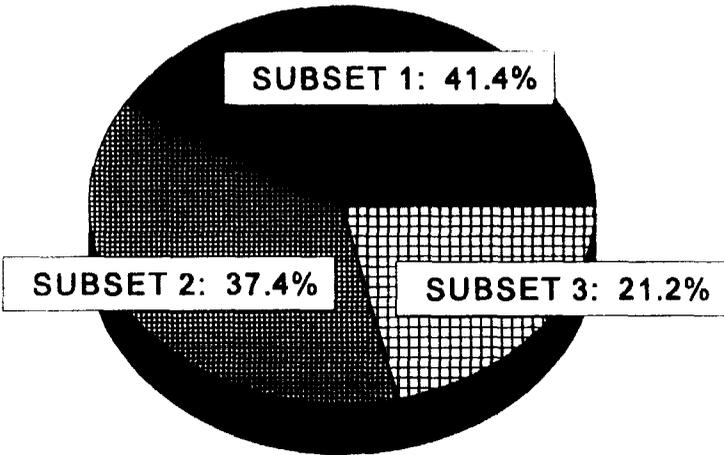
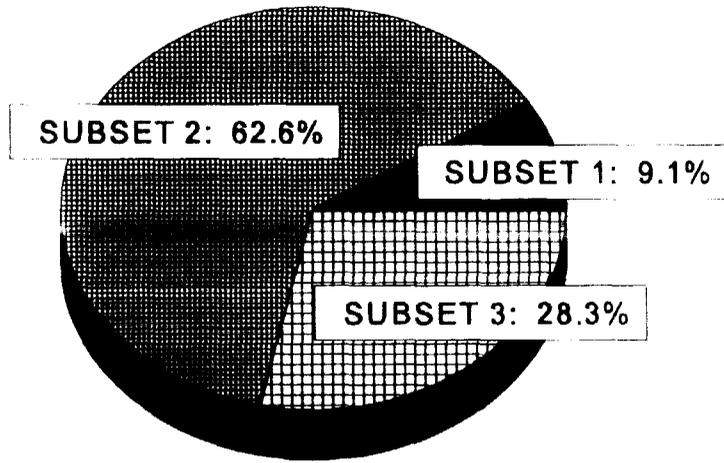
**UNIVERSAL SERVICE FUND DATA  
COMPARED TO  
BENCHMARK COST MODEL**

Cost OR Avg	USE ANNPAY	BCM >\$20 Benchmark HH*Annual Cost 1			BCM >\$40 Benchmark HH*Annual Cost 2		
		Difference Compared To USF	% Difference Compared To USF	Difference Compared To USF	% Difference Compared To USF		
<b>LOOP ONLY - EXCLUDES SWITCHING</b>							
Total ALABAMA	21,065,111	117,225,481	96,160,370	456.5%	8,282,649	(12,782,461)	-60.7%
Total ALASKA			0	N/A		0	N/A
Total ARIZONA	14,465,920	113,361,726	98,895,806	683.6%	45,834,654	31,368,734	216.8%
Total ARKANSAS	36,785,886	122,615,612	85,829,726	233.3%	16,953,136	(17,832,750)	-48.5%
Total CALIFORNIA	44,170,735	231,366,759	187,196,024	423.8%	62,907,485	18,736,750	0
Total COLORADO	4,162,908	101,821,337	97658429.02	23.46	37,608,285	33445377.16	8.03
Total CONNECTICUT	0	12,633,880	12,633,880	N/A	18,909	18,909	N/A
Total DELAWARE	0	5,126,119	5,126,119	N/A	16,965	16,965	N/A
Total DISTRICT OF COLUMBIA	0	20,216	20,216	N/A	1,081	1,081	N/A
Total FLORIDA	28,851,600	107,520,739	78,669,139	272.7%	13,941,878	(14,909,722)	-51.7%
Total GEORGIA	28,561,460	150,340,250	121,778,790	426.4%	11,093,854	(17,467,606)	-61.2%
Total HAWAII	0	14,002,464	14,002,464	N/A	3,691,458	3,691,458	N/A
Total IDAHO	20,280,837	78,692,540	58,411,703	288.0%	31,706,465	11,425,629	56.3%
Total ILLINOIS	4,006,055	131,157,885	127,151,830	3174.0%	9,698,660	5,662,606	142.1%
Total INDIANA	3,213,310	87,353,301	84,139,991	2618.5%	1,372,449	(1,840,861)	-57.3%
Total IOWA	4,830,353	122,780,056	117,949,703	2441.8%	19,280,513	14,450,159	299.2%
Total KANSAS	21,393,518	112,712,331	91,318,814	426.9%	29,936,128	8,542,610	39.9%
Total KENTUCKY	8,732,026	98,318,027	89,586,002	1025.9%	1,707,809	(7,024,217)	-80.4%
Total LOUISIANA	31,033,105	100,961,642	69,928,537	226.3%	12,655,303	(18,377,802)	-59.2%
Total MAINE	5,722,757	50,963,204	45,240,447	790.5%	6,582,963	860,207	15.0%
Total MARYLAND	0	23,182,616	23,182,616	N/A	344,203	344,203	N/A
Total MASSACHUSETTS	2,015	12,353,844	12,351,829	612902.7%	84,349	82,334	4085.4%
Total MICHIGAN	12,516,922	122,741,615	110,224,693	880.6%	9,914,973	(2,601,949)	-20.8%
Total MINNESOTA	7,700,579	158,654,039	150,953,460	1960.3%	34,421,285	26,720,706	347.0%
Total MISSISSIPPI	12,874,865	115,455,528	102,580,663	796.8%	11,004,787	(1,870,078)	-14.5%
Total MISSOURI	63,088,104	167,759,467	104,671,364	165.9%	26,565,791	(36,522,313)	-57.9%
Total MONTANA	10,501,242	109,783,691	99,282,449	945.4%	53,163,019	42,661,778	406.3%
Total NEBRASKA	5,191,817	92,242,897	87,051,079	1676.7%	28,455,758	23,263,941	448.1%
Total NEVADA	2,833,135	64,349,174	61,516,039	2171.3%	32,674,828	29,841,693	1053.3%
Total NEW HAMPSHIRE	4,843,676	24,017,420	19,173,744	395.9%	1,454,531	(3,389,145)	-70.0%

