

**TDS TELECOM**

*Quincy  
Telephone Company*

ORIGINAL

August 3, 1998

Blanca Bayo  
Division of Records and Reporting  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

In re: Special Project 9800u0A-SP: Fair and Reasonable Rates

Dear Ms. Bayo:

Enclosed is a copy of the completed Division of Communications (CMU) Request of June 19, 1998, which we herewith hand deliver and submit for TDS Telecom/Quincy Telephone. Copies are also being hand delivered to the Commission's Division of Auditing and Financial Analysis, the Commission's Division of Communications, and the Public Counsel, Jack Shreve. A copy is being mailed this date to Michael Gross at the Office of the Attorney General.

Pursuant to Section 364.183(1), Florida Statutes, the company claims that the CMU data request contains proprietary confidential business information which the Commission should keep confidential. Such information is highlighted, and with respect to the furnishing of such information to the Public Counsel and the Attorney General, the company is contemporaneously filing a Motion for Protective Order with the Commission. The Public Counsel and the Attorney General requested a copy of this data request in a Request for Production of Documents in Docket 980733-TL.

Sincerely,

Thomas M. McCabe

- ACM \_\_\_\_\_
- AF \_\_\_\_\_
- AI \_\_\_\_\_
- CP \_\_\_\_\_
- CM \_\_\_\_\_
- CTH \_\_\_\_\_ DBE:jm
- EAC \_\_\_\_\_ Enclosure
- LES \_\_\_\_\_
- LIT \_\_\_\_\_ Cost of Service
- OPC \_\_\_\_\_
- RCH \_\_\_\_\_
- SEC \_\_\_\_\_ *1 str only*
- WAS \_\_\_\_\_
- OTH \_\_\_\_\_

DOCUMENT NUMBER-DATE

08199 AUG-3 88

8888-RECORDS/REPORTING

**TDS TELECOM/Quincy Telephone**  
**980000A-SP: UNDOCKETED SPECIAL PROJECT:**  
**Fair and Reasonable Rates**  
**Division of Communications Data Request**

**TDS TELECOM/Quincy Telephone**

Response - Questions 1 (a), (c), (e), (g), (i).

**TDS TELECOM/Quincy Telephone**  
**980000A-SP: UNDOCKETED SPECIAL PROJECT:**  
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Commission Staff Data Requests: Section 2 of Chapter 98-277

For purposed of requests Nos. 1 through 4, "contribution analysis" should be understood as a comparison of the rates charged for a given service with their associated costs, and the difference between the total revenues generated by a service and the service's total cost; we ask you to provide both measures. We request that you indicate the service's dollar contribution (rate minus unit cost, and total revenues minus total costs), and the service's percentage contribution ( $(\text{rate}-\text{cost})/\text{cost}$ , and  $(\text{total revenue} - \text{total costs})/\text{total cost}$ ). The cost standard should be total service long-run incremental cost (TSLRIC) per Section 364.3381(2), or a reasonably comparable measure.

**Response:**

TDS TELECOM/Quincy Telephone does not have TSLRIC studies in response to questions 1-4. In an effort to provide relevant information, we have provided the following information for each of the services listed in question 1 (a) through (j), the tariff rate, number of units, and total revenues.

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1. (a) Please provide a contribution analysis for "voice-grade, flat rate residential local exchange service," as this term is used in Section 364.02(2), F.S.
- (b) Please provide the cost study and all associated work papers and related documentation, that results in the contribution analysis in (a)

**Response:**

1. (a) TDS TELECOM/Quincy does not have TSLRIC studies in response to question 1(a). In an effort to provide relevant information, we have provided the number of residential access lines, tariff rate, and total monthly revenues. The access line count is based on the average year end December 1997.

<u>Monthly Quantity</u>	<u>Price</u>	<u>Monthly Revenue</u>
9,653	\$12.70	\$122,593

- (b) N/A

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1. (c) Please provide a contribution analysis for "voice-grade, flat-rate single-line business local exchange service," as this term is used in Section 364.02(2), F.S.
- (d) Please provide the cost study and all associated work papers and related documentation, that results in the contribution analysis in (c).

**Response:**

1. (c) TDS TELECOM/Quincy does not have TSLRIC studies in response to question 1(c). In an effort to provide relevant information, we have provided the number of residential access lines, tariff rate, and total monthly revenues. The access line count is based on the average year end December 1997.

<u>Monthly Quantity</u>	<u>Price</u>	<u>Monthly Revenue</u>
2,160	\$35.00	\$75,600

(d) N/A

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1. (e)

	<u>Monthly Qty</u>	<u>Price</u>	<u>Monthly Revenue</u>
Centrex (Dec. 1997)			
State of Florida	[REDACTED]	\$15.00	[REDACTED]
Gadsden County	[REDACTED]	\$15.00	[REDACTED]
NARS	[REDACTED]	\$16.80	[REDACTED]
Line Qty.:			
2-5			
monthly	[REDACTED]	\$25.00	[REDACTED]
24 month	[REDACTED]	\$23.00	[REDACTED]
48 month	[REDACTED]	\$21.00	[REDACTED]
NARS	[REDACTED]	\$20.90	[REDACTED]
6-10			
monthly	[REDACTED]	\$24.40	[REDACTED]
24 month	[REDACTED]	\$22.40	[REDACTED]
48 month	[REDACTED]	\$20.40	[REDACTED]
NARS	[REDACTED]	\$20.55	[REDACTED]
11-25			
monthly	[REDACTED]	\$23.80	[REDACTED]
24 month	[REDACTED]	\$21.80	[REDACTED]
48 month	[REDACTED]	\$19.80	[REDACTED]
26-50			
monthly	[REDACTED]	\$23.20	[REDACTED]
24 month	[REDACTED]	\$21.20	[REDACTED]
48 month	[REDACTED]	\$19.20	[REDACTED]
101 +			
60 month	[REDACTED]	\$14.00	[REDACTED]
NARS 16 +	[REDACTED]	\$16.80	[REDACTED]

1. (f) N/A

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	<u>Monthly Qty</u>	<u>Price</u>	<u>Monthly Revenue</u>
1. (g) PBX Trunk (Dec. 1997)		\$69.95	
1. (h) N/A			

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1. (i) Other Multi-Line,  
Switched Services  
Type:

ISDN 2 lines/.5  
ISDN B

 \$35.00   
\$15.00

1. (j) N/A



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**TDS TELECOM/Quincy Telephone**

2. (a) Please provide a contribution analysis for intrastate switched access charges.
- (b) Please provide the cost study and all associated work papers and related documentation, that results in the contribution analysis in (a)

**Response:**

2. (a) TDS TELECOM/Quincy Telephone does not have a TSLRIC study to provide a revenue contribution analysis. In an effort to provide relevant information, we have provided the 1997 annual intrastate switched access total minutes of use, the access rate (rounded), and total revenue.

	<u>MOU</u>	<u>Rate</u>	<u>Revenue</u>
1997 Switched Access(interLATA)	[REDACTED]	0 0676	[REDACTED]
(intraLATA)	[REDACTED]	0 0573	[REDACTED]
(TOTAL)	[REDACTED]	0 0674	[REDACTED]
1997 MABC	[REDACTED]	0 0832	[REDACTED]

(b) N/A

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3. (a) Please provide a contribution analysis for intraLATA toll (including common line WATS/800-type services).
  
- (b) Please provide the cost study and all associated work papers and related documentation, that results in the contribution analysis in (a)

**Response:**

3. (a) TDS TELECOM/Quincy Telephone does not have a TSLRIC study to perform a contribution analysis. In an effort to relevant information, we have provide the 1997 Annual IntraLATA Toll Revenue.

1997 Annual IntraLATA Toll Revenue.



4a June 1998 ACS Revenue

		Qty	Price	Revenue
1 3-Way Calling	Res.	[REDACTED]	2.50	[REDACTED]
	Bus.	[REDACTED]	3.50	[REDACTED]
6-Way Bus.			10.00	[REDACTED]
2 Call Waiting	Res.	[REDACTED]	2.25	[REDACTED]
	Bus.	[REDACTED]	3.00	[REDACTED]
3 Call Forwarding Busy	Res. Var.	[REDACTED]	2.50	[REDACTED]
	Bus. Var.	[REDACTED]	3.75	[REDACTED]
	Res. Fixed.	[REDACTED]	1.00	[REDACTED]
	Bus. Fixed.	[REDACTED]	2.00	[REDACTED]
4 Call Forwarding Don't Answer	Bus.	[REDACTED]	3.75	[REDACTED]
	Res.	[REDACTED]	1.75	[REDACTED]
	Res. Fixed.	[REDACTED]	1.00	[REDACTED]
	Bus. Fixed.	[REDACTED]	2.00	[REDACTED]
5 Call Return	Res.	[REDACTED]	4.00	[REDACTED]
	Bus.	[REDACTED]	4.50	[REDACTED]
6 Repeat Dialing	Res.	[REDACTED]	4.00	[REDACTED]
	Bus.	[REDACTED]	4.50	[REDACTED]
7 Call Selector	Res.	[REDACTED]	3.00	[REDACTED]
	Bus.	[REDACTED]	4.00	[REDACTED]
8 Preferred Call Forwarding	Res.	[REDACTED]	4.00	[REDACTED]
	Bus.	[REDACTED]	4.50	[REDACTED]
9 Caller ID Deluxe w/ call rejection	Res.	[REDACTED]	7.50	[REDACTED]
	Bus.	[REDACTED]	10.00	[REDACTED]
10 Custom Code Restrictions	Res. Opt. 1	[REDACTED]	2.25	[REDACTED]
	Opt. 2	[REDACTED]	2.00	[REDACTED]
	Opt. 3	[REDACTED]	2.25	[REDACTED]
	Opt. 4	[REDACTED]	2.00	[REDACTED]
	Bus. Opt. 1	[REDACTED]	3.50	[REDACTED]
	Opt. 2	[REDACTED]	3.25	[REDACTED]
	Opt. 3	[REDACTED]	3.50	[REDACTED]
	Opt. 4	[REDACTED]	3.25	[REDACTED]

TOTAL SERVICES REVENUE

Total Discounts for Multiple Service Subscription

\$1,528

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4c. % of Access Lines Equipped		%
Total Access Lines 13276 (from 06/98)		
1 3-Way Calling		
Res.		NA
Bus.		NA
2 Call Waiting		
Res.		NA
Bus.		NA
3 Call Forwarding Busy		
Res.		NA
Bus.		NA
4 Call Forwarding Don't Answer		
Res.		Combined
Bus.		with
		Above
5 Call Return		
Res.		NA
Bus.		NA
6 Repeat Dialing		
Res.		NA
Bus.		NA
7 Call Selector		
Res.		NA
Bus.		NA
8 Preferred Call Forwarding		
Res.		NA
Bus.		NA
9 Caller ID Deluxe		
Res.		NA
Bus.		NA
10 Custom Code Restrictions		
Res.		NA
Bus.		NA

\* Variable

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5. (a) Please provide any studies, reports or analyses conducted by or for your company that concerns the relationship between the price and quantity demanded for various services offered by your company. If the company does not have company-specific studies, reports or analyses, but does have studies, reports or analyses that deal with this subject prepared within the past 10 years, please provide such studies, reports or analyses.
- (b) Please provide any studies, reports or analyses conducted by or for your company that concern the consumption patterns of your Florida consumers as it pertains to telecommunications purchases. If the company does not have company-specific studies or reports, but does have relevant materials prepared within the past five years, please provide such studies, reports or analyses.
- (c) To the extent not provided in response to (b), please provide any reports, studies, surveys or analyses prepared within the past five years that discuss the ability of Florida consumers to pay for various telecommunications products and services.
- (d) To the extent not provided in response to (b), please provide any reports, studies, surveys or analyses prepared within the past five years that discuss the willingness of Florida consumers to pay for various telecommunications products and services.
- (e) To the extent not provided in response to (b), please provide any reports, studies, surveys or analyses prepared within the past five years that discuss the relative valuation placed upon for various telecommunications products and services by Florida consumers.
- (f) Please provide any reports, studies or analyses in your possession prepared within the past five years that compare or discuss the relative price levels of residential basic local exchange service in the United States.
- (g) Please provide any reports, studies or analyses in your possession prepared within the past five years that compare or otherwise discuss the price paid for typical mixes of telecommunications products and services by residential consumers in different areas of the United States. If known, please indicate the dollar amount associated with each component of the "market basket" of telecommunications goods and services. (E.g., indicate amount typically spent on local service, toll, ancillary services, taxes, and other fees, etc.)

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**Response:**

5. (a) through (e): TDS TELECOM/Quincy Telephone does not have any studies, reports, or analyses in response to questions 5 (a) through (e).

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Response - Question 5 (f) - TDS TELECOM operates in twenty-eight states, attached are the rates for each TDS Telecom Company. Also, attached is part of a report title "Trends in Telephone Service" prepared by the Industry Analysis Division of the FCC.

TDS TELECOM  
ANALYSIS OF R1 RATES

STATE	COMPANY	EXCHANGE	R1 RATE
AL	Butler	All	16.30
AL	Goshen	All	16.30
AL	Grove Hill	All	12.52
AL	Oakman	Fiatman	13.30
AL	Oakman	Lynn	16.30
AL	Oakman	Nauvoo	20.40
AL	Oakman	Oakman	23.70
AL	Peoples	All	16.30
AR	Cleveland Cty	All	6.25
AR	Decatur	All	15.00
AZ	Arizona Tel.	All	9.25
AZ	Southwestern	Quartzite	11.00
AZ	Southwestern	Salome	11.00
CA	Happy Valley	Minersville	22.00
CA	Happy Valley	Olinda	16.85
CA	Happy Valley	Pistna	16.85
CA	Happy Valley	Trinity Center	16.85
CA	Hornitos	All	11.25
CA	Winterhaven	All	17.50
CO	Delta Cty	All	14.09
CO	Strasburg	All	16.40
FL	Quincy	All	12.70
GA	Blue Ridge	All	10.00
GA	Camden	All	5.93
GA	Nelson-Ball Ground	Big Canoe	23.70
GA	Nelson-Ball Ground	Marble Hill	17.90
GA	Nelson-Ball Ground	Nelson	17.90
GA	Quincy	All	12.20
ID	Potlatch	All	11.75
ID	Troy	All	12.67
IN	Camden	All	11.00
IN	CCI	Clayton	21.30
IN	CCI	Fillmore	15.00
IN	CCI	New Rosa	17.00
IN	CCI	Roachdale	17.00
IN	CCI	Whitestown	21.34
IN	CCI	Wickliffe	9.25
IN	CCSI	Einora	18.70
IN	CCSI	Poseyville	12.95
IN	CCSI	Wadesville	12.95
IN	Home	All	19.45
IN	Home - Pittsboro	All	22.20
IN	Tipton	All	5.30
KY	Leslie Cty	Bledsoe	10.05
KY	Leslie Cty	Buckhorn	10.05
KY	Leslie Cty	Canoe	10.05
KY	Leslie Cty	Dwarf	10.75
KY	Leslie Cty	Heyden	10.05
KY	Leslie Cty	Stinnett	10.05
KY	Leslie Cty	Wooton	10.05
KY	Lewisport	All	9.15
KY	Salem	All	9.41
ME	Hampden	Etna	10.86
ME	Hampden	Hampden	10.86
ME	Hartland	Harmony	9.95
ME	Hartland	Hartland	9.95
ME	Hartland	West Ripley	10.80
ME	Somerset	Athens	13.07
ME	Somerset	Bigelow	9.50
ME	Somerset	Carrabassett	9.50
ME	Somerset	Coburn Gore	9.50
ME	Somerset	Embden Lake	13.07



