

Commonwealth Telephone Company
 Summary of Cost of Capital and Fair Rate of Return
 Based Upon the Estimated Average Calendar Year 1993
Capital Structure

<u>Type of Capital</u>	<u>Ratios(1)</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	60.32%	6.24%(1)	3.76%
Preferred Stock	0.12	5.26 (1)	0.01
Common Equity	<u>39.56</u>	15.30 (2)	<u>6.05</u>
Total	<u>100.00%</u>		<u>9.82%</u>

Notes:

- (1) Company provided.
- (2) The 13.80% common equity cost rate recommended by Mr. Hanley is applicable to the 54.82% average common equity ratio based upon permanent capital maintained by the Proxy Group of Five Independent Operating Companies as detailed on page 2 of this Schedule and discussed in Mr. Hanley's accompanying direct testimony. The 13.80% common equity cost rate must be adjusted upward to reflect Commonwealth Telephone Company's lower estimated average common equity ratio of 39.56% for calendar year 1993. In a study conducted by Brigham, Gapenski, and Aberwald, it is concluded that a 1 percentage point change in common equity ratio results in an average 12 basis points change in common equity cost rate in the range of 40%-50% common equity ratio. It can be derived that for each 1 percentage point change in common equity ratio between 50% and 60%, the common equity cost rate will change, on average, by 5.2 basis points. The adjustment is calculated as follows: $((54.82\% - 50.00\% = 4.82\% \times 0.052\% = 0.25\%) + (50.00 - 39.56\% = 10.44\% \times 0.12\% = 1.25\%) = 1.50\%)$. Thus, a 15.3% common equity cost rate is applicable to a 39.56% common equity ratio $(15.30\% = 13.80\% + 1.50\%)$.

Source of Information: Public Utilities Fortnightly, "Capital Structure, Cost of Capital, and Revenue Requirements", Eugene F. Brigham, Louis G. Gapenski and Dana A. Aberwald, pages 15-24, January 8, 1987

Commonwealth Telephone Company
Capital Structure Ratios Based upon Permanent Capital
for the Proxy Group of Five Independent Operating Companies
for the Years 1987 through 1991

	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1987</u>
<u>Century Telephone Enterprises</u>					
Long-Term Debt	45.06%	47.62%	52.26%	56.33%	56.86%
Preferred Stock	1.18	0.86	0.38	1.04	1.30
Minority Interest	0.00	0.00	0.43	0.00	0.00
Common Equity	53.76	51.52	46.93	42.63	41.84
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
<u>Cincinnati Bell, Inc.</u>					
Long-Term Debt	41.19%	40.63%	38.60%	37.24%	41.57%
Preferred Stock	5.50	5.58	6.39	6.92	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	53.31	53.79	55.01	55.84	58.43
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
<u>Lincoln Telecommunications Co.</u>					
Long-Term Debt	31.63%	36.45%	27.39%	29.37%	31.47%
Preferred Stock	2.67	2.84	3.67	4.07	4.18
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	65.70	60.71	68.94	66.56	64.35
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
<u>Rochester Telephone Corp.</u>					
Long-Term Debt	50.68%	47.34%	46.61%	43.09%	43.66%
Preferred Stock	1.92	2.55	2.92	3.65	3.86
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	47.40	50.11	50.47	53.26	52.48
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
<u>Telephone and Data Systems, Inc.</u>					
Long-Term Debt	33.08%	35.81%	40.56%	51.22%	59.88%
Preferred Stock	13.00	7.22	6.09	8.13	3.95
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	53.92	56.97	53.35	40.65	36.17
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>
<u>Proxy Group Average</u>					
Long-Term Debt	40.33%	41.57%	41.08%	43.45%	46.69%
Preferred Stock	4.85	3.81	3.89	4.76	2.66
Minority Interest	0.00	0.00	0.09	0.00	0.00
Common Equity	54.82	54.62	54.94	51.79	50.65
Total Capital	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

Source of Information: Standard & Poor's Compustat Services, Inc.,
Telecommunications Compustat II

Commonwealth Telephone Company
 Capital Structure Ratios Based upon Permanent Capital
 for the Proxy Group of Seven Regional Holding Companies
 for the Years 1987 through 1991

	1991	1990	1989	1988	1987
<u>Ameritech</u>					
Long-Term Debt	39.20%	40.20%	40.34%	36.82%	37.57%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	60.80	59.80	59.66	63.18	62.43
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====
<u>Bell Atlantic Corporation</u>					
Long-Term Debt	53.06%	50.13%	49.18%	43.58%	37.68%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	46.94	49.87	50.82	56.42	62.32
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====
<u>BellSouth Corporation</u>					
Long-Term Debt	37.85%	38.69%	35.73%	38.38%	34.73%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	62.15	61.31	64.27	61.62	65.27
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====
<u>NYNEX Corporation</u>					
Long-Term Debt	44.99%	43.87%	41.85%	40.45%	40.04%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	55.01	56.13	58.15	59.55	59.96
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====
<u>Pacific Telesis Group</u>					
Long-Term Debt	41.48%	43.33%	40.82%	40.56%	41.65%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.87	0.70	0.49	0.27	0.16
Common Equity	57.65	55.96	58.69	59.17	58.19
Total Capital	100.00%	99.99%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====
<u>Southwestern Bell Corporation</u>					
Long-Term Debt	40.56%	39.18%	39.99%	38.21%	40.90%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	59.44	60.82	60.01	61.79	59.10
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====
<u>U.S. West Inc.</u>					
Long-Term Debt	47.31%	45.95%	49.08%	46.76%	40.29%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.00	0.00	0.00	0.00	0.00
Common Equity	52.69	54.05	50.92	53.24	59.71
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====
<u>Proxy Group Average</u>					
Long-Term Debt	43.49%	43.05%	42.43%	40.68%	38.98%
Preferred Stock	0.00	0.00	0.00	0.00	0.00
Minority Interest	0.13	0.10	0.07	0.04	0.02
Common Equity	56.38	56.85	57.50	59.28	61.00
Total Capital	100.00%	100.00%	100.00%	100.00%	100.00%
	=====	=====	=====	=====	=====