**UNIVERSAL SERVICE FUND DATA  
COMPARED TO  
BENCHMARK COST MODEL**

Cost OR Avg	USF ANNPAY	LOOP ONLY - EXCLUDES SWITCHING			LOOP ONLY - EXCLUDES SWITCHING		
		BCM >\$20 Benchmark HH*Annual Cost 1	Difference Compared To USF	% Difference Compared To USF	BCM >\$40 Benchmark HH*Annual Cost 2	Difference Compared To USF	% Difference Compared To USF
Total NEW JERSEY	937,941	20,562,187	19,624,246	2092.3%	429,158	(508,783)	-54.2%
Total NEW MEXICO	19,017,555	98,336,558	79,319,003	417.1%	43,777,971	24,760,415	130.2%
Total NEW YORK	13,304,724	262,283,383	248,978,659	1871.4%	11,597,810	(1,707,114)	-12.8%
Total NORTH CAROLINA	23,111,223	133,852,804	110,741,581	479.2%	3,564,592	(19,546,632)	-84.6%
Total NORTH DAKOTA	3,857,465	67,806,956	63,949,491	1657.8%	26,194,069	22,336,604	579.0%
Total OHIO	2,424,465	110,522,114	108,097,650	4458.6%	354,788	(2,069,676)	-85.4%
Total OKLAHOMA	24,890,214	114,930,060	90,039,846	361.7%	20,378,061	(4,512,153)	-18.1%
Total OREGON	12,599,167	101,786,079	89,186,912	707.9%	33,943,805	21,344,638	169.4%
Total PENNSYLVANIA	1,550,430	116,546,981	114,996,552	7417.1%	3,493,133	1,942,703	125.3%
Total RHODE ISLAND	0	2,764,569	2,764,569	N/A	18,060	18,060	N/A
Total SOUTH CAROLINA	23,469,139	84,291,324	60,822,185	259.2%	3,592,731	(19,876,407)	-84.7%
Total SOUTH DAKOTA	3,183,630	74,492,545	71,308,915	2239.9%	27,467,713	24,284,083	762.8%
Total TENNESSEE	3,611,588	112,310,743	108,699,155	3009.7%	3,890,535	278,947	7.7%
Total TEXAS	92,481,547	383,210,065	290,728,518	314.4%	96,683,176	4,201,629	4.5%
Total UTAH	2,544,988	56,230,198	53,685,210	2109.4%	25,693,258	23,148,270	909.6%
Total VERMONT	5,532,218	25,207,833	19,675,615	355.7%	1,211,572	(4,320,646)	-78.1%
Total VIRGINIA	3,228,434	96,883,495	93,655,062	2900.9%	2,240,793	(987,640)	-30.6%
Total WASHINGTON	22,126,475	97,329,890	75,203,415	339.9%	28,435,035	6,308,560	28.5%
Total WEST VIRGINIA	19,484,323	64,983,438	45,499,115	233.5%	3,509,783	(15,974,540)	-82.0%
Total WISCONSIN	7,392,113	133,297,157	125,905,044	1703.2%	13,018,629	5,626,517	76.1%
Total WYOMING	4,488,400	51,261,441	46,773,042	1042.1%	25,158,956	20,670,556	460.5%
<b>SUBTOTAL 49 STATES</b>	686,063,970	4,858,403,679	4,172,339,709	608.2%	888,027,597	201,963,627	29.4%
Excludes Alaska; Includes DC							
<b>TOTAL SUBSET 1</b>	63,873,648	1,949,132,991	1,885,259,342	2951.5%	309,047,037	245,173,389	383.8%
<b>TOTAL SUBSET 2</b>	426,682,765	1,772,898,743	1,346,215,979	315.5%	269,801,698	(156,881,066)	-36.8%
<b>TOTAL SUBSET 3</b>	195,507,557	1,010,647,306	815,139,748	416.9%	268,829,227	73,321,670	37.5%
<b>TOTAL ALL SUBSETS</b>	686,063,970	4,732,679,040	4,046,615,070	589.8%	847,677,963	161,613,993	23.6%