**TDS TELECOM  
ANALYSIS OF R1 RATES**

STATE	COMPANY	EXCHANGE	R1 RATE
ME	Somerset	Kingfield	9 50
ME	Somerset	Mercer	9 50
ME	Somerset	Moosehorn	9 50
ME	Somerset	N New Portland	9 50
ME	Somerset	New Vineyard	13 07
ME	Somerset	Norridgewock	14 00
ME	Somerset	North Anson	13 07
ME	Somerset	Phillips	9 50
ME	Somerset	Rome	9 50
ME	Somerset	Salem	9 50
ME	Somerset	Smithfield	9 50
ME	Somerset	Solon	13 07
ME	Somerset	Stratton	9 50
ME	Somerset	Strong	13 07
ME	Somerset	Weid	14 00
ME	The Island	Frenchboro	9 50
ME	The Island	Isle au Haut	15 00
ME	The Island	Matinicus	10 95
ME	The Island	Swans Island	10 95
ME	Warren	All	13 63
ME	West Penobscot	Corinna	8 50
ME	West Penobscot	Exeter	8 50
ME	West Penobscot	Stetson	13 05
MI	CCM	Augusta	13 90
MI	CCM	Clayton	11 15
MI	CCM	Hickory Corners	13 34
MI	Chatham	Au Train	11 55
MI	Chatham	Chatham	11 55
MI	Chatham	Sand River	11 55
MI	Chatham	Skandia	11 55
MI	Chatham	Trenary	11 55
MI	Island	All	10 55
MI	Shiawassee	Bell Oak	11 05
MI	Shiawassee	Perry	11 05
MI	Shiawassee	Shaftsbury	11 05
MI	Wolverine	Fostoria	11 55
MI	Wolverine	Millington	11 55
MI	Wolverine	Munger	11 55
MI	Wolverine	Sanford	11 55
MN	Arvig	Ash River	11 24
MN	Arvig	Backus	12 70
MN	Arvig	Breezy Point	12 70
MN	Arvig	Hackensack	12 70
MN	Arvig	Ideal Corners	12 70
MN	Arvig	Pequot Lakes	12 70
MN	Arvig	Pine River	12 70
MN	Arvig	Woman Lake	12 70
MN	Bridgewater	Enfield	10 28
MN	Bridgewater	Monticello	10 28
MN	Danube	All	13 90
MN	Mid-State	Brooton	10 30
MN	Mid-State	Irving	10 30
MN	Mid-State	Kerkhoven	7 25
MN	Mid-State	Murdock	7 25
MN	Mid-State	New London	12 00
MN	Mid-State	Pennock	8 40
MN	Mid-State	Sedan	10 30
MN	Mid-State	Spicer	12 00
MN	Mid-State	Sunberg	10 30
MN	Mid-State	Terrace	10 30
MN	Winsted	All	5 68
MO	New London	All	12 30

TDS TELECOM  
ANALYSIS OF R1 RATES

STATE	COMPANY	EXCHANGE	R1 RATE
MO	Orchard Farm	All	12.25
MO	Stoutland	All	8.75
MS	Calhoun City	All	17.05
MS	Myrtle	All	16.75
MS	SE Mississippi	All	15.05
NC	Barnardsville	All	18.26
NC	Saluda Mountain	All	11.51
NC	Service	All	9.52
NH	Chichester	All	8.18
NH	Kearsarge	Andover	8.26
NH	Kearsarge	Boscawen	8.26
NH	Kearsarge	New London	9.13
NH	Kearsarge	Salisbury	7.48
NH	Meriden	All	10.18
NY	Deposit	Aflon	11.82
NY	Deposit	Deposit	10.85
NY	Deposit	Harpersville	11.62
NY	Deposit	Windsor	11.62
NY	Edwards	All	9.04
NY	Oriskany Falls	All	15.47
NY	Port Byron	Port Byron	8.05
NY	Port Byron	Savannah	8.42
NY	Vernon	All	10.20
OH	Arcadia	All	22.90
OH	Continental	All	19.75
OH	LMCC	Butlerville	18.85
OH	LMCC	Fayetteville	19.39
OH	Oakwood	All	11.27
OH	Vanlue	All	17.75
OK	Mid-America	Bromide	7.75
OK	Mid-America	Fittstown	10.25
OK	Mid-America	Hennepin	7.50
OK	Mid-America	Stonewall	10.25
OK	OCSI	Adair	13.80
OK	OCSI	Choctaw	13.80
OK	OCSI	Cyril	13.80
OK	OCSI	Egin	13.80
OK	OCSI	Fletcher	13.80
OK	OCSI	Gracemont	13.80
OK	OCSI	Inola	13.80
OK	OCSI	Jones	13.80
OK	OCSI	Kellyville	13.80
OK	OCSI	Mounds	13.80
OK	OCSI	Union City	13.80
OK	OCSI	Verden	13.80
OK	Wyandotte	All	13.90
OR	Asotin	All	10.75
OR	Home	All	13.60
PA	Deposit	Sherman	13.85
PA	M & M	Leck Kill	15.64
PA	M & M	Mandata	15.64
PA	M & M	Trevorton	16.33
PA	Sugar Valley	All	18.50
SC	McClellanville	All	14.35
SC	Norway	All	14.35
SC	St. Stephens	All	12.76
SC	Williston	All	16.35
TN	Concord	All	11.85
TN	Humphreys Cty	All	5.25
TN	Tellico	Balplity	11.95
TN	Tellico	Coker Creek	11.95
TN	Tellico	Englewood	12.85

**TDS TELECOM  
ANALYSIS OF R1 RATES**

STATE	COMPANY	EXCHANGE	R1 RATE
TN	Tellico	Niota	11.95
TN	Tellico	Riceville	11.95
TN	Tellico	Tellico Plains	11.95
TN	Tellico	Vonore	11.95
TN	Tennessee Tel	Bruceston	11.60
TN	Tennessee Tel	Clifton	11.60
TN	Tennessee Tel	Collinwood	11.60
TN	Tennessee Tel	Cornersville	11.60
TN	Tennessee Tel	Darden	11.60
TN	Tennessee Tel	Decaturville	11.60
TN	Tennessee Tel	Halls	11.85
TN	Tennessee Tel	La Vergne	15.70
TN	Tennessee Tel	Linden	11.60
TN	Tennessee Tel	Lobelville	11.60
TN	Tennessee Tel	Mt. Juliet	15.70
TN	Tennessee Tel	Parsons	11.60
TN	Tennessee Tel	Sardis	11.60
TN	Tennessee Tel	Scotts Hill	11.60
TN	Tennessee Tel	Waynesboro	11.60
VA	Amelia	All	13.40
VA	New Castle	All	9.09
VA	Virginia Tel	All	9.85
VT	Ludlow	All	39.00
VT	Northfield	All	45.00
VT	Perkinsville	All	39.00
WA	Asotin	Anatone	11.50
WA	Asotin	Asotin	17.20
WA	Lewis River	All	26.00
WA	McDaniel	All	7.70
WI	Badger	Chili	19.95
WI	Badger	Granton	17.95
WI	Badger	Greenwood	17.95
WI	Badger	Nellsville	17.15
WI	BB&W	Bohners Lake	7.95
WI	BB&W	Wheatland	8.25
WI	Black Earth	All	15.35
WI	Bonduel	All	17.40
WI	Central State	Auburndale	21.50
WI	Central State	Cranmoor	13.30
WI	Central State	Junction City	18.50
WI	Central State	Lindsey	20.50
WI	Central State	Mill Creek	16.20
WI	Central State	Necedah	17.50
WI	Central State	Pittsville	17.50
WI	Central State	Vesper	21.90
WI	EastCoast	Cleveland	15.45
WI	EastCoast	Collins	18.45
WI	EastCoast	Howard's Grove	18.45
WI	EastCoast	St. Nazianz	18.45
WI	EastCoast	Valders	18.45
WI	Grantland	Bagley	12.50
WI	Grantland	Bloomington	15.55
WI	Grantland	Fennimore	14.30
WI	Grantland	Mt. Hope	16.75
WI	Grantland	Woodman	11.90
WI	Midway	Dorchester	12.78
WI	Midway	Medford	11.55
WI	Midway	Stetsonville	11.55
WI	Mt. Vernon	Mt. Vernon	12.00
WI	Mt. Vernon	New Glarus	10.75
WI	Mt. Vernon	Verona	12.30
WI	Riverside	Johnson Creek	13.65

**TDS TELECOM  
ANALYSIS OF R1 RATES**

<b>STATE</b>	<b>COMPANY</b>	<b>EXCHANGE</b>	<b>R1 RATE</b>
WI	Riverside	Reeseville	13 70
WI	S & S	Hibert	15 39
WI	S & S	Sherwood	16 00
WI	S & S	Stockbridge	15 39
WI	S & S	Tisch Mills	15 39
WI	Scandinavia	Iola	14 35
WI	Scandinavia	Scandinavia	16 65
WI	Tenney	All	16 95
WI	Utelco	All	14 75
WI	Waunakee	All	9 65

# TRENDS IN TELEPHONE SERVICE

Industry Analysis Division  
Common Carrier Bureau  
Federal Communications Commission  
July 1998



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This report is available for reference in the Common Carrier Bureau's Public Reference Room, 2000 M Street, N.W., Room 575. Copies may be purchased by calling International Transcription Services, Inc. (ITS) at (202) 857-3800. The report can be downloaded [file name TREND298.ZIP] from the FCC-State Link internet site at <http://www.fcc.gov/ccb/stats> on the World Wide Web. The report can also be downloaded from the FCC-State Link computer bulletin board system at (202) 418-0241.

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# TABLE 13.1

## AVERAGE RESIDENTIAL RATES FOR LOCAL SERVICE IN URBAN AREAS

(as of October 15)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Representative Monthly Charge *	\$12.58	\$12.44	\$12.32	\$12.30	\$12.36	\$13.03	\$13.05	\$13.16	\$13.19	\$13.62	\$13.71	\$13.82
Subscriber Line Charges	2.04	2.66	2.67	3.53	3.55	3.56	3.55	3.55	3.55	3.54	3.54	3.53
Touch-tone Service	1.57	1.52	1.54	1.52	1.33	1.06	0.97	0.94	0.77	0.44	0.30	0.12
Taxes and 911 Charges	1.51	1.56	1.58	1.70	2.00	2.12	2.15	2.29	2.31	2.41	2.40	2.44
<b>Total Monthly Charge</b>	<b>17.70</b>	<b>18.18</b>	<b>18.11</b>	<b>19.05</b>	<b>19.24</b>	<b>19.77</b>	<b>19.72</b>	<b>19.95</b>	<b>19.81</b>	<b>20.01</b>	<b>19.95</b>	<b>19.92</b>
Basic Connection Charge	\$45.63	\$44.04	\$42.94	\$43.06	\$43.06	\$42.00	\$41.50	\$41.38	\$41.28	\$40.91	\$41.11	\$41.06
Touch-tone Service	1.34	1.31	1.55	1.78	1.77	1.27	1.22	1.23	0.85	0.23	0.23	0.17
Taxes	2.28	2.20	2.11	2.44	2.32	2.30	2.29	2.30	2.33	2.44	2.36	2.46
<b>Total Connection Charge</b>	<b>46.97</b>	<b>45.35</b>	<b>44.49</b>	<b>44.82</b>	<b>44.83</b>	<b>45.57</b>	<b>42.72</b>	<b>44.92</b>	<b>44.46</b>	<b>43.58</b>	<b>43.70</b>	<b>43.68</b>
Additional Charge if Drop Line and Connection Block Needed	n.a.	n.a.	6.04	6.07	6.89	6.89	6.50	7.29	6.74	5.90	5.74	5.65
Lowest-cost Inside Wiring Maintenance Plan	\$0.58	\$0.85	\$0.89	\$1.07	\$1.07	\$1.20	\$1.25	\$1.31	\$1.45	\$1.52	\$1.78	\$1.62

**TABLE 13.2**

**AVERAGE LOCAL RATES FOR BUSINESSES WITH A SINGLE LINE IN URBAN AREAS**

	1989	1990	1991	1992	1993	1994	1995	1996	1997
Extra for Touch-tone	2.43	2.35	1.84	1.71	1.67	1.21	0.97	0.82	0.44
<b>Total Monthly Charge</b>	<b>41.25</b>	<b>41.21</b>	<b>42.12</b>	<b>42.29</b>	<b>42.57</b>	<b>41.64</b>	<b>41.60</b>	<b>41.81</b>	<b>41.65</b>
<b>Total Monthly Charge for Flat-rate Service</b>	<b>43.71</b>	<b>44.07</b>	<b>44.91</b>	<b>44.94</b>	<b>45.81</b>	<b>44.57</b>	<b>44.71</b>	<b>44.47</b>	<b>44.31</b>
Measured/Message	\$16.18	\$16.17	\$16.76	\$16.55	\$16.60	\$16.74	\$17.06	\$17.26	\$17.39
200 Five-minute Business-day Same-zone Calls	16.11	16.19	16.70	17.23	17.57	17.38	17.15	17.1	17.03
<b>Total Monthly Charge for Measured/Message Service</b>	<b>42.72</b>	<b>42.83</b>	<b>43.44</b>	<b>43.82</b>	<b>44.26</b>	<b>43.72</b>	<b>43.75</b>	<b>43.84</b>	<b>43.58</b>
Tax	4.06	4.15	4.32	4.33	4.25	4.13	4.17	4.2	4.42
	<b>76.81</b>	<b>77.40</b>	<b>78.20</b>	<b>78.07</b>	<b>76.83</b>	<b>74.93</b>	<b>72.31</b>	<b>72.85</b>	<b>73.18</b>

Rate is based on flat-rate service where available, and on measured/message

**TABLE 13.3**

**AVERAGE MONTHLY LOCAL RATES OF RUS BORROWERS**

Year	Average Business Rate	Average Residential Rate	Percentage of US Access Lines
1994	\$20.88	\$11.05	5.03%
1995	\$20.84	\$10.94	3.79%
1996	\$21.41	\$11.17	3.83%

\* Average rates do not include subscriber line charges, surcharges.

TABLE 16.2

**TELEPHONE PENETRATION BY STATE**  
**(ANNUAL AVERAGE PERCENTAGE OF HOUSEHOLDS WITH TELEPHONE SERVICE)**

STATE	1984	1997	CHANGE
ALABAMA	88.4 %	92.3 %	3.9 % *
ALASKA	86.5	94.5	8.0 *
ARIZONA	86.9	91.6	4.7 *
ARKANSAS	86.6	89.8	3.2 *
CALIFORNIA	92.5	94.3	1.8 *
COLORADO	93.2	95.9	2.6 *
CONNECTICUT	95.5	94.2	-1.3
DELAWARE	94.3	95.7	1.5 *
DISTRICT OF COLUMBIA	94.9	90.8	-4.1 **
FLORIDA	88.7	92.8	4.1 *
GEORGIA	86.2	92.0	5.8 *
HAWAII	93.5	94.5	0.9 *
IDAHO	90.7	94.0	3.3 *
ILLINOIS	94.2	92.2	-2.0 **
INDIANA	91.6	93.8	2.2 *
IOWA	96.2	96.7	0.5 *
KANSAS	94.3	94.0	-0.4
KENTUCKY	88.1	93.2	5.0 *
LOUISIANA	89.7	91.0	1.4 *
MAINE	93.4	96.1	2.7 *
MARYLAND	95.7	95.7	0.0
MASSACHUSETTS	95.9	95.4	-0.5
MICHIGAN	92.8	94.3	1.4 *
MINNESOTA	95.8	96.9	1.1 *
MISSISSIPPI	82.4	89.2	6.8 *
MISSOURI	91.5	95.0	3.6 *
MONTANA	91.0	93.7	2.7 *
NEBRASKA	95.7	97.1	1.4 *
NEVADA	90.4	94.1	3.8 *
NEW HAMPSHIRE	94.3	96.5	2.2 *
NEW JERSEY	94.8	94.9	0.1
NEW MEXICO	82.0	88.1	6.1 *
NEW YORK	91.8	94.2	2.4 *
NORTH CAROLINA	88.3	93.1	4.8 *
NORTH DAKOTA	94.6	95.8	1.2 *
OHIO	92.4	94.6	2.1 *
OKLAHOMA	90.3	91.4	1.2 *
OREGON	90.6	95.6	5.0 *
PENNSYLVANIA	94.9	97.1	2.3 *
RHODE ISLAND	93.6	94.5	0.8 *
SOUTH CAROLINA	83.7	92.5	8.9 *
SOUTH DAKOTA	93.2	93.9	0.7 *
TENNESSEE	88.5	94.5	6.0 *
TEXAS	88.4	91.3	2.9 *
UTAH	92.5	96.9	4.4 *
VERMONT	92.3	95.1	2.8 *
VIRGINIA	93.1	94.5	1.5 *
WASHINGTON	93.0	95.0	2.9 *
WEST VIRGINIA	87.7	93.2	5.5 *
WISCONSIN	95.2	96.3	1.1 *
WYOMING	89.9	93.4	3.5 *
TOTAL UNITED STATES	91.6	93.9	2.3 *

SOURCE: INDUSTRY ANALYSIS DIVISION, *TELEPHONE SUBSCRIBERSHIP IN THE UNITED STATES*.