Source of Information: Standard & Poor's Compustat Services, Inc.,
 Telecommunications Compustat II

Commonwealth Telephone Company
 Projected Common Equity Ratios Based Upon
 Total Capital for 1992, 1993 and 1995-1997 for
 the Proxy Group of Five Independent Operating Companies
 and the Proxy Group of Seven Regional Holding Companies

<u>Proxy Group of Five Independent Operating Companies</u>	<u>Projected Common Equity Ratios</u>		
	<u>1992</u>	<u>1993</u>	<u>1995-1997</u>
Century Telephone Enterprises	47.0%	44.5%	74.5%
Cincinnati Bell, Inc.	57.0	53.0	57.5
Lincoln Telecommunications Co.	70.5	73.0	81.5
Rochester Telephone Corp.	52.0	53.0	63.0
Telephone & Data Systems, Inc.	<u>57.5</u>	<u>55.0</u>	<u>57.5</u>
Average	<u>56.8%</u>	<u>55.7%</u>	<u>66.8%</u>
<u>Proxy Group of Seven Regional Holding Companies</u>			
Ameritech	58.5%	60.5%	66.5%
Bell Atlantic Corp.	51.5	52.0	53.5
BellSouth Corp.	65.0	66.0	66.0
NYNEX Corporation	58.0	58.0	59.0
Pacific Telesis Group	62.0	63.0	62.5
Southwestern Bell Corp.	62.0	63.5	66.0
U S West, Inc.	<u>57.5</u>	<u>57.5</u>	<u>58.0</u>
Average	<u>59.2%</u>	<u>60.1%</u>	<u>61.6%</u>

Source of Information: Value Line Investment Survey, January 15, 1993
 and March 5, 1993

Commonwealth Telephone Company
Average Investment Horizon and Current Institutional Holdings for
the Proxy Group of Five Independent Operating Companies and
the Proxy Group of Seven Regional Holding Companies for the years 1987-1991

	Common Stock Turnover Rate in Years					Five Year Average	March 1993 Percentage of Institutional Holdings
	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>1987-1991</u>	
<u>Proxy Group of Five Independent Operating Companies</u>							
Century Telephone Enterprises	3.1	2.6	2.0	2.2	2.4	2.5	67.4%
Cincinnati Bell, Inc.	5.1	5.8	4.7	5.7	6.7	5.6	26.3
Lincoln Telecommunications Co.	4.2	4.4	1.7	3.0	3.4	3.3	33.4
Rochester Telephone Corp.	4.4	3.5	1.9	2.3	1.8	2.8	30.9
Telephone & Data Systems, Inc.	<u>2.4</u>	<u>2.9</u>	<u>1.9</u>	<u>3.2</u>	<u>1.8</u>	<u>2.4</u>	<u>71.3</u>
Average	<u>3.8</u>	<u>3.8</u>	<u>2.4</u>	<u>3.3</u>	<u>3.2</u>	<u>3.3</u>	<u>45.9%</u>
<u>Proxy Group Seven Regional Holding Companies</u>							
Ameritech	4.5	4.3	3.5	2.9	1.9	3.4	32.2%
Bell Atlantic Corp.	3.8	3.8	3.3	3.2	2.3	3.3	32.0
BellSouth Corp.	5.5	4.8	3.9	3.8	2.7	4.1	26.5
NYNEX Corporation	3.2	2.4	2.5	2.5	2.0	2.5	38.8
Pacific Telesis Group	3.6	3.3	2.5	2.9	1.8	2.8	37.9
Southwestern Bell Corp.	3.3	3.2	2.8	3.2	2.3	3.0	39.0
U S West, Inc.	<u>3.4</u>	<u>3.4</u>	<u>3.3</u>	<u>2.7</u>	<u>2.2</u>	<u>3.0</u>	<u>42.6</u>
Average	<u>3.9</u>	<u>3.6</u>	<u>3.1</u>	<u>3.0</u>	<u>2.2</u>	<u>3.2</u>	<u>35.6%</u>

- Notes: (1) The average investment horizon is calculated by dividing average common shares outstanding by common shares traded.
- (2) The percentage of institutional holdings is calculated by dividing the number of shares held by institutions by the number of shares outstanding.