# Current USF Distribution vs. Benchmark Cost Model Results



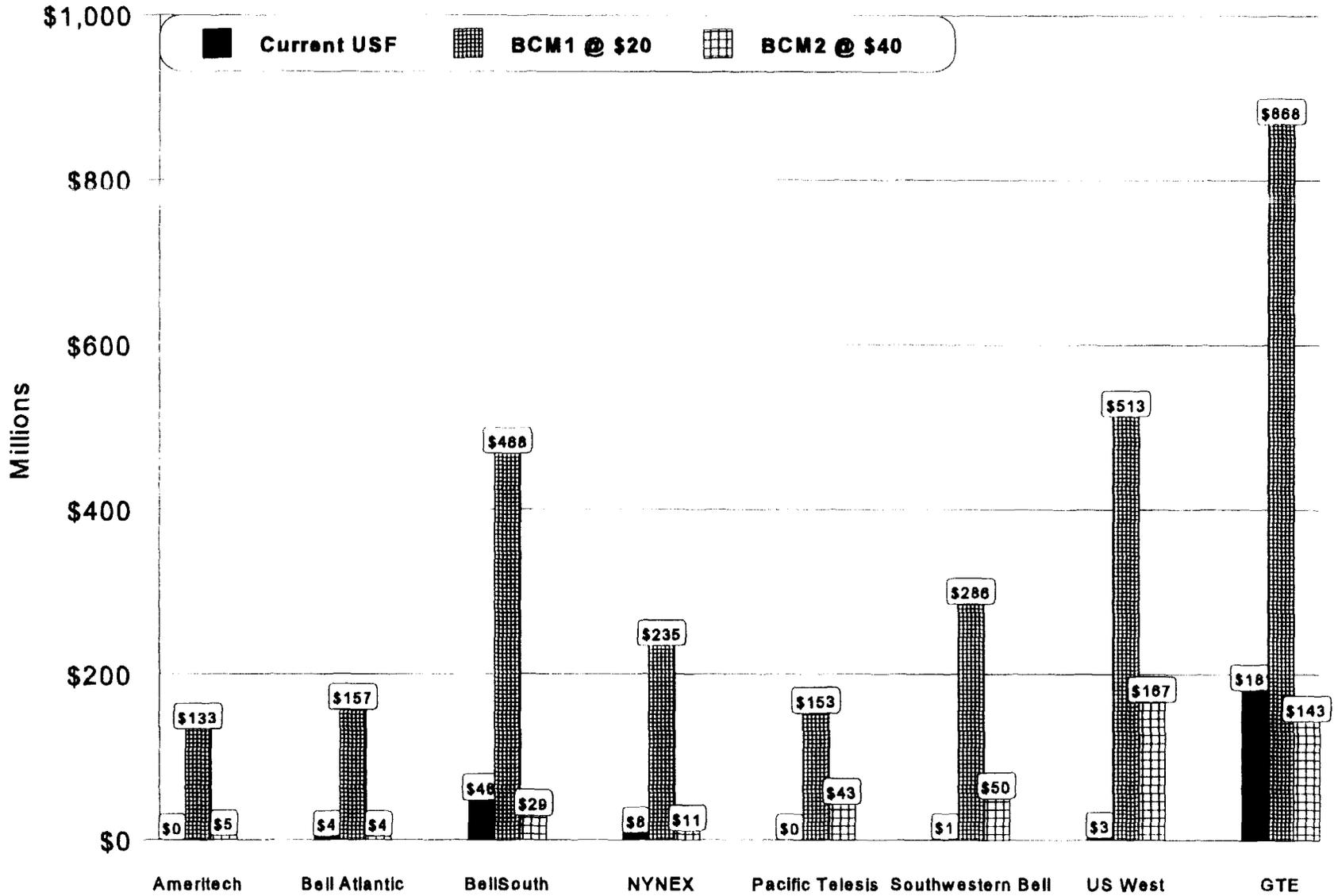
BCM1 @ \$20

CURRENT USF

BCM2 @ \$40

Revised 2/19/96

# Current USF Distribution vs. Benchmark Cost Model Results



Revised 2/19/96

# COMPARISON OF SWBT LOOP INVESTMENT PER LINE TO BCM LOOP INVESTMENT PER HOUSEHOLD

**BCM RESULTS SUMMARIZED TO PROVIDE LOOP INVESTMENT BY SWBT WIRE CENTER**

**COMPARED TO SWBT STUDY DATA FOR WIRE CENTER COSTS**

**RESULTS:**

	<u>Wire Centers</u>	<u>% Wire Centers</u>
BCM DIFF. <= -75%	22	4.3%
-75% < BCM DIFF. < = -50%	199	39.3%
-50% < BCM DIFF. < = -25%	194	38.3%
-25% < BCM DIFF. < = 0%	58	11.5%
0% < BCM DIFF. <= 25%	13	2.6%
25% < BCM DIFF. < = 75%	12	2.4%
75% < BCM DIFF. < = 100%	4	0.8%
100% < BCM DIFF	4	0.8%
MAXIMUM DIFFERENCE		823.4%
MINIMUM DIFFERENCE		-90.1%

**SUMMARY:**

**RESULTS VARY SIGNIFICANTLY FROM WIRE CENTER TO WIRE CENTER**

**APPLICATION OF BCM WOULD CREATE WINNERS AND LOSERS**

**SOUTHWESTERN BELL STUDY DATA  
COMPARED TO  
BENCHMARK COST MODEL DATA**

CLLI CODE	SWBT LOOP INV / LINE	BCM AVG LOOP INV / HH	DIFFERENCE Compared To SWBT	% DIFFERENCE Compared To SWBT
1	489.78	321.35	(168.43)	-34.4%
2	400.06	353.06	(46.99)	-11.7%
3	2,889.69	2,015.77	(873.92)	-30.2%
4	2,603.37	1,626.34	(977.03)	-37.5%
5	1,682.59	1,306.26	(376.33)	-22.4%
6	1,272.87	1,623.18	350.31	27.5%
7	3,129.59	2,762.44	(367.15)	-11.7%