\* INCREASE IS STATISTICALLY SIGNIFICANT AT THE 95% CONFIDENCE LEVEL.

\*\* DECREASE IS STATISTICALLY SIGNIFICANT AT THE 95% CONFIDENCE LEVEL.

CHANGES MAY NOT BE THE SAME AS CALCULATED DIFFERENCES, DUE TO ROUNDING.



**TDS TELECOM/Quincy Telephone**  
**980000A-SP: UNDOCKETED SPECIAL PROJECT:**  
**Fair and Reasonable Rates**  
**Division of Communications Data Request**

**TDS TELECOM/Quincy Telephone**

Response - Question 5 (g): Attached is a study titled "1997 Independent Benchmark Study" prepared by Cathey, Hutton, & Associates, Inc.. Also, included is sections of a report titled, "Keeping Rural America Connected: Costs and Rates in the Competitive Era", prepared by the Organization for the Protection and Advancement of Small Telephone Companies (OPASTCO).

# Keeping Rural America Connected: Costs and Rates in the Competitive Era

A study for the Organization for the Protection and Advancement of Small Telephone Companies (OPASTCO) by John Staurulakis Inc. and Patricia Lum and funded by OPASTCO and firms throughout the rural telecommunications industry.



Organization for the Protection and Advancement of Small Telephone Companies  
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Figure 4.1

## OPASTCO Study Group Statistics

State	Access Lines <sup>1</sup>	Interstate Access Minutes of Use <sup>2</sup>	Interstate Access Minutes per Line per Month <sup>3</sup>	Total Billed Interstate Minutes of Use <sup>4</sup>
Alabama	80,883	144,895,711	149	62,965,210
Alaska <sup>5</sup>	289,513	968,692,895	279	380,990,451
Arizona	75,501	393,160,655	434	147,774,039
Arkansas	130,099	285,478,053	183	33,363,569
California	129,110	170,504,715	110	64,519,554
Colorado	22,680	50,679,412	186	29,367,369
Connecticut	NA	NA	NA	NA
Delaware	NA	NA	NA	NA
Florida	106,505	63,659,377	50	27,773,203
Georgia	119,802	182,972,138	102	81,163,605
Hawaii	NA	NA	NA	NA
Idaho	11,450	26,735,092	195	9,934,911
Illinois	NA	NA	NA	NA
Indiana	25,259	44,394,269	146	19,656,151
Iowa	10,938	25,206,587	192	12,370,071
Kansas	36,504	57,810,451	132	27,125,901
Kentucky	NA	NA	NA	NA
Louisiana	86,768	250,004,363	240	99,193,721
Maine	29,257	49,486,069	141	21,404,392
Maryland	NA	NA	NA	NA
Massachusetts	NA	NA	NA	NA
Michigan	140,289	265,810,630	158	98,481,358
Minnesota	47,828	123,485,057	215	46,735,157
Mississippi	31,668	68,352,657	180	31,493,535
Missouri	70,380	123,044,278	146	52,355,416
Montana	30,285	70,572,636	194	33,207,810
Nebraska	25,483	45,601,675	149	17,153,786
Nevada	32,679	112,267,735	286	50,106,712
New Hampshire	15,469	44,220,360	238	17,741,813
New Jersey	NA	NA	NA	NA
New Mexico	22,328	51,883,051	194	29,610,389
New York	103,543	181,268,323	146	85,515,806
North Carolina	272,761	265,756,348	81	123,427,816
North Dakota	12,836	22,343,708	145	10,401,031
Ohio	108,500	203,834,096	157	100,527,893
Oklahoma	58,617	97,640,136	139	45,637,280
Oregon	59,548	126,122,057	176	53,713,263
Pennsylvania	11,587	19,931,275	143	9,586,368
Rhode Island	NA	NA	NA	NA
South Carolina	101,123	180,591,133	149	79,060,853
South Dakota	13,730	23,042,519	140	10,588,545
Tennessee	72,423	174,084,702	200	68,815,103
Texas	122,797	168,386,127	114	64,540,172
Utah	12,071	21,585,985	149	10,267,015
Vermont	13,018	38,618,462	247	15,897,640
Virginia	3,550	6,548,815	154	2,252,383
Washington	46,867	140,132,555	249	52,775,933
West Virginia	18,411	46,430,261	210	18,208,780
Wisconsin	168,824	401,792,963	198	153,784,603
Wyoming	3,027	11,480,711	316	4,792,435
Total	2,803,911	5,748,508,042	171	2,304,280,542

<sup>1</sup>The average of the 12 monthly access line counts the LECs reported to the National Exchange Carrier Association (NECA) during calendar year 1992.

<sup>2</sup>The cumulative total of the originating and terminating switched access minutes the LECs reported to NECA for each of the 12 months of calendar year 1992.

<sup>3</sup>This shows the wide variance in raw interstate usage in different regions of the United States. States with large geographic areas and many cities, such as Texas, have relatively low interstate usage per line, but have relatively higher intrastate calling patterns. In the more rural states, the amount of interstate calling per month almost always is higher because there are not as many places to call within the state. Thus, states such as Alaska, Arizona, Nevada, and Wyoming, which have a greater number of access minutes per line, per month, also have the highest percentage of interstate usage.

<sup>4</sup>This is derived by applying a ratio to the interstate subscriber line usage minutes of use as detailed in "Current Monthly Subscriber Bill Calculations" in Appendix B.

<sup>5</sup>The Alaska access lines used in this study include the urban, as well as the rural, areas of the state.

Figure 4.2

Calculation of 1992 Monthly Local Service Revenues<sup>1</sup>

State	Local Service Revenues	Subscribers Receiving Service	Local Service Revenues per Subscriber per Month
Alabama	\$36,582,236	160,989	\$18.94
Alaska	\$24,763,656	98,554	\$20.94
Arizona	\$38,115,579	150,912	\$21.05
Arkansas	\$44,399,854	221,442	\$16.71
California	\$15,470,655	62,453	\$20.64
Colorado	\$8,113,342	31,734	\$21.31
Connecticut	NA	NA	NA
Delaware	NA	NA	NA
Florida	\$22,472,307	111,643	\$16.77
Georgia	\$86,317,621	396,989	\$18.12
Hawaii	NA	NA	NA
Idaho	\$3,378,341	19,396	\$14.51
Illinois	\$13,571,211	89,120	\$12.69
Indiana	\$18,190,896	93,642	\$16.19
Iowa	\$28,004,290	167,709	\$13.92
Kansas	\$29,114,927	179,045	\$13.55
Kentucky	\$44,224,567	219,287	\$16.81
Louisiana	\$34,308,764	130,283	\$21.95
Maine	\$11,561,162	86,866	\$11.09
Maryland	\$454,469	4,933	\$7.68
Massachusetts	\$489,671	2,472	\$16.51
Michigan	\$20,933,034	154,219	\$11.31
Minnesota	\$56,395,640	308,132	\$15.25
Mississippi	\$18,153,840	62,910	\$21.40
Missouri	\$48,922,447	293,163	\$13.91
Montana	\$6,699,859	41,692	\$13.39
Nebraska	\$11,410,644	73,692	\$12.90
Nevada	\$1,154,924	6,136	\$15.56
New Hampshire	\$3,601,414	26,793	\$11.20
New Jersey	\$25,064,926	152,154	\$13.73
New Mexico	\$5,575,461	28,572	\$16.26
New York	\$25,525,210	130,249	\$16.33
North Carolina	\$87,271,839	381,361	\$19.07
North Dakota	\$11,122,968	65,192	\$14.22
Ohio	\$5,209,071	23,710	\$18.31
Oklahoma	\$24,203,350	144,641	\$13.94
Oregon	\$11,765,495	61,303	\$15.99
Pennsylvania	\$67,429,226	464,793	\$12.09
Rhode Island	NA	NA	NA
South Carolina	\$58,052,037	263,362	\$18.37
South Dakota	\$8,742,832	61,482	\$11.85
Tennessee	\$51,914,705	259,489	\$16.67
Texas	\$39,375,778	211,026	\$15.55
Utah	\$1,094,265	13,190	\$12.60
Vermont	\$2,356,858	12,963	\$15.15
Virginia	\$8,329,518	53,174	\$13.05
Washington	\$5,361,883	34,111	\$13.10
West Virginia	\$18,629,472	60,742	\$25.56
Wisconsin	\$58,036,333	358,594	\$13.49
Wyoming	\$2,703,638	14,034	\$16.05
Total	\$1,143,470,015	5,988,398	\$15.91

<sup>1</sup>Reflects 894 local exchange carriers per the Rural Electrification Administration's 1992 Statistical Report, Rural Telephone Borrowers, Table 24, "Composite Revenues Reported by Borrowers by States—Calendar Year 1992."

Figure 4.12

## Current Monthly Subscriber Bill for the OPASTCO Study Group LECs' Subscribers

State	Local Billing (A)	Federal Subscriber Line Charge (B)	Interstate Toll Billing at \$0.12 per Minute (C)	Intrastate Toll Billing at \$0.16 per Minute (D)	Total Current Subscriber Bill (E)
Alabama	\$18.94	\$3.50	\$7.78	\$11.52	\$41.74
Alaska	\$20.94	\$3.50	\$13.16	\$12.30	\$49.90
Arizona	\$21.05	\$3.50	\$19.57	\$10.39	\$54.51
Arkansas	\$16.71	\$3.50	\$2.56	\$2.19	\$24.96
California	\$20.64	\$3.50	\$5.00	\$24.74	\$53.88
Colorado	\$21.31	\$3.50	\$12.95	\$11.97	\$49.73
Connecticut	NA	NA	NA	NA	NA
Delaware	NA	NA	NA	NA	NA
Florida	\$16.77	\$3.50	\$2.61	\$4.44	\$27.32
Georgia	\$18.12	\$3.50	\$5.42	\$13.80	\$40.84
Hawaii	NA	NA	NA	NA	NA
Idaho	\$14.51	\$3.50	\$8.68	\$13.32	\$40.01
Illinois	NA	NA	NA	NA	NA
Indiana	\$16.19	\$3.50	\$7.78	\$18.89	\$46.36
Iowa	\$13.92	\$3.50	\$11.31	\$21.19	\$49.92
Kansas	\$13.55	\$3.50	\$7.43	\$23.83	\$48.31
Kentucky	NA	NA	NA	NA	NA
Louisiana	\$21.95	\$3.50	\$11.43	\$31.59	\$68.47
Maine	\$11.09	\$3.50	\$7.32	\$23.15	\$45.06
Maryland	NA	NA	NA	NA	NA
Massachusetts	NA	NA	NA	NA	NA
Michigan	\$11.31	\$3.50	\$7.02	\$28.86	\$50.69
Minnesota	\$15.25	\$3.50	\$9.77	\$21.42	\$49.94
Mississippi	\$21.40	\$3.50	\$9.94	\$10.94	\$45.78
Missouri	\$13.91	\$3.50	\$7.44	\$17.46	\$42.31
Montana	\$13.39	\$3.50	\$10.97	\$23.37	\$51.23
Nebraska	\$12.90	\$3.50	\$6.73	\$15.47	\$38.60
Nevada	\$15.56	\$3.50	\$15.33	\$12.07	\$46.46
New Hampshire	\$11.20	\$3.50	\$11.47	\$18.20	\$44.37
New Jersey	NA	NA	NA	NA	NA
New Mexico	\$16.26	\$3.50	\$13.26	\$14.69	\$47.71
New York	\$16.33	\$3.50	\$8.26	\$16.10	\$44.19
North Carolina	\$19.07	\$3.50	\$4.53	\$7.36	\$34.46
North Dakota	\$14.22	\$3.50	\$8.10	\$16.39	\$42.21
Ohio	\$18.31	\$3.50	\$9.27	\$22.12	\$53.20
Oklahoma	\$13.94	\$3.50	\$7.79	\$20.22	\$45.45
Oregon	\$15.99	\$3.50	\$9.02	\$19.02	\$47.53
Pennsylvania	\$12.09	\$3.50	\$8.27	\$15.72	\$39.58
Rhode Island	NA	NA	NA	NA	NA
South Carolina	\$18.37	\$3.50	\$7.82	\$7.70	\$37.39
South Dakota	\$11.85	\$3.50	\$7.71	\$15.29	\$38.35
Tennessee	\$16.67	\$3.50	\$9.50	\$11.87	\$41.54
Texas	\$15.55	\$3.50	\$5.26	\$20.05	\$44.36
Utah	\$12.60	\$3.50	\$8.51	\$21.51	\$46.12
Vermont	\$15.15	\$3.50	\$12.21	\$12.13	\$42.89
Virginia	\$13.05	\$3.50	\$6.34	\$22.96	\$45.85
Washington	\$13.10	\$3.50	\$11.26	\$30.76	\$58.62
West Virginia	\$25.56	\$3.50	\$9.89	\$15.84	\$54.79
Wisconsin	\$13.49	\$3.50	\$9.11	\$17.67	\$43.77
Wyoming	\$16.05	\$3.50	\$15.83	\$17.54	\$47.92
Average	\$15.91	\$3.50	\$8.22	\$15.63	\$43.26

**1997 Independent Benchmark Study**

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## Introduction

Welcome to Cathey, Hutton & Associates' (CHA's) 1997 edition of the Independent Benchmark Study (IBS). This is the fourth edition of the IBS and the number of independent telecommunications companies (Independents) participating in the study continues to grow dramatically. For the 1997 IBS, the number of subscribers has grown over 50% from the last edition.

This edition of the study includes data from *over 180 separate telephone operations*. We know of no other study like the IBS that is *specifically for Independents*. Neither do we know of any study that includes data from so many local telephone operations.

The large data set for the 1997 IBS is a result of some of the larger participants reporting their IBS data according to their separate local telephone operations. For example, a large Independent with 250,000 access lines might have local telephone operations in dozens of different geographical areas. Under this scenario, each distinct operation of this large Independent might average 5,000 access lines. Each distinct telephone operation performs differently and the 1997 IBS data reflects these differences.

We continue to make the IBS "subscriber-driven." We have integrated several of the suggestions IBS participants have offered. The new features in the 1997 edition include:

- *Price* comparisons for products and services.
- Entirely new sections on long distance, wireless voice, video services, and general telephone operations.
- Expanded information on marketing, including marketing success stories.
- Additional and updated information covered in previous editions of the IBS.

With the telecommunications industry still in flux, the IBS is more valuable than ever. All telecommunications providers, Independents included, will have to make adjustments to stay competitive in the evolving telecommunications environment. The IBS is an excellent

tool to help you identify what other Independents are doing, and how you compare with your peer companies.