Source of Information: Standard & Poor's Compustat Services, Inc., Telephone Compustat II
Standard & Poor's Stock Guide

Commonwealth Telephone Company
Dividend Payout Ratio (1)
 Historical Comparison of the Proxy Group of Five Independent Operating Companies
 and the Proxy Group of Seven Regional Holding Companies
 for the Years 1987-1992, Inclusive and 1993 Spot

<u>Year</u>	<u>Proxy Group of Five Independent Operating Companies (2)</u>	<u>Proxy Group of Seven Regional Holding Companies (2)</u>
1993 (3)	66.9%	75.4%
1991	65.6%	100.8%
1990	52.6	76.0
1989	58.7	74.4
1988	52.8	62.7
1987	54.3	64.0
5 Year Average 1987-1991	56.8%	75.6%

Notes:

- (1) Dividend payout ratio is computed by dividing the yearly reported dividends declared by the yearly income available for common equity.
- (2) Arithmetic average of achieved results for all individual companies in the group.
- (3) Spot 1992 dividend payout ratio is computed by dividing the current annualized DPS by the latest reported twelve months EPS.

Source of Information: Standard & Poor's Compustat Services, Inc.,
 Telephone Compustat II
 Interactive Data Corporation

Commonwealth Telephone Company
Price-Earnings Multiples (1)

Historical Comparison of the Proxy Group of Five Independent Operating Companies
 and the Proxy Group of Seven Regional Holding Companies
 for the Years 1987-1991, Inclusive, and 1993 Spot

<u>Year</u>	<u>Proxy Group of Five Independent Operating Companies (2)</u>	<u>Proxy Group of Seven Regional Holding Companies (2)</u>
1993 (3)	27.9x	16.2x
1991	28.8x	18.2x
1990	24.6	14.8
1989	39.2	14.5
1988	20.0	10.2
1987	14.7	10.9
5 Year Average 1987-1991	25.5x	13.7x

Notes:

- (1) Price-Earnings Multiple = average yearly high-low market price ÷ reported earnings per share.
- (2) Arithmetic average of achieved results for all individual companies in this group.
- (3) Spot 1993 Price-Earnings Multiple = spot market price on 4-06-93 ÷ latest reported twelve months earnings per share.

Source of Information: Standard & Poor's Compustat Services, Inc.,
 Telephone Compustat II
 Interactive Data Corporation

Commonwealth Telephone Company
Illustration of the Impact
on DCF Derived Common Equity Cost Rate
of Assumed Constant and Non-Constant Price-Earnings Multiple

Line No.	Stock Selling at Book		Stock Selling Above Book		
	Expected Constant Price-Earnings Multiple	Expected Increase in Price-Earnings Multiple	Expected Constant Price-Earnings Multiple	Expected Increase in Price-Earnings Multiple	
1.	Market Value at time of purchase	\$10.00	\$10.00	\$15.00	\$15.00
2.	Book Value at time of purchase	\$10.00	\$10.00	\$10.00	\$10.00
3.	Market-to-Book Ratio at time of purchase (Line 1 ÷ Line 2)	100%	100%	150%	150%
4.	Earnings per share	\$1.40	\$1.40	\$1.40	\$1.40
5.	Earnings book ratio (Line 4 ÷ Line 2)	14.0%	14.0%	14.0%	14.0%
6.	Dividends per share	\$0.90	\$0.90	\$0.90	\$0.90
7.	Dividends Payout Ratio (Line 6 ÷ Line 4)	64.3%	64.3%	64.3%	64.3%
8.	Retention Ratio (100% - Line 7)	35.7%	35.7%	35.7%	35.7%
9.	Dividend Yield (Line 6 ÷ Line 1)	9.0%	9.0%	6.0%	6.0%
10.	Price-Earnings Multiple at time of purchase (Line 1 ÷ Line 4)	7.14	7.14	10.71	10.71
11.	Assumed expected price-earnings multiple at time of sale	7.14	7.25	10.71	11.00
12.	Assumed earnings and dividend per share growth rate	5.0%	5.0%	5.0%	5.0%
	Dividend Yield (A)	9.0%	9.0%	6.0%	6.0%
	Growth in Value	<u>5.0</u> (B)	<u>6.6</u> (C)	<u>4.9</u> (D)	<u>7.8</u> (E)
	Cost of common equity	<u>14.0%</u>	<u>15.6%</u>	<u>10.9%</u>	<u>13.8%</u>

(A) Dividend yield calculated on Line Number 9.

(B) The value of stock in the marketplace is expressed as a multiple of earnings. At the end of one year the earnings per share would be 1.40 x 1.05 (a 5% growth rate) or \$1.47. If the price-earnings multiple is held constant at 7.14, the value of the stock would be 1.47 x 7.14 or \$10.50. If the purchase price was \$10.00, the growth in value is \$0.50. A \$0.50 growth related to a \$10.00 purchase price is 5.0%.

(C) If the \$1.40 earnings per share grow by 5%, the resultant earnings per share is \$1.47. If the price-earnings multiple is 7.25, up from 7.14, the market value is \$10.66. If the purchase price was \$10.00, the growth in value is \$0.66. A \$0.66 growth in value relative to a \$10.00 purchase price is 6.6%.

(D) $\$1.47 \times 10.71 = \$15.74 - 15.00 = \$0.74 \div \$15.00 = 4.9\%$.

(E) $\$1.40 \text{ earnings per share} \times 1.05 = \$1.47 \times 11 \text{ price-earnings multiple} = \$16.17 \text{ less } \$15.00 \text{ purchase price} - \$1.17 \text{ increase in value relative to a } \$15 \text{ purchase price} = 7.8\%$.