8	2,402.54	1,222.90	(1,179.64)	-49.1%
9	1,218.07	608.97	(609.04)	-50.0%
10	5,301.44	1,549.03	(3,752.45)	-70.8%
11	1,686.32	3,296.35	1,610.03	95.5%
12	5,337.54	1,136.35	(4,201.19)	-78.7%
13	3,315.61	3,021.82	(293.80)	-8.9%
14	948.83	351.96	(596.87)	-62.9%
15	2,162.03	1,919.30	(242.76)	-11.2%
16	2,461.67	2,398.03	(63.63)	-2.6%
17	772.30	284.82	(487.49)	-63.1%
18	4,808.34	2,687.94	(2,120.41)	-44.1%
19	943.78	487.73	(456.05)	-48.3%
20	3,475.64	3,415.20	(60.44)	-1.7%
21	3,188.16	2,745.88	(442.27)	-13.9%
22	1,933.10	382.40	(1,550.70)	-80.2%
23	3,890.05	1,815.52	(2,074.54)	-53.3%
24	2,537.42	1,741.93	(795.49)	-31.4%
25	4,064.33	2,530.85	(1,533.28)	-37.7%
26	2,830.63	2,419.70	(410.93)	-14.5%
27	1,170.34	447.14	(723.70)	-61.8%
28	3,497.31	4,280.89	783.09	22.4%
29	4,244.44	3,101.62	(1,142.82)	-26.9%
30	619.37	316.37	(303.51)	-49.0%
31	1,610.98	1,480.68	(130.30)	-8.1%
32	944.43	1,070.74	126.31	13.4%
33	993.99	411.16	(582.83)	-58.6%
34	2,013.43	2,142.05	128.63	6.4%
35	999.53	388.15	(611.38)	-61.2%
36	1,190.77	169.57	(1,021.20)	-85.8%
37	4,638.29	3,221.29	(1,417.00)	-30.5%
38	2,748.03	2,269.20	(478.83)	-17.4%
39	3,433.61	3,484.30	50.69	1.5%
40	2,972.54	2,668.64	(303.90)	-10.2%
41	598.52	370.67	(227.85)	-38.1%
42	1,793.26	2,772.65	979.39	54.6%
43	4,448.16	2,916.08	(1,532.08)	-34.4%
44	927.62	489.15	(438.47)	-47.3%
45	7,124.55	4,525.77	(2,598.78)	-36.5%
46	2,126.84	3,287.60	1,160.76	54.6%