Above, we defined Independents as "independent telecommunications companies." Using the word "telecommunications" instead of "telephone" accurately reflects the 1997 IBS data. The vast majority of Independents provide much more than "plain old telephone service" (POTS). That is, most IBS participants are close to being full service telecommunications providers. For example, over 80% of IBS participants provide advanced calling services (CLASS) and Internet access; well over half offer cellular service and paging; and nearly half of respondents offer long distance, ISDN, and video services.

The body of the IBS report has a great deal of detail on these and many other areas. We hope you enjoy the 1997 edition of the IBS. Let us know what you think!



## 1. Research Methodology & Overview

The vast majority of current telecommunications research is either geared towards or based on large companies like the Regional Bell Operating Companies (RBOC's) and/or Interexchange Companies (IXC's). The fact is, though, that both the business operations and the customer base of most Independents are very different than that of an RBOC. One major difference is that of market type, where an Independent's market tends to be more rural than urban. Another difference is economies of scale - RBOC's have a broader and more densely populated customer base than do Independents. Thus, the Independent Benchmark Study (IBS) remains a unique and distinctive research document that gives Independents an in-depth look at what is going on in the telecommunications industry as it relates to them.

The data gathering process for the IBS begins with the data request/survey. Even though the process of completing the data request can be an inconvenience for IBS participants, it is *the crucial step* in developing a quality data set and, hence, an accurate report.

As is often the case, IBS participants frequently have questions about the data request. In turn, we at CHA sometimes have questions about the responses and often call participants to clarify their data request responses. This time-consuming process is critical to develop an accurate data set.

After the data collection process is complete, the analysis, conclusions, and report writing process begins. This, also, is a time-consuming task, but it is made possible by your completed data requests. The results are fascinating for us as consultants as much as they are for you as telecommunications providers.

As we have in past editions of the IBS, in the 1997 edition we have analyzed the data in three ways:

- *Overall* - includes all IBS participants
- *Market type classification* - rural, semi-rural, and suburban
- *Company access line size* - small, medium, and large

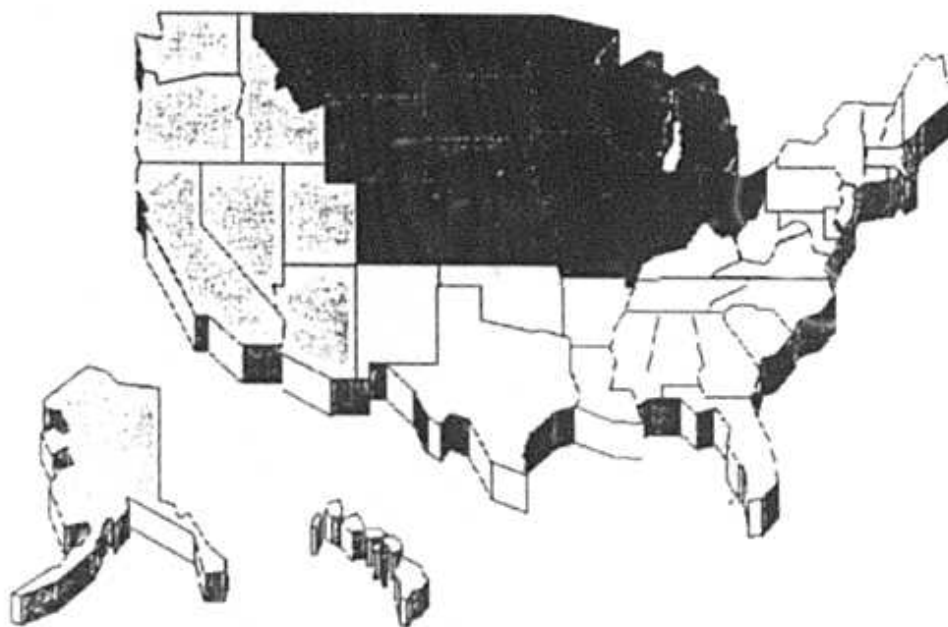
These different "looks" to the data allow you to compare your company with others very similar to yourself. We have defined each of these classification criteria later in this section.

### 1.1 Geographic Location of Participants

IBS participants represent over 35 different states. For the purposes of this study, we have divided the U.S. into four geographical regions: West, Rocky Mountain/Midwest, Southwest/Southeast, and Northeast.

The map and table below show the regional distribution of IBS participants. All regions are well represented, but the Rocky Mountain/Midwest and Southwest/Southeast regions are home to most IBS participants. This does not come as a surprise as most Independents nationwide are in these regions.

Figure 1: IBS Participant Distribution



West	10.6%
Rocky Mountains & Midwest	36.1%
Southwest & Southeast	40.6%
Northeast	12.8%

## 1.2 Classification by Company Size

Dividing the IBS data according to number of access lines provides valuable insights. Larger companies have more resources to devote to marketing, which can dramatically affect penetration rates. In contrast, in some cases it is easier for small companies to market to their customer base (e.g., because they are more homogeneous). Providing the IBS data according to company size allows you to compare your company's performance to others of similar size.

The 1997 IBS, like previous versions, has a wide variation of company sizes - from less than 1,000 to over 100,000 access lines. We have slightly changed the criteria by which we determine company size. In the last edition of the IBS we classified small companies as those with 10,000 access lines or less; medium sized companies were classified as having 10,000 to 25,000 access lines; and large companies as those with more than 25,000 access lines. We have re-thought these criteria and categorized them according to Table 1 below.

**Table 1: Classification of Company Size by Access Lines**

<b>Small</b>	Less than 5,000 Access Lines
<b>Medium</b>	5,000 to 20,000 Access Lines
<b>Large</b>	More than 20,000 Access Lines

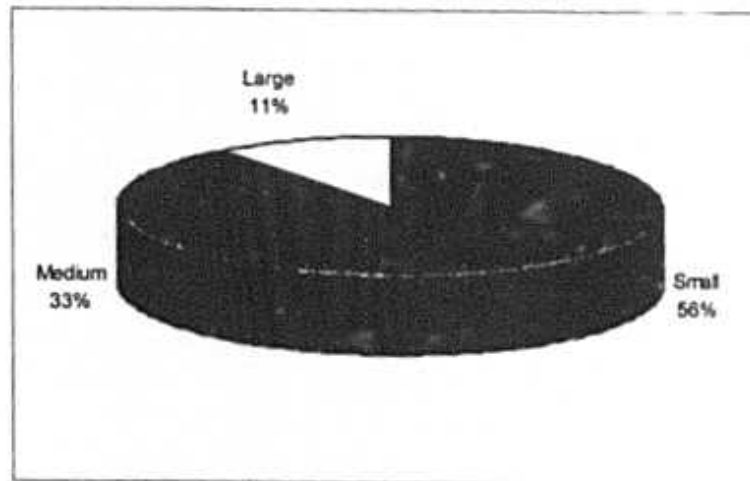
Our experience with Independents shows that companies with less than 5,000 access lines are similar in terms of personnel resource allocation, operations, marketing, and management. Companies between 5,000 and 10,000 access lines tend to show operating similarities to companies with 10,000 to 20,000 access lines. There is obviously a very wide range of companies larger than 20,000 access lines, but the vast majority of large Independents fall in the 20,000 to 100,000 category. (Less than 20 Independents nationwide have more than 100,000 access lines.)

Figure 2 below shows the percentage of companies, according to access line size, represented in the 1997 IBS. The percentage of IBS participants, per company size category,

1

closely parallels the same for Independents nationwide. For example, most Independents nationwide fall within the small company category, as is the case with IBS participants.

Figure 2: IBS Participants by Company Size



### 1.3 Classification by Market Served

We have also classified the IBS data according to market type - rural, semi-rural, and suburban. We believe that market type segmentation of the data is equally or even more valuable than presenting the data according to company size. There are great differences in performance between the three market type categories. Following are definitions of each market type.

**Rural:** A rural market is defined as an area located within 60-90 miles of an "urban center." This market type has a low competitive threat (for local telephone service) for the near term. The rural market population tends to be older and have a large percentage of families. Population growth rates in rural markets tends to be low (1.5% or less), sometimes even having a slightly negative growth rate.

Technical acceptance is lowest in rural markets and personal computer (PC) ownership tends to be lower than the national average. This is significant because lower levels of technical acceptance typically mean lower penetrations of enhanced services and Internet access. Rural markets typically have the lowest percentage of business access lines of any market type, usually 20% or less of the total.

*Semi-rural:* We classified a semi-rural market as being within 30-60 miles of an urban center with a moderate competitive threat for the near term. A good number of residents most likely commute to the nearby urban center, but many people still work in the semi-rural market area. Those residents who commute to the urban center could potentially be "home office/telecommuters" - a market segment that typically has advanced telecommunications needs. The demographics of this market type consist of a large percentage of families and younger adults. Population growth rates are typically moderate, between 1% and 3%.

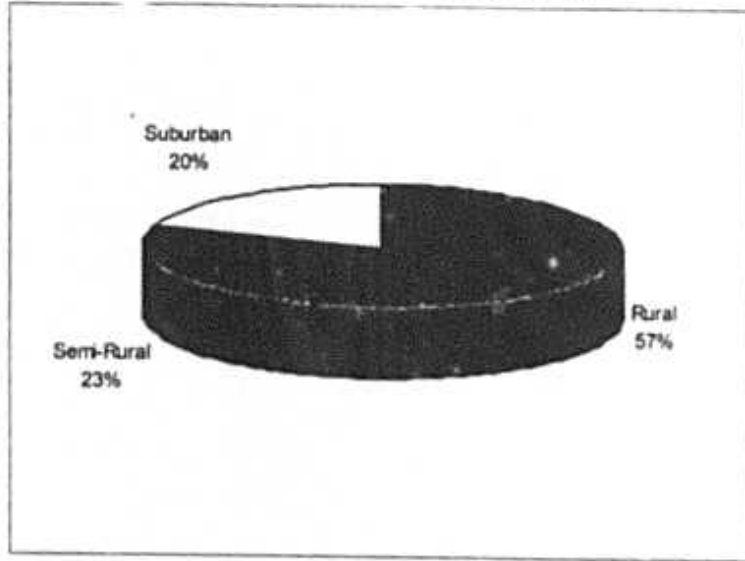
Technical acceptance levels in a semi-rural market are moderate. PC ownership is typically close to the national average in this type of market. Typically, between 20%-25% of the access lines are business. Small businesses, oftentimes with only a few phone lines, make up the majority of businesses in the area.

*Suburban:* A suburban market type is an area within 30 miles of an urban center. The majority of workers in the area commute to the urban center for employment. This market type is also a prime one for home office/telecommuters. Even though close in proximity to an urban center, traffic congestion often makes telecommuting an attractive option. Suburban markets have a higher threat of near-term competition. These markets can be attractive to competitive telecommunications providers, especially if there is a significant number of businesses.

A suburban market's demographics typically show a large percentage of young families and young adults. Population growth rates are typically healthy, 2% or above. Technical acceptance is typically very good with higher than average ownership of PC's. In this market, the percentage of business access lines is usually higher than in the other two markets, typically around 25%. Overall, a suburban market is the most attractive (of those described) for a local telecommunications provider.

Figure 3 below shows the percentage of IBS participants, according to market type. The market type percentage breakdown of IBS participants closely parallels national figures for Independents.

Figure 3: IBS Participants by Market Type



## 2. Executive Summary

Here we provide various highlights of the 1997 IBS. First we detail the products and services provided by IBS participants. Then we provide tables which summarize the various product penetration rates. Lastly, we provide highlights from the body of the IBS report.

### 2.1 Services Provided by Participants

The tables below show the services offered by IBS participants. Overall, the data clearly shows that Independents continue to move towards becoming full service providers of telecommunications products and services. The days of providing POTS only are over. While the vast majority of participants offer custom local area signaling service (CLASS), Internet access, and wireless voice services, nearly half offer long distance, video services, and ISDN.

Table 2: Services Provided by Participants - All Companies

	CLASS	Caller ID, # Only	Caller Name & Number	Internet Access	Long Dist.	CLEC	ISDN	xDSL	Video Svcs.	Cellular	PCS	Paging
Offer Now	85.7%	81.1%	52.5%	85.5%	48.4%	10.3%	45.6%	23.6%	47.5%	68.9%	16.9%	64.5%
Plan Soon	12.7%	15.1%	40.7%	9.7%	29.0%	60.5%	26.1%	30.9%	14.8%	3.3%	27.1%	11.3%

Table 3: Services Provided by Participants - by Market Type

	CLASS	Caller ID, # Only	Caller Name & Number	Internet Access	Long Dist.	CLEC	ISDN	xDSL	Video Svcs.	Cellular	PCS	Paging
<b>Rural</b>												
Offer Now	77.8%	75.0%	34.6%	92.3%	51.9%	4.0%	44.0%	29.2%	55.6%	77.8%	12.0%	63.0%
Plan Soon	18.5%	20.8%	57.7%	3.8%	29.6%	64.0%	21.0%	16.7%	7.4%	0.0%	20.0%	11.1%
<b>Semi-Rural</b>												
Offer Now	86.4%	77.8%	63.2%	86.4%	42.9%	9.5%	36.6%	15.8%	47.6%	61.9%	14.3%	76.2%
Plan Soon	13.6%	11.1%	36.8%	4.5%	23.8%	57.1%	41.5%	42.1%	14.3%	9.5%	33.3%	4.8%
<b>Suburban</b>												
Offer Now	93.8%	84.6%	60.8%	75.0%	43.8%	21.4%	57.1%	21.4%	40.0%	53.3%	26.7%	50.0%
Plan Soon	6.3%	7.7%	18.8%	25.0%	31.3%	50.0%	25.7%	35.7%	26.7%	0.0%	20.0%	18.8%

Table 4: Services Provided by Participants - by Company Size

	CLASS	Caller ID, # Only	Caller Name & Number	Internet Access	Long Dist.	CLEC	ISDN	xDSL	Video Svcs.	Cellular	PCS	Paging
<b>Small</b>												
Offer Now	64.7%	62.5%	31.3%	76.5%	18.8%	7.1%	35.6%	6.7%	58.6%	54.7%	5.9%	43.8%
Plan Soon	29.4%	31.3%	56.3%	17.6%	37.5%	64.3%	23.8%	13.3%	11.8%	5.9%	23.5%	12.5%
<b>Medium</b>												
Offer Now	90.6%	80.8%	54.8%	90.3%	53.1%	3.2%	56.7%	27.6%	46.9%	65.6%	13.3%	65.6%
Plan Soon	9.4%	11.5%	38.7%	3.2%	28.1%	64.5%	30.0%	27.6%	12.5%	3.1%	30.0%	12.5%
<b>Large</b>												
Offer Now	93.8%	92.3%	71.4%	87.5%	62.5%	26.7%	63.2%	30.8%	42.9%	71.4%	35.7%	75.0%
Plan Soon	0.0%	0.0%	21.4%	12.5%	18.8%	40.0%	26.3%	53.8%	21.4%	0.0%	21.4%	6.3%

The vast majority of all IBS participants (85.7%) offer CLASS, but only 64.7% of the small companies offer it. A significant percentage of companies offer both Caller ID, number only (81.1%) and Caller ID, name and number (52.5%). All semi-rural market companies either offer or plan to offer Caller ID, name and number (CNAM).

The vast majority of IBS participants (85.5%) also offer Internet access. More rural companies (92.3%) offer Internet access than any other group. In regard to company size, a higher percentage of medium sized companies offer Internet access (90.3%) than do small or large companies.

Offering long distance resale is becoming increasingly popular among Independents. Almost half of the IBS participants (48.4%) offer long distance service. Over three fourths of companies either offer long distance or plan to offer it soon. As expected, fewer small companies (18.8%) offer long distance than the overall average. Currently, small companies tend to have a difficult time generating sufficient minutes of use (MOU) to make long distance a viable product offering at this time.

Some of the most dramatic statistics in these service offering tables have to do with competitive local exchange carrier (CLEC) service. Over 70% of all companies either are CLEC's or plan to soon offer service competitively outside of their own serving area. Significant percentages of suburban market companies (21.4%) and large sized companies (26.7%) are already CLEC's.