Comment: For simplicity of illustration, the next period dividend and the time value of money has not been taken into account.

Commonwealth Telephone Company
Price-Earnings Multiples for Industrials and Public Utilities
and Interest Rates at the Peaks and Troughs of
the Business Cycle Since the Arab Oil Embargo

<u>Official Turning Points in Business Cycle</u>	<u>S&P Industrial Index (1)</u>	<u>S&P Public Utility Index (1)</u>	<u>Yield on 'A' Public Util. Bonds</u>	<u>30-Year Treasury Bonds</u>
Nov. 1973 (Peak)	14.00x	9.03x	8.26%	N/A (2)
Mar. 1975 (Trough)	9.52	7.20	9.24	N/A (2)
Jan. 1980 (Peak)	7.94	7.01	11.80	10.60%
July 1980 (Trough)	8.01	7.54	11.35	10.24
July 1981 (Peak)	9.22	6.65	15.04	13.59
Nov. 1982 (Trough)	10.20	6.94	11.91	10.54
Aug. 25, 1987	24.21(4)	11.92	9.94 (5)	8.97
July 1990 (Peak)	17.09	13.40	9.83	8.50
Mar. 1991 (Trough)	18.23	14.80	9.57	8.29
Feb. 1993	27.05	17.54	8.58	7.09

- Notes: (1) Previously called the S&P 400 Industrials and S&P 40 Public Utilities. As of April 6, 1988, S&P no longer uses a fixed number of industrial and utility companies.
(2) N/A - Not Available.
(3) Represents the yield on Treasury Issues with maturities of three to five years.
(4) Peak of Price-Earnings Multiple within the business cycle.
(5) For the week ended August 26, 1987.

Source of Information: National Bureau of Economic Research
Survey of Current Business, April 1991
Standard & Poor's Security Price Index Record
Standard & Poor's Bond Guide
Federal Reserve Bulletin

Commonwealth Telephone Company
Inadequacy of DCF Return Related to Book Value

	<u>Market Value</u>	<u>Book Value</u>
Per Share	\$150.00	\$100.00
DCF Cost Rate (1)	10.00%	10.00%
Return in Dollars	\$ 15.00	\$ 10.00 ;
Dividends (2)	\$ 9.75	\$ 9.75
Growth in Dollars	\$ 5.25	\$ 0.25
Return on Market Value	10.00%	6.67%(3)
Rate of Growth on Market Value	3.50%(4)	0.17%(5)

Notes:

- (1) Comprised of 6.5% yield and 3.5% growth.
- (2) \$150.00 @ 6.5% yield = \$9.75.
- (3) $\$10.00 \div \150.00 market value = 6.67%.
- (4) Expected rate of growth per market based DCF model.
- (5) Actual rate of growth when DCF cost rate is applied to book value ($\$10.00$ possible earnings - $\$9.75$ dividends = $\$0.25$ for growth \div $\$150.00$ market value = 0.17%).

THE WALL STREET JOURNAL

MONEY & INVESTING

Goldman Study of '80's Stocks' Rise Poses Major Riddle

HEARD
ON THE
STREET

By ROGER LOWENSTEIN
Staff Reporter of THE WALL STREET JOURNAL
NEW YORK—What makes stock prices rise?

Most people would say rising corporate earnings and falling interest rates. But Barrie Wigmore, a limited partner at Goldman Sachs, may have just blown a hole through this most cherished of Wall Street convictions.

In a just-published statistical study on stock prices in the 1980s, Mr. Wigmore finds that "only 35% of stock price growth [as measured by the Standard & Poor's 500] can be attributed to earnings and interest rates."

These are the factors, Mr. Wigmore says, "that are emphasized in Wall Street models of stock price behavior." Yet according to his straightforward methodology, they seem to account for only about one-third of the 1980s' rise in the S&P.

For the rest, Mr. Wigmore looks to the effect of mergers and recapitalizations and the "considerable optimism" that pre-

vailed among analysts, leading them to err on the high side again and again when predicting corporate earnings.

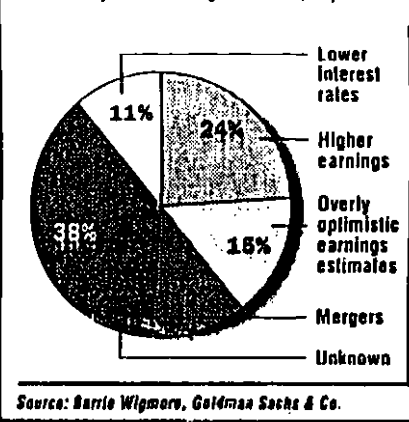
Yet even counting these factors, Mr. Wigmore finds that 38% of the rise in the S&P is simply unaccounted for. "This is a rather large component of the decade's results," the understated Mr. Wigmore observes.

This 'X' factor, he says, may be attributable to changing social attitudes, such as a willingness to assume more risk, or a rising propensity to hold stocks. "Does it represent recovery from undervalued stock prices in the 1970s? . . . or overvaluation" in the 1980s?

There is "a great deal of room for observers to see whatever they choose to see," he says. The disturbing element, Mr. Wigmore says, is that his study seems to rule out fundamental corporate performance as the rationale for much of stock-price behavior.