Nearly twice as many companies offer Integrated Services Digital Network (ISDN) than Digital Subscriber Line technology (xDSL). Even though ISDN technology has been available for several years, over one fourth of the participants still plan to offer this service soon. Even more companies (30.9%) plan to offer xDSL technology sometime soon. It is significant, though, that almost half (45.5%) of the participants have no plans to offer xDSL service.

Nearly half of the participants (47.5%) offer video entertainment services - either traditional wireline cable TV or Direct Broadcast Satellite (DBS). The percentage of companies offering video services increases from suburban to rural and large to small companies.

Wireless services - cellular, personal communications service (PCS), and paging - are in a dramatic growth mode. Independents have been very active in their efforts to offer wireless services to their customers. For example, over 65% of the participants currently offer cellular service. A significant percentage of IBS participants either offer PCS (16.9%) or have plans to in the near future (27.1%). Paging is also a popular wireless service offered by IBS participants (64.5%).

## *2.2 Summary of Average Penetration Rates*

Below is a table summarizing the average penetration rates for all the IBS participants and then for the various company groups (small, medium, semi-rural, etc.). We analyze the data further in the body of the report, but there are a few broad observations worth noting here.

When compared to the last issue of the IBS, the penetration rates for all companies have slightly increased for nearly every product. All Custom Calling and CLASS product penetrations have increased as well as the numbers for Wire Maintenance and additional lines.

Call Waiting and Caller ID by far have the highest penetration rates for Custom Calling and CLASS, respectively. CNAM has a slightly higher penetration rate than Caller ID,

number only. The results show that customers are willing to pay a little extra to add the name feature to Caller ID.

The overall Voice Mail penetration among IBS participants is 5.8%, compared to 6.3% in the last edition. There was also a very slight decrease in Internet access penetration (0.1%) when compared to the last edition. Currently, Internet access penetration is 7.0%.

**Table 5: Summary of Average Penetration Rates**

	Overall	Rural	Semi-Rural	Suburban	Small	Medium	Large
<b>Custom Calling</b>	41.7%	33.8%	48.0%	43.6%	36.5%	39.3%	45.0%
Call Waiting	29.4%	24.0%	32.2%	32.3%	24.9%	28.4%	31.4%
Cancel Call Waiting	0.3%	0.4%	0.2%	0.2%	0.1%	0.5%	0.1%
Call Forwarding	5.3%	4.1%	5.9%	6.1%	4.6%	5.7%	5.2%
Speed Dial	2.2%	1.8%	2.8%	1.9%	3.2%	2.2%	1.9%
Three-Way Calling	3.0%	2.4%	3.6%	3.1%	3.7%	2.9%	2.6%
<b>CLASS Features</b>	16.7%	15.0%	18.1%	16.9%	12.9%	15.2%	18.5%
Caller ID, Number Only	5.0%	4.7%	5.5%	4.6%	4.3%	5.4%	4.7%
Caller Name & Number	6.5%	7.0%	7.2%	5.5%	6.2%	7.1%	6.2%
Last Call Return	3.1%	2.6%	3.3%	3.5%	1.8%	2.0%	4.2%
Selective Call Forwarding	0.5%	0.1%	0.6%	0.7%	0.2%	0.1%	0.8%
Selective Call Rejection	1.1%	0.4%	0.9%	1.9%	0.3%	0.5%	1.6%
<b>Voice Mail</b>	5.8%	4.3%	6.0%	6.6%	5.0%	6.1%	5.8%
<b>Wire Maintenance</b>	51.3%	56.4%	45.3%	55.0%	60.9%	47.1%	52.5%
<b>Additional Lines</b>	9.2%	13.8%	8.3%	8.3%	13.1%	9.6%	8.8%
<b>Internet Access</b>	7.0%	8.3%	5.2%	5.8%	10.5%	9.7%	5.5%

### 2.3 Study Result Highlights

The 1997 IBS contains a vast amount of information. Following are some of the highlights from this year's study:

- Most IBS participants are continuing the trend towards full service provisioning. Independents continue to diversify into Internet access, long distance, high speed data, and wireless services.
- CLEC plans are also in the works for most IBS participants. Where only 10.3% of participants are currently CLEC's, 60.5% of the companies have plans to offer service competitively.

- Enhanced services penetration rates vary greatly from company to company. Marketing the range of enhanced services is more important than ever to maximize non-regulated revenue. Voice Mail, Call Waiting, and Caller ID continue to provide the greatest revenue opportunities.
- The marketing of additional lines presents an excellent opportunity for Independents to increase revenue. Over half of the residents who request an additional phone line do so for Internet access.
- The vast majority of participants that are Internet Service Providers (ISP's) now face local access competition. Those that have competition are showing better Internet penetration than those who do not face competition. Marketing Internet access service to EAS and/or local calling areas provides an excellent opportunity to gain new customers and maximize Internet access revenue. Still, nearly half of the participant ISP's are losing money.
- Simplification is the trend in long distance rates. Most participants that offer long distance offer customers the option of a one-rate plan. IBS participants should concentrate on gaining the best long distance usage customers (in terms of toll), not just any customers.
- Wireless voice services are in a dramatic growth mode. Most participants already offer cellular service. It is unknown what effects PCS will have on rural markets (e.g., the threat of wireless local loop or taking away cellular customers).
- Participants have healthy cable TV penetration rates. HBO is the best penetrating premium channel, as is the case nationwide. Higher retail prices for HBO do not seem to negatively impact its penetration rates. Current cable TV plant is fairly low bandwidth (most 300 MHz). New cable TV plant will increase channel capacity (most is planned to be 550 MHz), but is still is not "state-of-the-art."
- In five years, nearly all IBS participants expect to face competition for local dial tone customers. Over half of participants expect to lose 10% or less of their customers in three years time.

- Nearly half of IBS participants do not have a marketing plan. Bill inserts and direct mailings are the most effective marketing and customer communication media.

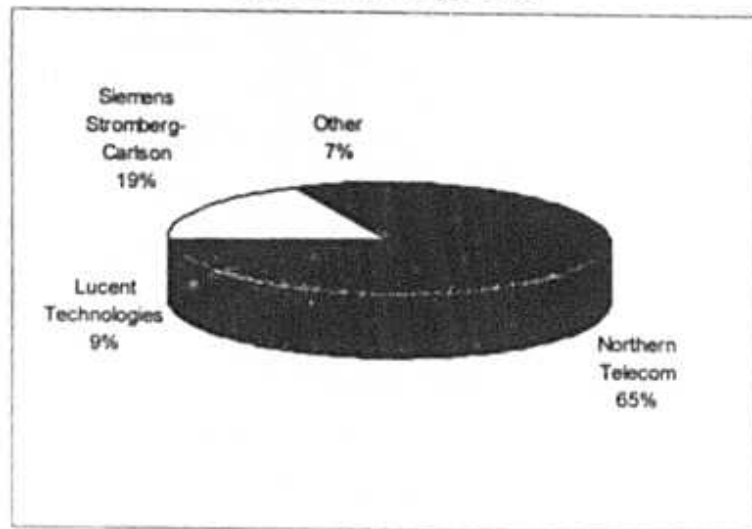
### 3. General Telephone Operations

This is the first issue of the IBS that we have devoted a section to general telephone operations. We foresee this type of section expanding in future editions of the IBS, depending on whether subscribers find that it contains useful information.

#### 3.1 *Switch Type*

The dominant switch manufacturer for IBS participants is Northern Telecom, used by 65% of the companies. The remainder of the market share for switches was divided between Siemens Stromberg-Carlson (19%), Lucent Technologies (9%), and others (7%).

Figure 4: Switch Type Used



#### 3.2 *Telephony Fiber*

Table 6 below shows the median number of miles of telephony fiber among IBS participants. For example, the median from among all IBS participants was 89.0 miles of telephony fiber. (We used median - the middle value - here instead of average because data from a few companies skewed the averages in the high direction. In this case, median provides a better representation of the data.)

According to market type, the rural companies have the highest median miles of telephony fiber. The median value decreases from rural to semi-rural to suburban.

**Table 6: Average Miles of Telephony Fiber - by Market Type**

Overall	Rural	Semi-Rural	Suburban
89.0	169.5	89.0	42.9

When examined according to company size, the data shows that large companies have the highest median number of miles of telephony fiber. The median for both small and medium sized companies is dramatically lower.

**Table 7: Average Miles of Telephony Fiber - by Company Size**

Overall	Small	Medium	Large
89.0	56.0	70.6	300.0

### 3.3 First Phone Line Prices

The local loop is at the heart of a LEC's operations. While additional services - from enhanced services to Internet access to long distance resale - are important to all Independents, the local loop serves as the core of an Independent's business.

Here we provide data concerning first phone line prices - broken down between installation and monthly recurring charges for the different market types and company sizes.

Table 8 below shows the first phone line prices for installation and monthly charges, for both business and residential customers. As one would expect, the business rates are higher than residential rates, across the board.

There is a wide range of prices for both installation and recurring monthly rates. The low installation charges (e.g., \$8.50 for business and \$7.00 for residential) appear to be priced well below actual cost.

**Table 8: First Phone Line Prices - All Companies**

	Business		Residential	
	Installation	Monthly Rate	Installation	Monthly Rate
Average	\$37.20	\$20.02	\$32.95	\$11.96
High	\$87.77	\$42.49	\$80.00	\$23.62
Low	\$8.50	\$8.30	\$7.00	\$4.87

The following table breaks down the averages only (not highs and lows) for first phone line installation and monthly charges, according to market type. The averages are all within a fairly small range, without a great deal of variance. The greatest difference among the averages is for the business monthly recurring rate where there is a difference of \$4.44 between suburban and rural market companies.

**Table 9: Average First Phone Line Prices - by Market Type**

	Business		Residential	
	Installation	Monthly Rate	Installation	Monthly Rate
Rural	\$36.86	\$18.88	\$34.24	\$11.61
Semi-Rural	\$36.43	\$19.28	\$31.69	\$12.10
Suburban	\$38.98	\$23.32	\$32.52	\$12.34

Table 10 shows the averages, according to company size, for first phone line installation and monthly charges. Again, there is not a great deal of variance. The greatest disparity among the averages is also for the business monthly recurring rate where there is a difference of \$4.87 between large and small companies.

**Table 10: Average First Phone Line Prices - by Company Size**

	Business		Residential	
	Installation	Monthly Rate	Installation	Monthly Rate
Small	\$36.02	\$16.40	\$32.15	\$10.85
Medium	\$36.63	\$21.13	\$32.50	\$12.67
Large	\$39.54	\$21.27	\$34.64	\$11.69

### 3.4 Additional Line Prices

We use the term "additional lines" instead of the more common "second lines" terminology because many households today have *more* than two lines. Calling them "second lines" limits the number in customer's minds.

Consumers' telecommunications needs vary. Some people need an Additional Line for Internet access. Others need an additional voice line (for teenagers) where others need additional phone lines for a home office (where there might be both voice and data needs).

The table below shows the average, high, and low prices for additional phone lines - both installation and monthly charges - for all IBS participants. The overall *average* rates for additional lines are very comparable with local loop prices. Many companies have the

same or very similar rates for additional lines as for first phone lines. The biggest difference between the first phone line and additional line rates is in the installation charges.

**Table 11: Additional Phone Line Prices - All Companies**

	Business		Residential	
	Installation	Monthly Rate	Installation	Monthly Rate
Average	\$35.32	\$20.00	\$32.58	\$11.87
High	\$119.00	\$42.49	\$120.00	\$23.62
Low	\$8.50	\$8.30	\$7.00	\$4.87

Table 12 below shows the *averages only* (not highs and lows) for additional phone line installation and monthly charges, according to market type. The averages are fairly close, as they were for first phone lines. The biggest differences are for installation prices where the average prices for suburban market companies are several dollars more than rural and semi-rural market companies.

**Table 12: Additional Phone Line Prices - by Market Type**

	Business		Residential	
	Installation	Monthly Rate	Installation	Monthly Rate
Rural	\$33.89	\$18.98	\$32.08	\$11.61
Semi-Rural	\$33.89	\$19.19	\$30.96	\$11.96
Suburban	\$40.67	\$23.43	\$36.48	\$12.25

Table 13 presents the average additional phone line installation and monthly charges, according to company size. An interesting pattern appears in the data. Where small companies have the highest installation rates for both business and residential, they have the lowest recurring monthly rate.

**Table 13: Additional Phone Line Prices - by Company Size**

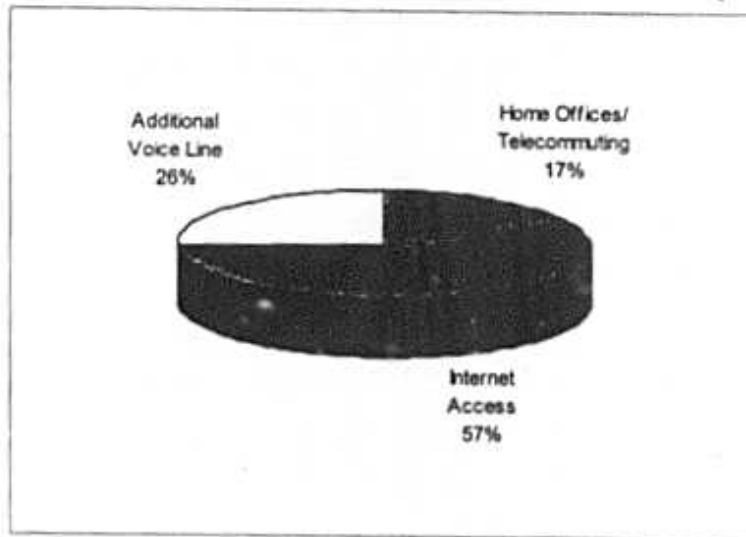
	Business		Residential	
	Installation	Monthly Rate	Installation	Monthly Rate
Small	\$40.56	\$16.61	\$36.70	\$10.85
Medium	\$33.19	\$21.26	\$29.92	\$12.47
Large	\$33.97	\$21.11	\$33.70	\$11.78

In the IBS data request, we asked participants the reasons why they find customers requesting additional lines. Figure 5 below illustrates the *primary* reason why customers request additional lines. For example, 57% of the IBS participants ranked Internet access as



the number one reason that customers are requesting additional lines. Use of an additional voice line was next (26%) followed by use in a home office/telecommuting environment last (17%).

Figure 5: Reasons Customers Request Additional Lines - All Companies



#### 4. Enhanced Services

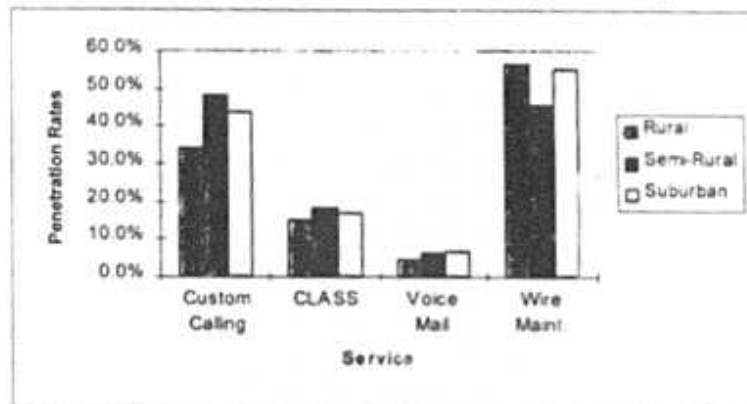
This section provides valuable, in-depth penetration and pricing information for the range of enhanced services including Custom Calling, CLASS, Voice Mail and Wire Maintenance.

As the data shows, Call Waiting and Caller ID (both number only and name and number) are by far the highest penetrating Custom Calling and CLASS features. Because of this, they are referred to as the "anchor services" for Custom Calling and CLASS products.