Although markets are often erratic over brief periods, over the span of a decade—at least in theory—one would expect prices to follow fundamentals. "This paper is a slap at efficient market theory," Mr. Wigmore adds. "In some respects, it's an appeal [for a return] to fundamental

Fueling the Bull Market
Barrie Wigmore's list of factors boosting the S&P 500 by 227% during the 1980s, in percent



analysis."

"I'm with him," says Robert Shiller, a Yale University economist who has read the report. "Something else was driving the market. It's something intangible—and this is what's puzzling to people."

Mr. Wigmore, formerly Goldman's general partner in charge of regulated industries, retired in 1988. Like other limited

partners, the 50-year-old Mr. Wigmore maintains an office at the firm, but his day-to-day activities are separate.

Steven Einhorn, co-chairman of Goldman's investment policy committee, acknowledges in a brief introduction to the Wigmore report that "some will disagree with Barrie's methodology and/or conclusions." Nonetheless, Goldman took the unusual step of publishing the work of a limited partner under the imprimatur of Goldman Sachs Investment Research, noting that "we found it interesting and somewhat startling."

In the week since the printing, Mr. Einhorn says Goldman has had "an enormous response" from salespeople seeking copies. He adds that although the report takes a longer-term view than most Wall Street research, "it has our full endorsement."

The study assumes that a given percentage rise in earnings—or drop in rates—should move the S&P index upward by a like proportion. The S&P 500 earnings rose 54% in the decade. Were stock prices merely reflecting earnings, Mr. Wigmore says, they, too, would have climbed 54%. But, in fact, the S&P index surged 227%, to 353.40 from 107.94. Thus, Mr. Wigmore

Please Turn to Page C2, Column 3

Goldman Study of the Rise by Stocks in 1980s Clobbers Conventional Wisdom, Poses Riddle

HEARD ON THE STREET

Continued From Page C1

calculates, earnings accounted for only 24% of the actual rise in stocks.

Similarly, Mr. Wigmore reasons that the 25% drop in interest rates, as measured by the yield on 10-year U.S. Treasuries, should have propelled stock prices by 25%; that would account for only 11% of the actual rise in stock prices.

Also, he found, companies that were acquired in mergers or recapitalized accounted for 12% of the actual rise in the S&P. Further, he found, if stock prices had risen in line with analysts' expectations rather than the mere earnings, stocks would have risen an additional 15%.

"Analysts showed a tendency when earnings were disappointing to move their optimistic expectations a year forward," he says. Thus, companies by and large weren't "punished" for falling short.

As for the 'X' factor, Mr. Wigmore shrugs off several common rationales. He doubts that the total amount of shares outstanding shrank sufficiently to cause a scarcity of shares—especially given that



companies going private usually soaked up the same amount of capital in the form of debt.

Although the financial news media was "replete with discussions of 'asset values' in the 1980s," and many stocks rose on mere whispers of a takeover, he disputes that merger activity permanently raised stocks in general. By the end of 1989, he says, the high-stakes merger game "was pretty much washed up."

Similarly, Mr. Wigmore finds that the S&P wasn't distorted by a handful of new industries, such as technology. And he argues that, in the case of the S&P Industrials, cash flow didn't grow much more than earnings; thus, "no extra growth was hidden by accounting practices." Finally, he says the time period in question is fair: "Both years [1979 and 1989] were preceded by prolonged economic and earnings growth, and there was considerable debate in both years about when a recession would begin. Return on equity for the S&P 500 was 15.8% in 1979 and 15.6% in 1989."

Mr. Wigmore, chary of trampling on the turf of Goldman's paid analysts, declines to make a market forecast for the 1990s. Yet his paper seems of a piece with a report he wrote in 1989, documenting a decline in the credit quality of junk bonds throughout the 1980s. Both reports implicitly condemn the decade as speculative.

"You can't say whether the 1980s stock market overperformed because the '70s underperformed, or because the 1980s were overly optimistic," Mr. Wigmore says. "It was probably both."



**UTILITY REGULATORY POLICY IN THE
UNITED STATES
AND CANADA**

COMPILATION 1991-1992

OF THE

**NATIONAL ASSOCIATION OF
REGULATORY UTILITY COMMISSIONERS**

Paul Rodgers
Administrative Director and
General Counsel

Karon Bauer
Editor

TABLE 45 - AGENCY AUTHORITY OVER RATE OF RETURN

AGENCY	Agency determines rate of return under its general authority	Capital structure is adjusted to exclude non-utility financing when it is traceable	Method Agency favors in determining rate of return								Duration of call protection provision influences judgment in determining rate of return
			No ONE method ALL are considered	Dis-counted cash flow	Com-parable earnings test	Earn-ings/price ratio	Mid-point approach	Capital asset pricing model	Risk premium	Other	
FCC	X	X	X 2/								
FERC	X	X	X	X 10/	X 10/	X 10/	X 10/				
ALABAMA PSC	X	X		X							
ALASKA PUC	X	X			X						Possible.
ARIZONA CC	X	X	X 2/								
ARKANSAS PSC	X	X		X							
CALIFORNIA PUC	X	X 1/	X 2/	X	X			X	X	X	Possible.
COLORADO PUC	X	X		X 12/	X						
CONNECTICUT DPUC	X	X	X 2/							X	
DELAWARE PSC	X	X	X 2/	X	X					X	
D.C. PSC	X	X		X							
FLORIDA PSC	X	X 1/	X 2/								
GEORGIA PSC	X	X	X 2/	X					X	X 11/	
HAWAII PUC	14/	X	X 2/		X	X 3/				X	
IDAH0 PUC	X	X		X 3/	X 3/	X 3/		X			
ILLINOIS CC	X	X	X 2/							X	
INDIANA URC	X	X	X								
IOWA UB	X	X 1/	X	X					X	X 9/	
KANSAS SCC	X	X		X							
KENTUCKY PSC	X	X	X 2/	X	X	X	X			X	
LOUISIANA PSC	X	X		X							
MAINE PUC	X	13/	X 2/	X	X					X	
MARYLAND PSC	X	X		X						X 9/	
MASSACHUSETTS DPU	X	X		X 7/						X 7/	
MICHIGAN PSC	X	X	2/	X	X		X	X	X	X	
MINNESOTA PUC	X	X		X							
MISSISSIPPI PSC	X	X		X	X						
MISSOURI PSC	X	X		X							
MONTANA PSC	X	X		X	X						
NEBRASKA PSC	5/	X		X							
NEVADA PSC	X	X		X	X	X					
NEW HAMPSHIRE PUC	X	X		X							Yes
NEW JERSEY BRC	14/	X	X	X				X	X	X	
NEW MEXICO PSC	X	X	X 2/	X						X	
NEW MEXICO SCC	X	X		X			X				
NEW YORK PSC	X	X	X	X 10/						X	
NORTH CAROLINA UC	X	X	X 2/	X	X			X	X	X	
NORTH DAKOTA PSC	X	X		X							
OHIO PUC	X	X	X	X 10/						X 10/	No decision.
OKLAHOMA CC	X	X	X 2/	X						X	
OREGON PUC	X	X 1/		X				X			
PENNSYLVANIA PUC	X	X	X 2/	X	X	X	X			X	Maybe, if soon
RHODE ISLAND PUC	14/	X	X	X	X	X	X		X	X 4/	
SOUTH CAROLINA PSC	X	X	X	X				X	X		
SOUTH DAKOTA PUC	X	X		X	X						
TENNESSEE PSC	X	X	X	X	X	X					
TEXAS PUC	X	X	X 2/	X	X					X	
TEXAS RC	6/	X	X 2/	X	X					X	
TEXAS UC	X	X							X		
UTAH PSC	X	X		X							
VERMONT PSB	14/	X		X	X					X	
VIRGINIA SCC	X	X	X 2/								
WASHINGTON UTC	X	X		X							
WEST VIRGINIA PSC	X	X	X 2/	X	X			X	X	X	
WISCONSIN PSC	X	X	X 2/	X				X		X	
WYOMING PSC	X	ICB	X 2/	X	X					X	
PUERTO RICO PSC	14/	X		X	X						
VIRGIN ISLANDS PSC	X	13/	X 2/	X	X					X	
CANADIAN RTC	X	X	X 2/	X	X					X	
NATL ENERGY BOARD	X	X	X 2/	X	X			X	X	X	
ALBERTA PUB	X	X	X 2/	X	X					X	
NOVA SCOTIA PUB	14/	X	X 2/	X	X					X	
ONTARIO EB	14/	X	X 2/	X	X					X	
ONTARIO TSC	14/	X	X 2/	X	X	X	X			X	
QUEBEC NGB	X	X	X 2/	X	X					X	
QUEBEC TB	X	X	X 2/	X	X					X	

** For definitions of terms, please consult the Glossary of Terms at the back of this book. ICB=Case-by-Case Basis

**FOOTNOTES - TABLE 45
AGENCY AUTHORITY OVER RATE OF RETURN**

- 1/ Non-utility investment dollars are always excluded from rate base. Where non-utility investment is comparatively small, capital ratios are not adjusted. When non-utility investment is large, we usually remove non-utility investment from equity.
- 2/ Commission favors no single method, but rather that which produces the most reasonable results.
- 3/ All three methods used and accepted. In most cases more than one method has been introduced.
- 4/ It may use any method it desires especially in the case of a small company.
- 5/ No Commission regulation of electric or gas utilities.
- 6/ No Commission regulation of electric or telephone utilities.
- 7/ DCF is preferred, but Department approves other methods which check DCF result; risk spread analysis preferred by a slight margin. Financial condition of utility also given serious consideration.
- 8/ Individually considered according to standard criteria - utilize double leverage principle.
- 9/ DCF is preferred; all methods are considered including econometric modeling approach.
- 10/ No single method, however, discounted cash flow is frequently used.
- 11/ Discounted cash flow most often used, but risk premium method used also. Determined case by case.
- 12/ DCF has been the preferred method, but its results should be checked with other methods.
- 13/ Never an issue before this agency.
- 14/ Commission did not respond to request for update information; this data may not be current.

Commonwealth Telephone Company
Summary of Indicated Discounted Cash Flow Model Results

	<u>Proxy Group of Five Independent Operating Companies</u>	<u>Proxy Group of Seven Holding Distribution Companies</u>
Discounted Cash Flow Model Results Using Historical and Projected Growth in Earnings and Dividends Per Share (1)	11.0%	10.3%
Discounted Cash Flow Model Results Using Only Projected Growth in Earnings and Dividends Per Share (2)	12.0	10.5
Discounted Cash Flow Model Results Using the New York Public Service Commission Staff Recommended Methodology(3)	13.9	11.2
Use	12.3% =====	10.7% =====

Notes: (1) From page 1 of Schedule 15.
 (2) From page 1 of Schedule 16.
 (3) From page 1 of Schedule 17.