In this section, we have provided some charts which show penetration rates for Custom Calling, CLASS, Voice Mail, and Wire Maintenance, according to market type and company size. The Custom Calling and CLASS penetration rates were generated by taking the total number of Custom Calling and CLASS features (units) sold as a percentage of access lines. For example if among 100 access lines, 27 had Call Waiting, six had Call Forwarding, three had Speed Dial, and two had Three-Way Calling (i.e., 38 total units), the total Custom Calling penetration would be 38%.

Figure 6 below shows that according market type, semi-rural companies have the highest Custom Calling and CLASS penetration rates. Voice Mail penetrations increase slightly from rural to semi-rural to suburban market type companies. For Wire Maintenance, rural companies have the highest average penetration rate, followed by suburban companies.

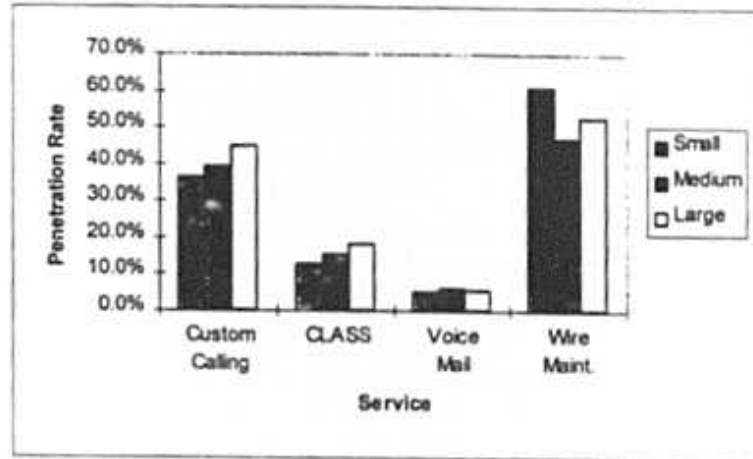
Figure 6: Average Penetration Rates - by Market Type



	Custom Calling	CLASS	Voice Mail	Wire Maint.
Rural	33.8%	15.0%	4.3%	56.4%
Semi-Rural	48.0%	18.1%	6.0%	45.3%
Suburban	43.6%	16.9%	6.6%	55.0%

Figure 7 shows that according to company size, Custom Calling and CLASS penetrations increase from small to medium to large sized companies. Voice Mail penetrations for the different company sizes are very close, but medium sized companies have the highest penetration rates. For Wire Maintenance, small companies have the highest penetration rates, followed by large and then medium sized companies.

Figure 7: Average Penetration Rates - by Company Size



	Custom Calling	CLASS	Voice Mail	Wire Maint.
Small	36.5%	12.9%	5.0%	60.9%
Medium	39.3%	15.2%	6.1%	47.1%
Large	45.0%	18.5%	5.8%	52.5%

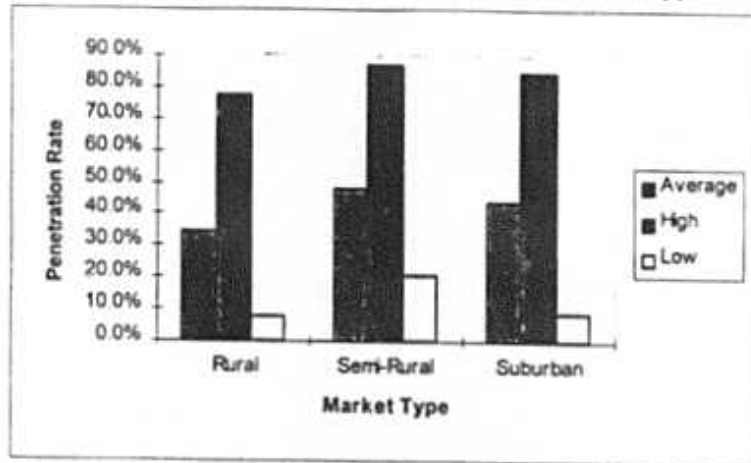
#### 4.1 Custom Calling - Penetration Rates & Prices

Here we provide details - for both penetrations and prices - on Custom Calling products. First we look at some overall data on the Custom Calling features we measured - Call Waiting, Cancel Call Waiting, Call Forwarding, Speed Dial (8 and 30 numbers), and Three-Way Calling. Then we examine each Custom Calling feature in depth.

##### 4.1.1 Custom Calling Penetration Rates

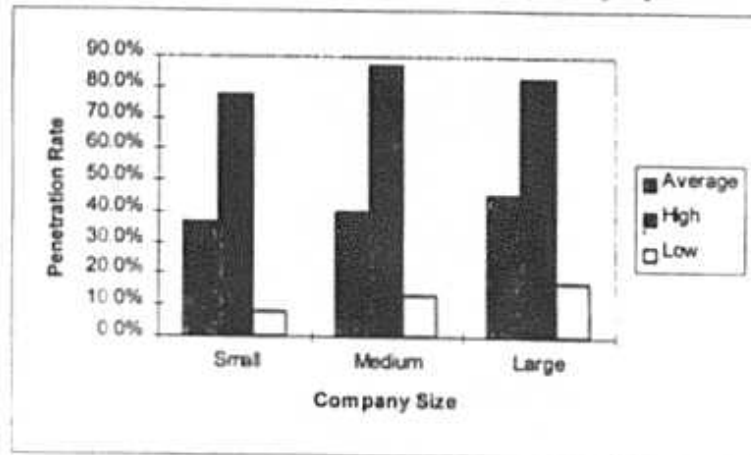
Custom Calling penetration varies dramatically - as low as 8.0% (for one small, rural company) and as high as 87.2% (for one medium, semi-rural company).

Figure 8: Custom Calling Penetration - by Market Type



	Rural	Semi-Rural	Suburban
<b>Average</b>	34.3%	48.0%	43.6%
<b>High</b>	77.6%	87.2%	84.7%
<b>Low</b>	8.0%	20.6%	9.0%

Figure 9: Custom Calling Penetration - by Company Size



	Small	Medium	Large
<b>Average</b>	36.5%	39.8%	45.0%
<b>High</b>	77.6%	87.2%	82.9%
<b>Low</b>	8.0%	13.1%	17.2%

The two tables below break down the average penetrations for the individual Custom Calling products, according to market type and company size. The penetration for overall Custom Calling is also included for comparative purposes.

These figures illustrate the differences between Call Waiting and the rest of the Custom Calling Products. Call Waiting is, by far, the highest penetrating Custom Calling product. The next highest penetrating product - Call Forwarding - is still dwarfed by Call Waiting. We did not request information about the other Custom Calling products because they typically have such low penetration rates.

**Table 14: Average Custom Calling Features Penetration - by Market Type**

	Custom Calling	Call Waiting	Cancel Call Waiting	Call Forwarding	Speed Dial	3-Way Calling
Rural	34.3%	24.0%	0.4%	4.1%	1.8%	2.4%
Semi-Rural	48.0%	32.2%	0.2%	5.9%	2.8%	3.6%
Suburban	43.6%	32.3%	0.2%	6.1%	1.9%	3.1%

**Table 15: Average Custom Calling Features Penetration - by Company Size**

	Custom Calling	Call Waiting	Cancel Call Waiting	Call Forwarding	Speed Dial	3-Way Calling
Small	36.5%	24.9%	0.1%	4.6%	3.2%	3.7%
Medium	39.8%	28.4%	0.5%	5.7%	2.2%	2.9%
Large	45.0%	31.4%	0.1%	5.2%	1.9%	2.8%

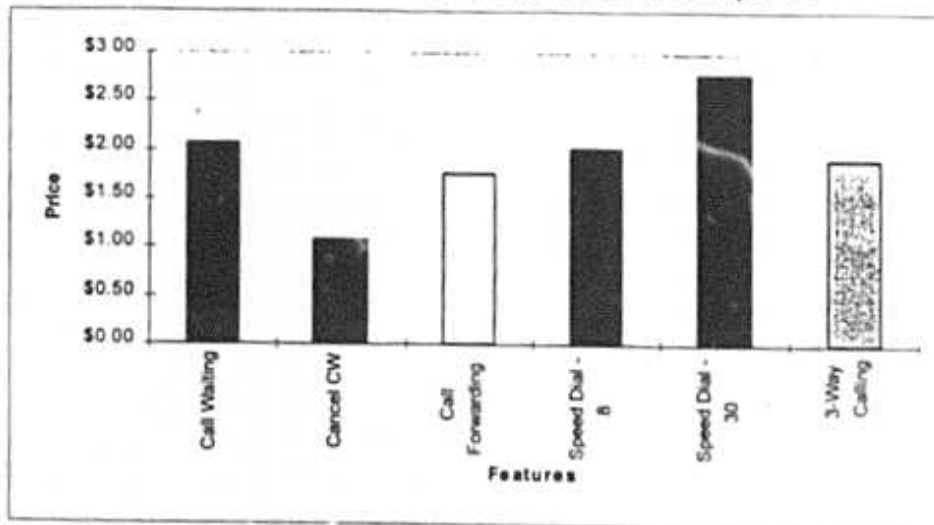
#### 4.1.2 Custom Calling Prices

Figure 10 below shows the average prices for all companies for the individual Custom Calling features. The following two figures break out the prices according to market type and company size.

Each of the Call Waiting average prices hovers slightly above \$2.00. The prices for Speed Dial 8 and Three-Way Calling were comparable to Call Waiting. Cancel Call Waiting is the lowest priced product at around \$1.00.

Half of the participants bundle Cancel Call Waiting with Call Waiting. For the purpose of the IBS data, these companies' Cancel Call Waiting prices were considered to be \$0.00. The average Call Forwarding price was slightly below \$2.00. The highest priced Custom Calling feature was Speed Dial 30.

Figure 10: Average Custom Calling Prices - All Companies



Call Waiting	Cancel Call Waiting	Call Forwarding	Speed Dial - 8#s	Speed Dial - 30#s	3-Way Calling
\$2.07	\$1.08	\$1.77	\$2.02	\$2.79	\$1.93

Table 16: Average Custom Calling Prices - by Market Type

	Call Waiting	Cancel Call Waiting	Call Forwarding	Speed Dial - 8 #s	Speed Dial - 30 #s	3-Way Calling
Rural	\$2.05	\$1.00	\$1.73	\$1.95	\$2.92	\$1.81
Semi-Rural	\$2.05	\$1.07	\$1.80	\$2.14	\$2.50	\$2.09
Suburban	\$2.18	\$1.16	\$1.85	\$2.10	N/A	\$2.06

Table 17: Average Custom Calling Prices - by Company Size

	Call Waiting	Cancel Call Waiting	Call Forwarding	Speed Dial - 8	Speed Dial - 30	3-Way Calling
Small	\$2.02	\$0.93	\$1.68	\$1.92	\$3.25	\$1.79
Medium	\$2.02	\$0.98	\$1.86	\$2.09	\$2.65	\$2.03
Large	\$2.53	\$1.58	\$1.97	\$2.34	N/A	\$2.44

#### 4.1.3 Call Waiting & Cancel Call Waiting

Call Waiting penetrations differ among companies from a low of 4.2% for one small, suburban company, to 53.7% for a medium, rural company. The averages for both semi-rural and suburban market companies are well above the average for rural market companies. The overall average penetration for Call Waiting is 29.4%.

When it comes to company size, the large companies have the highest Call Waiting penetrations, followed by the medium and small company averages, in that order.

**Table 18: Call Waiting Penetration - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	24.0%	32.2%	32.3%
<b>High</b>	53.7%	43.7%	53.4%
<b>Low</b>	5.6%	16.0%	4.2%

**Table 19: Call Waiting Penetration - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	24.9%	28.4%	31.4%
<b>High</b>	47.4%	53.7%	53.4%
<b>Low</b>	4.2%	10.4%	16.1%

As for prices, the Call Waiting average for both rural and semi-rural companies is \$2.05, with the suburban market average price slightly higher. The high and low prices vary greatly, from \$8.50 to free! Only a few of the participants give Call Waiting away free to its customers. The \$8.50 price is for business customers.

The average Call Waiting prices for both small and medium sized companies is the same - \$2.02 - followed by the large company price of \$2.53. The Call Waiting average prices rise from rural to suburban market type.

**Table 20: Call Waiting Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$2.05	\$2.05	\$2.18
<b>High</b>	\$6.00	\$5.00	\$8.50
<b>Low</b>	\$0.75	\$0.00	\$0.95

**Table 21: Call Waiting Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$2.02	\$2.02	\$2.53
<b>High</b>	\$6.00	\$4.00	\$8.50
<b>Low</b>	\$0.00	\$0.75	\$1.00

Because half of the companies provide Cancel Call Waiting free with Call Waiting, we did not break down the penetration and pricing data according to company size and market type. At the beginning of this section we presented the overall Cancel Call Waiting averages for both penetration and pricing (see Table 5 and Figure 10).

#### 4.1.4 Call Forwarding

The average Call Forwarding penetration rates for both market types and company sizes are fairly close - within two percentage points of each other. Again, there is a great discrepancy between the highs and lows - with lows below 1% to a high of 20.1%. The overall Call Forwarding penetration average is 5.3%.

**Table 22: Call Forwarding Penetration - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	4.1%	5.9%	6.1%
<b>High</b>	15.7%	17.7%	20.1%
<b>Low</b>	0.5%	1.1%	0.6%

**Table 23: Call Forwarding Penetration - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	4.6%	5.7%	5.2%
<b>High</b>	12.6%	20.1%	16.3%
<b>Low</b>	0.5%	1.1%	0.6%

As for price, the different company type averages for Call Forwarding did not vary greatly. The average Call Forwarding prices do increase slightly from rural to suburban market types and small to large companies. The overall average price for Call Forwarding was \$1.77. One company charges as much as \$4.50 for Call Forwarding while one participating company gives this feature away free.

**Table 24: Call Forwarding Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$1.73	\$1.80	\$1.85
<b>High</b>	\$4.50	\$3.30	\$3.90
<b>Low</b>	\$0.75	\$0.00	\$0.95

**Table 25: Call Forwarding Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$1.68	\$1.86	\$1.97
<b>High</b>	\$4.50	\$3.75	\$3.50
<b>Low</b>	\$0.00	\$0.75	\$1.00



#### 4.1.5 Speed Dial

Because many of the IBS participants could not report their customer count data separately for Speed Dial 8 and 30, the penetration data below is for both of these features combined. Even with the penetration data for both products combined, the average penetrations are fairly low.

Some companies, though, are doing very well with this product, noted by the penetration "highs" for both market type and company size. More companies, though, are performing closer to the low penetration rates than the high ones.

**Table 26: Speed Dial Penetration - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	1.8%	2.8%	1.9%
<b>High</b>	15.6%	16.1%	11.1%
<b>Low</b>	0.04%	0.1%	0.1%

**Table 27: Speed Dial Penetration - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	3.2%	2.2%	1.9%
<b>High</b>	15.6%	16.1%	9.4%
<b>Low</b>	0.1%	0.04%	0.1%

##### 4.1.5.1 Speed Dial - 8 Prices

Most companies were able to provide pricing data separately for Speed Dial 8 and 30. Therefore, we have broken out the data for both product options.

The overall Speed Dial 8 price is \$2.02. The company and market type averages do not vary greatly from this amount. The "highs" for Speed Dial 8 are well above the average prices, though.

**Table 28: Speed Dial 8 Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$1.95	\$2.14	\$2.10
<b>High</b>	\$5.10	\$6.00	\$4.75
<b>Low</b>	\$0.70	\$0.80	\$1.00

**Table 29: Speed Dial 8 Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$1.92	\$2.09	\$2.34
<b>High</b>	\$5.10	\$4.75	\$6.00
<b>Low</b>	\$0.70	\$1.00	\$1.00

#### 4.1.5.2 Speed Dial - 30 Prices

For Speed Dial 30, the overall average price is \$2.79. There was insufficient data to develop average Speed Dial 30 prices for both the suburban market type and large company categories.

**Table 30: Speed Dial 30 Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$2.92	\$2.50	N/A
<b>High</b>	\$5.00	\$3.00	N/A
<b>Low</b>	\$1.50	\$1.50	N/A

**Table 31: Speed Dial 30 Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$3.25	\$2.65	N/A
<b>High</b>	\$3.50	\$5.00	N/A
<b>Low</b>	\$3.00	\$1.50	N/A

#### 4.1.6 Three-Way Calling

Three-Way Calling is another historically low penetrating Custom Calling feature. The "company lows" are very low - some at a tenth of one percent. A few companies are experiencing double digit penetration rates for Three-Way Calling, though. The overall average penetration rate for Three-Way Calling is 3.0%. Double digit penetrations are the exception and not the rule.

**Table 32: Three-Way Calling Penetration - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	2.4%	3.6%	3.1%
<b>High</b>	13.9%	15.8%	14.5%
<b>Low</b>	0.1%	0.1%	0.1%

**Table 33: Three-Way Calling Penetration - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	3.7%	2.9%	2.8%
<b>High</b>	13.9%	15.8%	12.0%
<b>Low</b>	0.2%	0.1%	0.1%

The average Three-Way Calling price for all companies is \$1.93. One company provides this product free, while another charges \$6.00 per month. The market type averages are all fairly close to \$2.00. The company size averages vary more - from \$1.79 for the small company average to \$2.44 for the large company average.

**Table 34: Three-Way Calling Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$1.81	\$2.09	\$2.06
<b>High</b>	\$4.20	\$6.00	\$5.00
<b>Low</b>	\$0.45	\$0.00	\$0.45

**Table 35: Three-Way Calling Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$1.79	\$2.03	\$2.44
<b>High</b>	\$5.00	\$6.00	\$5.00
<b>Low</b>	\$0.00	\$0.45	\$1.00

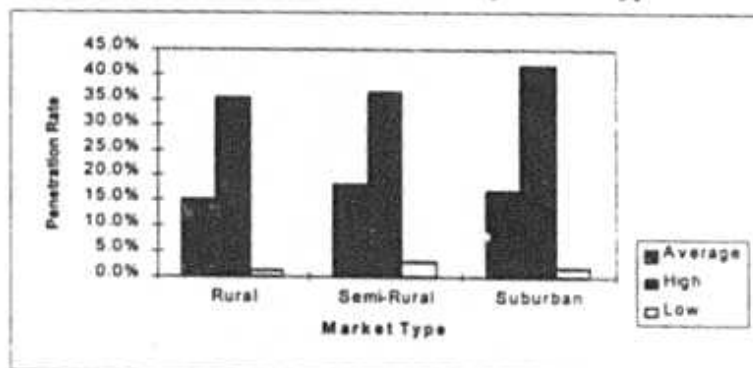
## 4.2 CLASS - Penetration Rates & Prices

As in the Custom Calling section, here we provide both penetration and price details for CLASS products - Caller ID (both number only and name and number delivery), Last Call Return, Selective Call Forwarding, and Selective Call Rejection. We examine each CLASS feature more closely further on in this section.

### 4.2.1 CLASS Penetration Rates

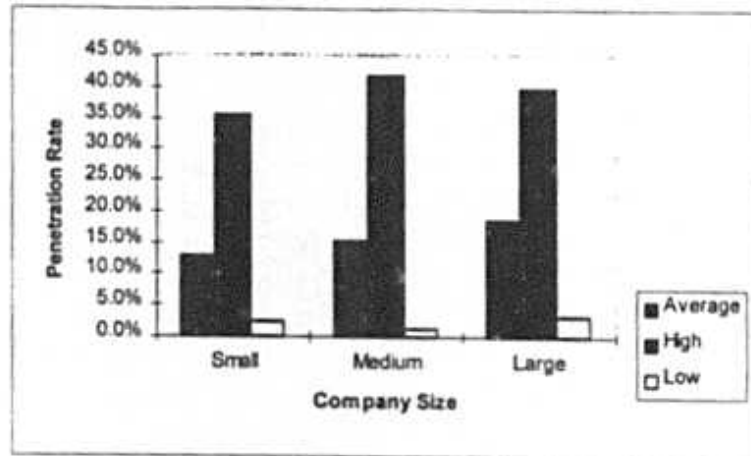
Near the beginning of the Enhanced Services section (in Figure 6 and Figure 7) we examined the average penetration rates for CLASS overall. The next two figures show the average CLASS features penetration rates, according to market type and company size. In addition, the figures show the individual company CLASS penetration highs and lows. The differences are dramatic - as high as 41.8% (for one medium, suburban company) and as low as 1.1% (for a medium, rural company).

Figure 11: CLASS Penetration - by Market Type



	Rural	Semi-Rural	Suburban
<b>Average</b>	15.0%	18.1%	16.9%
<b>High</b>	35.3%	36.4%	41.8%
<b>Low</b>	1.1%	3.0%	1.9%

Figure 12: CLASS Penetration - by Company Size



	Small	Medium	Large
<b>Average</b>	12.9%	15.2%	18.5%
<b>High</b>	35.3%	41.8%	39.6%
<b>Low</b>	2.4%	1.1%	3.4%

The two tables below break down the average penetrations for the individual CLASS products, according to market type and company size.

The figures show the average CLASS features penetrations from highest to lowest in this order: CNAM, Caller ID - number only, Last Call Return, Selective Call Rejection, and Selective Call Forwarding. As with Custom Calling, we did not request information about the other CLASS products because they typically have very low penetration rates.

No one market type has dramatically higher average penetrations than the other two. But, semi-rural companies reported the highest average penetrations for both Caller ID products.

According to company size, medium sized companies had the highest Caller ID penetrations, but not by large margins. Large companies had the highest penetrations for the other three CLASS products.

**Table 36: Average CLASS Features Penetration - by Market Type**

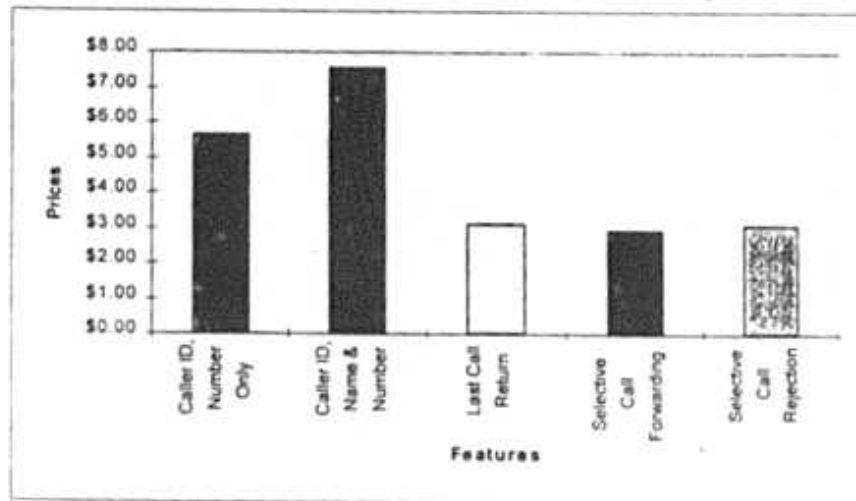
	Caller ID, Number Only	Caller ID, Name & Number	Last Call Return	Selective Call Forwarding	Selective Call Rejection
Rural	4.7%	7.0%	2.6%	0.1%	0.4%
Semi-Rural	5.5%	7.2%	3.3%	0.6%	0.9%
Suburban	4.6%	5.5%	3.5%	0.7%	1.0%

**Table 37: Average CLASS Features Penetration - by Company Size**

	Caller ID, Number Only	Caller ID, Name & Number	Last Call Return	Selective Call Forwarding	Selective Call Rejection
Small	4.3%	6.2%	1.8%	0.2%	0.3%
Medium	5.4%	7.1%	2.0%	0.1%	0.5%
Large	4.7%	6.2%	4.2%	0.8%	1.6%

Figure 13 and Table 38 and Table 39 below show average prices for the individual CLASS features, according to all companies (overall), market type, and company size.

**Figure 13: Average CLASS Features Prices - All Companies**



Caller ID, Number Only	Caller ID, Name & Number	Last Call Return	Selective Call Forwarding	Selective Call Rejection
\$5.63	\$7.55	\$3.11	\$2.91	\$3.08

The averages are surprisingly close. The greatest variance is for CNAM, where there is a difference of \$0.60 between the semi-rural (\$7.25) and suburban (\$7.85) market type averages. Caller ID, number only average prices vary between the \$5.50 and \$6.00 range.

The other three CLASS features measured are very close in price, with the averages around \$3.00.

**Table 38: Average CLASS Features Prices - by Market Type**

	Caller ID, Number Only	Caller ID, Name & Number	Last Call Return	Selective Call Forwarding	Selective Call Rejection
Rural	\$5.49	\$7.51	\$3.09	\$2.81	\$3.06
Semi-Rural	\$5.63	\$7.25	\$2.99	\$3.02	\$3.01
Suburban	\$5.95	\$7.85	\$3.29	\$3.02	\$3.23

**Table 39: Average CLASS Features Prices - by Company Size**

	Caller ID, Number Only	Caller ID, Name & Number	Last Call Return	Selective Call Forwarding	Selective Call Rejection
Small	\$5.82	\$7.78	\$3.04	\$2.79	\$3.02
Medium	\$5.41	\$7.51	\$3.08	\$2.94	\$3.14
Large	\$5.74	\$7.20	\$3.56	\$3.36	\$3.26

## 4.2.2 Caller ID

### 4.2.2.1 Caller ID, Number Only

Caller ID, number only penetrations vary widely. One medium, suburban company has a 31.7% penetration while other companies have less than a 0.1% penetration. Marketing is undoubtedly the biggest factor that affects penetration rates. But, beyond each company's different marketing efforts, or lack thereof, there could be several reasons for the differences in penetration. For example, a company might have recently launched the Caller ID product and not have had time to build up their customer base. Another reason might be that CNAM might overshadow the number only product and keep the penetration down for the latter.

For both the market type and also company size criteria, the middle categories - semi-rural and medium - have the highest average Caller ID, number only penetration, but not by very much (less than one percentage point).

**Table 40: Caller ID, Number Only Penetration - by Market Type**

	<b>Rural</b>	<b>Semi-Rural..</b>	<b>Suburban</b>
<b>Average</b>	4.7%	5.5%	4.6%
<b>High</b>	18.2%	21.3%	31.7%
<b>Low</b>	0.0%	0.0%	0.3%

**Table 41: Caller ID, Number Only Penetration - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	4.3%	5.4%	4.7%
<b>High</b>	18.2%	31.7%	15.7%
<b>Low</b>	0.1%	0.1%	0.0%

Participants' prices for Caller ID, number only range from a low of \$2.50 to a high of \$8.00. The overall average price for this product is \$5.63, which also happens to be the average price among semi-rural companies. The company type averages do not vary a great deal, all ranging from \$5.41 to \$5.95.

**Table 42: Caller ID, Number Only Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$5.49	\$5.63	\$5.95
<b>High</b>	\$7.50	\$8.00	\$7.50
<b>Low</b>	\$2.50	\$2.50	\$3.00

**Table 43: Caller ID, Number Only Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$5.82	\$5.41	\$5.74
<b>High</b>	\$7.50	\$8.00	\$7.50
<b>Low</b>	\$3.00	\$2.50	\$3.50

#### **4.2.2.2 Caller ID, Name and Number**

Caller ID, name and number (CNAM) is the highest penetrating CLASS feature. The overall CNAM penetration is 6.5%. Suburban market companies have the lowest average CNAM penetration (5.5%) while semi-rural market companies have the highest (7.2%). Some companies have very low CNAM penetrations. This is commonly due to either lack of marketing or that the product was recently launched.



**Table 44: Caller ID, Name & Number Penetration - by Market Type**

	Rural	Semi-Rural	Suburban
<b>Average</b>	7.0%	7.2%	5.5%
<b>High</b>	30.4%	22.0%	24.3%
<b>Low</b>	0.4%	1.4%	2.4%

**Table 45: Caller ID, Name & Number Penetration - by Company Size**

	Small	Medium	Large
<b>Average</b>	6.2%	7.1%	6.2%
<b>High</b>	29.9%	30.4%	25.3%
<b>Low</b>	1.4%	0.4%	3.7%

In addition to being the highest penetrating CLASS feature, Caller Name and Number is by far the most expensive. Each company type has a high price of \$10.00, while the low price is \$3.50 for a large rural company. The overall CNAM average price is \$7.55.

**Table 46: Caller ID, Name & Number Prices - by Market Type**

	Rural	Semi-Rural	Suburban
<b>Average</b>	\$7.51	\$7.25	\$7.85
<b>High</b>	\$10.00	\$10.00	\$10.00
<b>Low</b>	\$3.50	\$4.50	\$4.95

**Table 47: Caller ID, Name & Number Prices - by Company Size**

	Small	Medium	Large
<b>Average</b>	\$7.78	\$7.51	\$7.20
<b>High</b>	\$10.00	\$10.00	\$10.00
<b>Low</b>	\$4.50	\$4.00	\$3.50

#### 4.2.3 Last Call Return

Last Call Return is one of the lower penetrating CLASS features. Still, a few companies have achieved double digit penetration rates, one as high as 16.4%. The low penetration rates are very low - as low as 0.03%. The overall Last Call Return average penetration rate is 3.1%.

**Table 48: Last Call Return Penetration - by Market Type**

	Rural	Semi-Rural	Suburban
<b>Average</b>	2.6%	3.3%	3.5%
<b>High</b>	8.8%	16.4%	13.7%
<b>Low</b>	0.1%	0.03%	0.04%

**Table 49: Last Call Return Penetration - by Company Size**

	Small	Medium	Large
<b>Average</b>	1.8%	2.0%	4.2%
<b>High</b>	8.8%	16.4%	13.7%
<b>Low</b>	0.03%	0.1%	0.1%

The overall average price for Last Call Return is \$3.11 although one company charges as much as \$6.00 and another company charges as low as \$0.50. The company type averages are very close to the overall average, except for the large company average which is \$3.56.

**Table 50: Last Call Return Prices - by Market Type**

	Rural	Semi-Rural	Suburban
<b>Average</b>	\$3.09	\$2.99	\$3.29
<b>High</b>	\$4.50	\$4.50	\$6.00
<b>Low</b>	\$0.75	\$1.00	\$0.50

**Table 51: Last Call Return Prices - by Company Size**

	Small	Medium	Large
<b>Average</b>	\$3.04	\$3.08	\$3.56
<b>High</b>	\$5.00	\$6.00	\$5.00
<b>Low</b>	\$0.75	\$0.50	\$2.25

#### 4.2.4 Selective Call Forwarding

Selective Call Forwarding has the lowest penetration rate of any CLASS feature measured in the IBS. Although none of the participants has achieved a double digit penetration, one company has a high of 8.7%. The lows are extremely low - three thousandths of one percent! The overall average for Selective Call Forwarding is 0.5%. None of the company type categories has an average penetration of over 1.0%.

**Table 52: Selective Call Forwarding Penetration - by Market Type**

	Rural	Semi-Rural	Suburban
<b>Average</b>	0.1%	0.6%	0.7%
<b>High</b>	1.8%	4.7%	8.7%
<b>Low</b>	0.01%	0.01%	0.003%

**Table 53: Selective Call Forwarding Penetration - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	0.2%	0.1%	0.8%
<b>High</b>	0.7%	1.8%	8.7%
<b>Low</b>	0.02%	0.01%	0.003%

The overall average price for Selective Call Forwarding is \$2.91. The high of any participant is \$6.00 while the low is \$0.75. The company category averages (market type and company size) are all fairly close to \$3.00.