Commonwealth Telephone Company
Discounted Cash Flow Model Using Historical and Projected
Growth in Earnings and Dividends Per Share Summary of Conclusion

<u>Line No.</u>	<u>Proxy Group of Five Independent Operating Companies</u>	<u>Proxy Group of Seven Regional Holding Companies</u>
1. Dividend Yield (1)	2.8%	5.0%
2. Dividend Growth Component (2)	<u>0.1</u>	<u>0.1</u>
3. Yield	2.9	5.1
4. Growth in Earnings and Dividends Per Share (3)	<u>8.1</u>	<u>5.2</u>
5. Indicated Return Rate	<u>11.0%</u>	<u>10.3%</u>

- Notes: (1) From page 4 this Schedule.
 (2) This reflects a growth rate component equal to one-half the average of the five-year historical and five-year projected growth rate in earnings and dividends per share (from page 5 of this Schedule) x line 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, $2.8\% \times (1/2 \times 8.1\%) = 0.1\%$.
 (3) Conclusion of growth from page 5 of this Schedule.

Commonwealth Telephone Company
Discounted Cash Flow Model Using Historical and
Projected Growth in Earnings and Dividends Per Share
for the Proxy Group of Five Independent Operating Companies

Line No.	Century Telephone Enterprises	Cincinnati Bell, Inc.	Lincoln Telecom. Company	Rochester Telephone Corp.	Telephone & Data Systems, Inc.
1. Dividend Yield (1)	1.1%	4.1%	3.7%	4.4%	0.9%
2. Dividend Growth Component (2)	<u>0.1</u>	<u>0.2</u>	<u>0.1</u>	<u>0.1</u>	<u>0.0</u>
3. Yield	1.2	4.3	3.8	4.5	0.9
4. Growth in Earnings and Dividends Per Share (3)	<u>10.2</u>	<u>8.2</u>	<u>7.2</u>	<u>4.1</u>	<u>10.6</u>
5. Indicated Return Rate	<u>11.4%</u>	<u>12.5%</u>	<u>11.0%</u>	<u>8.6%</u>	<u>11.5%</u>

- Notes: (1) From page 4 of this Schedule.
(2) This reflects a growth rate component equal to one-half the average of the five-year historical and five-year projected growth rate in earnings and dividends per share (from page 5 of this Schedule) x line 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, $1.1\% \times (1/2 \times 10.2\%) = 0.1\%$.
(3) Conclusion of growth from page 5 of this Schedule.

Commonwealth Telephone Company
Discounted Cash Flow Model Using Historical and
Projected Growth in Earnings and Dividends Per Share
for the Proxy Group of Seven Regional Holding Companies

Line No.	Ameritech	Bell Atlantic Corp.	BellSouth Corp.	NYNEX Corp.	Pacific Telesis Group	Southwestern Bell Corp.	U S West, Inc.
1. Dividend Yield (1)	5.0%	5.1%	5.1%	5.4%	4.8%	4.1%	5.2%
2. Dividend Growth Component (2)	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>
3. Yield	5.1	5.2	5.2	5.5	4.9	4.2	5.3
4. Growth in Earnings and Dividends Per Share (3)	<u>5.9</u>	<u>5.3</u>	<u>4.4</u>	<u>4.4</u>	<u>5.5</u>	<u>5.6</u>	<u>5.1</u>
5. Indicated Return Rate	11.0% =====	10.5% =====	9.6% =====	9.9% =====	10.4% =====	9.8% =====	10.4% =====

- Notes: (1) From page 4 of this Schedule.
(2) This reflects a growth rate component equal to one-half the average of the five-year historical and five-year projected growth rate in earnings and dividends per share (from page 5 of this Schedule) x line 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, $5.0\% \times (1/2 \times 5.9\%) = 0.1\%$.
(3) Conclusion of growth from page 5 of this Schedule.

Commonwealth Telephone Company
Discounted Cash Flow Model Using Historical and
Projected Growth in Earnings and Dividends Per Share

	Dividend Yield				
	Spot (4-06-93)(1)	Average of Last 3 Months (2)	Average of Last 6 Months (3)	Average of Last 12 Months (4)	Average Dividend Yield (5)
<u>Proxy Group of Five</u>					
<u>Independent Operating Companies</u>					
Century Telephone Enterprises	1.0%	1.1%	1.1%	1.2%	1.1%
Cincinnati Bell, Inc.	3.6	4.0	4.4	4.5	4.1
Lincoln Telecommunications Co.	3.6	3.8	3.6	3.7	3.7
Rochester Telephone Corp.	4.1	4.2	4.4	4.7	4.4
Telephone & Data Systems, Inc.	0.9	0.9	0.9	0.9	0.9
	<u>2.6%</u>	<u>2.8%</u>	<u>2.9%</u>	<u>3.0%</u>	<u>2.8%</u>
	=====	=====	=====	=====	=====
 <u>Proxy Group Seven</u>					
<u>Regional Holding Companies</u>					
Ameritech	4.7%	4.9%	5.2%	5.3%	5.0%
Bell Atlantic Corp.	4.9	4.8	5.1	5.4	5.1
BellSouth Corp.	4.9	5.0	5.2	5.3	5.1
NYNEX Corporation	5.2	5.3	5.5	5.6	5.4
Pacific Telesis Group	4.5	4.7	4.9	5.0	4.8
Southwestern Bell Corp.	3.9	4.0	4.1	4.3	4.1
U S West, Inc.	4.9	5.1	5.3	5.5	5.2
	<u>4.7%</u>	<u>4.8%</u>	<u>5.0%</u>	<u>5.2%</u>	<u>5.0%</u>
	=====	=====	=====	=====	=====