**Table 54: Selective Call Forwarding Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$2.81	\$3.02	\$3.02
<b>High</b>	\$5.00	\$4.50	\$6.00
<b>Low</b>	\$0.75	\$1.50	\$1.00

**Table 55: Selective Call Forwarding Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$2.79	\$2.94	\$3.36
<b>High</b>	\$4.00	\$6.00	\$4.50
<b>Low</b>	\$0.75	\$1.00	\$2.25

#### 4.2.5 Selective Call Rejection

The overall penetration rate for Selective Call Rejection is 1.1%. Only the suburban market type and the large company averages exceed 1.0%. Small companies average only a 0.3% penetration rate. One large suburban company achieved an 8.9% penetration rate. The low penetration rates, as for Selective Call Forwarding, are very low.

**Table 56: Selective Call Rejection Penetration - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	0.4%	0.9%	1.9%
<b>High</b>	2.9%	4.7%	8.9%
<b>Low</b>	0.01%	0.02%	0.02%

**Table 57: Selective Call Rejection Penetration - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	0.3%	0.5%	1.6%
<b>High</b>	2.7%	2.9%	8.9%
<b>Low</b>	0.1%	0.01%	0.1%

The overall average price for Selective Call Rejection is \$3.08. All of the company category averages are very close to this figure. The prices charged for Selective Call Rejection range from a low of \$0.75 to a high of \$6.00.

**Table 58: Selective Call Rejection Prices - by Market Type**

	<b>Rural</b>	<b>Semi-Rural</b>	<b>Suburban</b>
<b>Average</b>	\$3.06	\$3.01	\$3.23
<b>High</b>	\$5.00	\$5.00	\$6.00
<b>Low</b>	\$0.75	\$1.00	\$1.00

**Table 59: Selective Call Rejection Prices - by Company Size**

	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Average</b>	\$3.02	\$3.14	\$3.26
<b>High</b>	\$4.50	\$6.00	\$5.00
<b>Low</b>	\$0.75	\$1.00	\$1.00

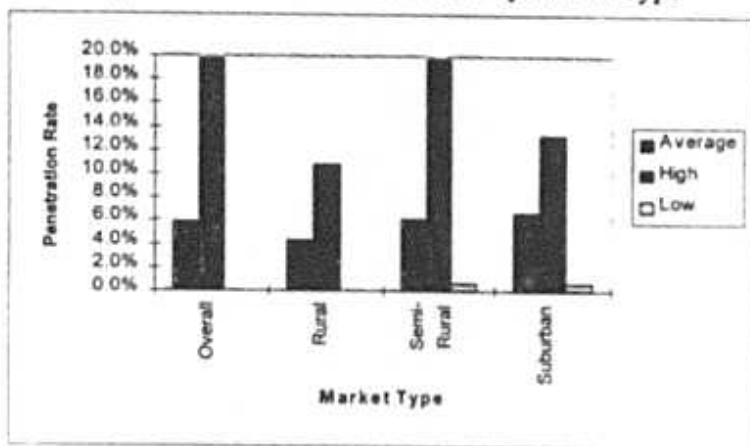
### 4.3 Voice Mail - Penetration Rates & Prices

Voice Mail continues to be one of the highest penetrating enhanced services offered by telephone companies. With the typical price being in the range of \$5.00 or more, Voice Mail has the best potential revenue opportunity of all of the enhanced services (when combined with its industry average penetration rates).

Almost 20% of IBS subscribers have achieved double digit penetration rates for Voice Mail. This shows that strong Voice Mail penetration rates are possible for Independents to achieve.

Figure 14 and Figure 15 show average Voice Mail penetrations, along with company highs and lows, according to market type and company size. The overall Voice Mail penetrations are also given for comparative purposes.

Figure 14: Voice Mail Penetration - by Market Type

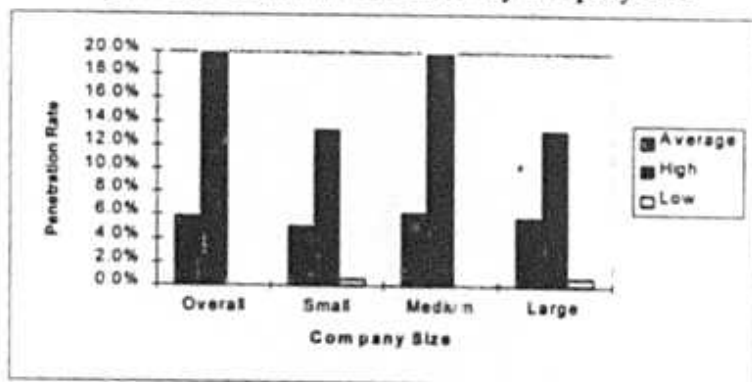


	Overall	Rural	Semi-Rural	Suburban
<b>Average</b>	5.8%	4.3%	6.0%	6.6%
<b>High</b>	19.8%	10.7%	19.8%	13.2%
<b>Low</b>	0.04%	0.04%	0.53%	0.52%

For the market type category, rural companies lag behind both semi-rural and suburban companies. Similarly, according to company size, small companies lag behind medium and large companies. The differences are not dramatic, but they are noticeable.

One company has achieved an almost 20% Voice Mail penetration. But, some companies have very low Voice Mail penetration rates, even below 1.0%. In general, Voice Mail penetration is largely a function of marketing emphasis (or lack thereof).

Figure 15: Voice Mail Penetration - by Company Size

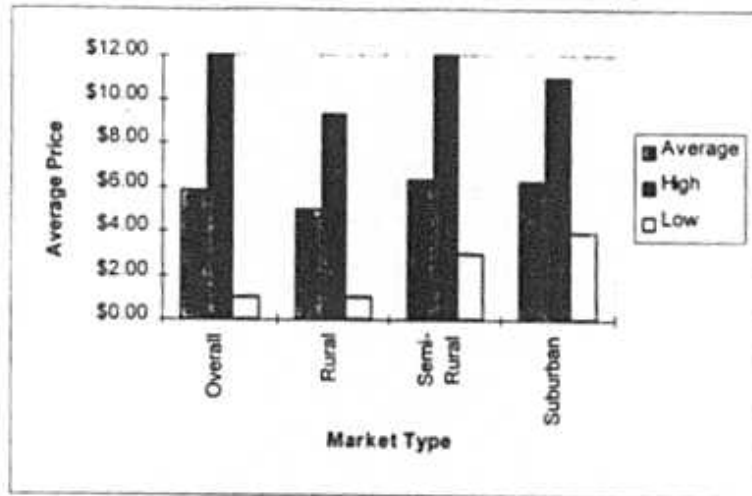


	Overall	Small	Medium	Large
<b>Average</b>	5.8%	5.0%	6.1%	5.8%
<b>High</b>	19.8%	13.2%	19.8%	13.3%
<b>Low</b>	0.04%	0.53%	0.04%	0.65%

Voice Mail prices range from as low as \$1.00 up to \$12.00. Undoubtedly, there is also a wide variance of features and limitations in the Voice Mail packages represented. The Voice Mail pricing data is limited by the fact that most companies offer more than one package. It is difficult to develop an average for this type of scenario. (e.g., some participants gave only one of their Voice Mail package prices when they actually offer more).

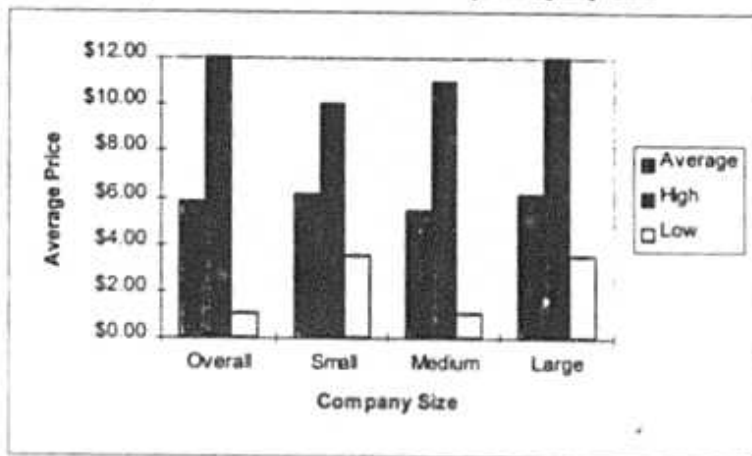
The pricing data is valuable, though, in that it gives the best average price possible for Voice Mail. It also provides the wide range (highs and lows) of Voice Mail package prices offered by participants. The overall average Voice Mail price among IBS participants is \$5.77. The market type and company size averages range from a high of \$6.28 for semi-rural companies to a low of \$4.94 for rural companies.

Figure 16: Voice Mail Prices - by Market Type



	Overall	Rural	Semi-Rural	Suburban
<b>Average</b>	\$5.77	\$4.94	\$6.28	\$6.19
<b>High</b>	\$12.00	\$9.25	\$12.00	\$10.95
<b>Low</b>	\$1.00	\$1.00	\$3.00	\$3.95

Figure 17: Voice Mail Prices - by Company Size



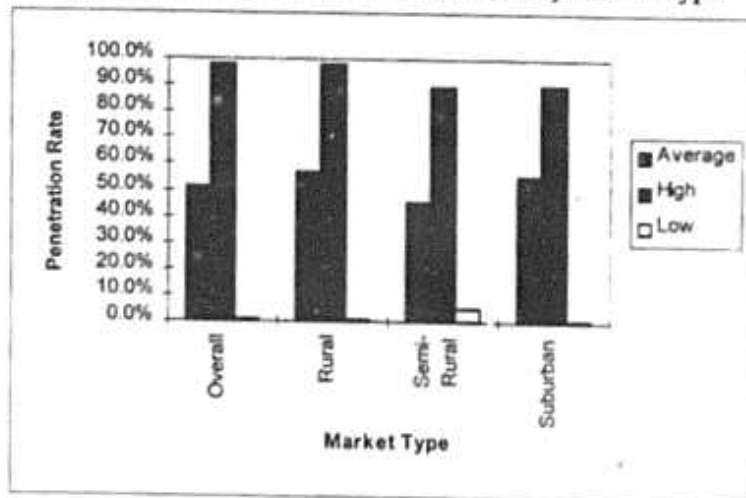
	Overall	Small	Medium	Large
<b>Average</b>	\$5.77	\$6.12	\$5.42	\$6.13
<b>High</b>	\$12.00	\$10.00	\$10.95	\$12.00
<b>Low</b>	\$1.00	\$3.50	\$1.00	\$3.50

#### 4.4 Wire Maintenance - Penetration Rates & Prices

Wire Maintenance is one of those enhanced services frequently neglected by telephone companies. That is, telcos often neglect to let their customers know of its availability and what its benefits are. The typically small monthly price for Wire Maintenance provides a reassuring type of "insurance" to many customers.

Wire Maintenance has the widest range of high to low penetration rates of any of the enhanced services. One company has achieved a high of 98.0% while a few companies have penetrations below 1.0%. The overall average penetration rate is very near the middle of these two extremes at 51.3%. According to market type, rural companies have the highest average penetration rate (56.4%) while according to company size, small companies have the highest average penetration rate (60.9%). Again, improving Wire Maintenance penetration is mostly a function of a company's marketing effort.

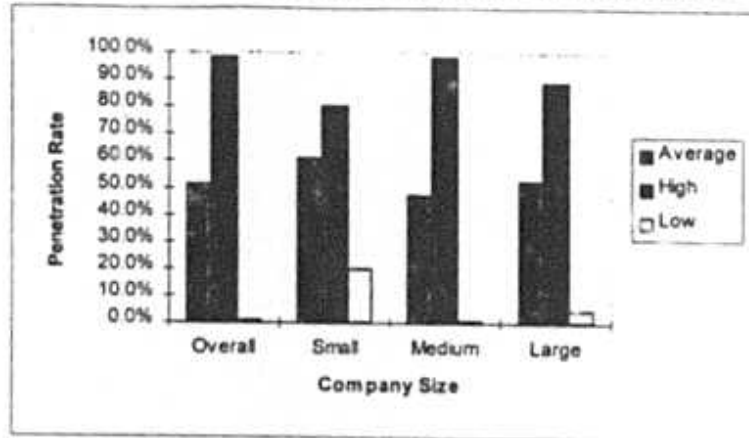
Figure 18: Wire Maintenance Penetration - by Market Type



	Overall	Rural	Semi-Rural	Suburban
<b>Average</b>	51.3%	56.4%	45.3%	55.0%
<b>High</b>	98.0%	98.0%	89.4%	90.1%
<b>Low</b>	0.83%	0.86%	4.79%	0.83%



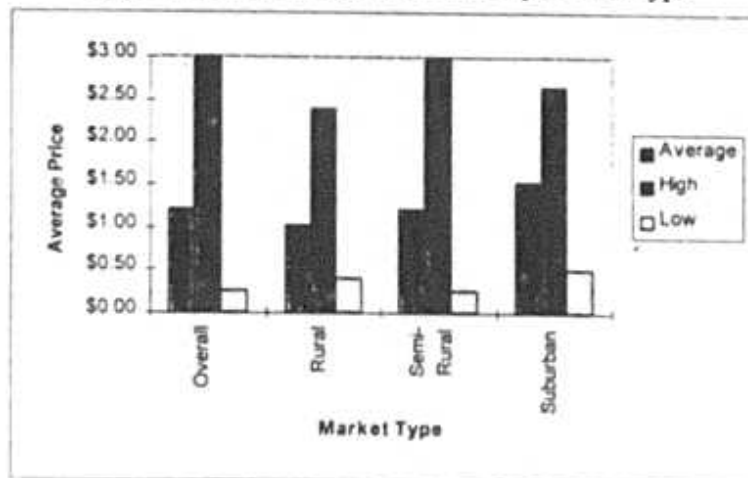
Figure 19: Wire Maintenance Penetration - by Company Size



	Overall	Small	Medium	Large
<b>Average</b>	51.3%	60.9%	47.1%	52.5%
<b>High</b>	98.0%	80.2%	98.0%	88.4%
<b>Low</b>	0.83%	20.19%	0.83%	4.79%

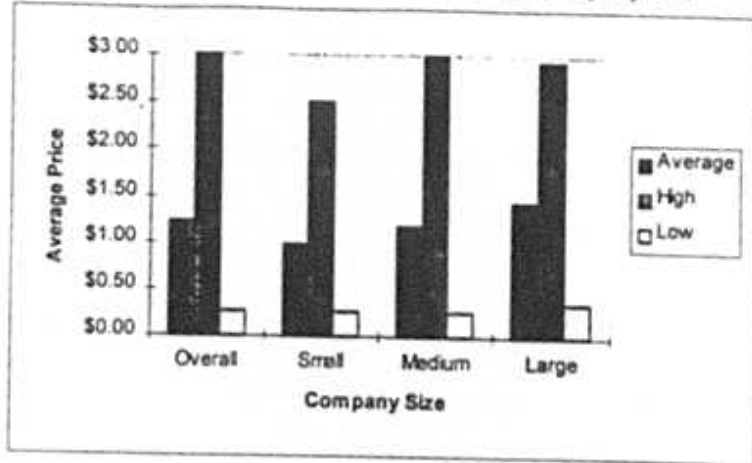
Except for Cancel Call Waiting, Wire Maintenance has the lowest average price (\$1.21) of any enhanced service product. While one company charges as much as \$3.00 per month, others charge as little as \$0.25 per month. The average price for Wire Maintenance increases from rural to suburban and small to large companies.

Figure 20: Wire Maintenance Prices - by Market Type



	Overall	Rural	Semi-Rural	Suburban
<b>Average</b>	\$1.21	\$1.01	\$1.21	\$1.53
<b>High</b>	\$3.00	\$2.38	\$3.00	\$2.65
<b>Low</b>	\$0.25	\$0.40	\$0.25	\$0.50

Figure 21: Wire Maintenance Prices - by Company Size



	Overall	Small	Medium	Large
Average	\$1.21	\$0.98	\$1.18	\$1.44
High	\$3.00	\$2.50	\$3.00	\$2.95
Low	\$0.25	\$0.25	\$0.25	\$0.35