- Notes: (1) The spot dividend yield is the current annualized dividend per share divided by the spot market price at 4-06-93.
- (2) The average 3-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the three months ended March 31, 1993.
- (3) The average 6-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the six months ended March 31, 1993.
- (4) The 12-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the twelve months ended March 31, 1993.
- (5) Equal weight has been given to the 12-month average, 6-month average, 3-month and spot dividend yield. This provides recognition of current conditions, but does not place undue emphasis thereon.

Source of Information: Standard & Poor's Compustat Services, Inc.,
Interactive Data Corporation

Commonwealth Telephone Company
Discounted Cash Flow Model using
Historical and Projected Growth in Earnings and Dividends Per Share

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
	Value Line Historical Five Year Growth Rate(1)		Value Line Projected 1989-'91 to 1995-97 Growth Rate(1)		I/B/E/S Projected Five-Year Growth Rate(2)		Mean of all Growth Rates	Standard Deviation of All Growth Rates	Average Projected Five-Year EPS Growth Rate(3)	Average of Historical and Projected EPS Growth Rate(4)	Average of Historical and Projected DPS Growth Rate(5)	Conclusion of Growth(6)
	DPS	EPS	DPS	EPS	EPS	No. of Analysts (Mean)						
<u>Proxy Group of Five Independent Operating Companies</u>												
Century Telephone Enterprises	3.0%	9.5%	7.0%	28.0%	14.1%	[3]	12.3%	9.6%	21.1%	15.3%	5.0%	10.2%
Cincinnati Bell, Inc.	12.5	8.5	5.0	6.5	6.6	[5]	7.8	2.9	6.6	7.6	8.8	8.2
Lincoln Telecommunications Co.	7.0	9.0	6.5	6.5	5.5	[2]	6.9	1.3	6.0	7.5	6.8	7.2
Rochester Telephone Corp.	4.0	1.0	3.0	8.5	7.9	[7]	4.9	3.2	8.2	4.6	3.5	4.1
Telephone & Data Systems, Inc.	7.5	7.0	6.0	28.0	15.3	[2]	12.8	9.3	21.7	14.4	6.8	10.6
Average	6.8%	7.0%	5.5%	15.5%	9.9%				12.7%	9.9%	6.2%	8.1%
	=====	=====	=====	=====	=====				=====	=====	=====	=====
Standard Deviation	3.7%	3.5%	1.6%	11.4%	4.5%							
	=====	=====	=====	=====	=====							
<u>Proxy Group Seven Regional Holding Companies</u>												
Ameritech	8.0%	5.0%	5.0%	5.5%	5.7%	[18]	5.8%	1.2%	5.6%	5.3%	6.5%	5.9%
Bell Atlantic Corp.	7.0	4.5	4.0	4.0	6.7	[20]	5.2	1.5	5.4	5.0	5.5	5.3
BellSouth Corp.	7.0	1.0	3.5	6.0	6.0	[20]	4.7	2.4	6.0	3.5	5.3	4.4
NYNEX Corporation	7.0	1.0	4.0	5.0	5.8	[15]	4.6	2.3	5.4	3.2	5.5	4.4
Pacific Telesis Group	7.0	4.5	4.5	5.0	6.2	[19]	5.4	1.1	5.6	5.1	5.8	5.5
Southwestern Bell Corp.	6.0	2.5	5.5	9.0	7.3	[15]	6.1	2.4	8.2	5.4	5.8	5.6
U S West, Inc.	7.0	1.0	4.5	9.5	6.0	[17]	5.6	3.2	7.8	4.4	5.8	5.1
Average	7.0%	2.8%	4.4%	6.3%	6.2%				6.3%	4.6%	5.7%	5.2%
	=====	=====	=====	=====	=====				=====	=====	=====	=====
Standard Deviation	0.6%	1.8%	0.7%	2.1%	0.6%							
	=====	=====	=====	=====	=====							

Notes:

- (1) As shown on pages 8 through 19 of this Schedule. Historical growth rates are five-year compound growth rates. Stock turnover rates for the five years ended 1991 based on shares traded and shares outstanding for the Proxy Group of Five Independent Telephone Companies and the Proxy Group Seven Regional Holding Companies were 3.3 and 3.2 years, respectively (see Schedule 7). Thus, this indicates the propriety of five year compound growth rates since the approximate investors' holding period horizon is around five years.
- (2) Compound growth rates in earnings per share are the only projected growth rates available from the I/B/E/S monthly summary.
- (3) Average of Value Line Projected Growth Rate in EPS (column 4) and I/B/E/S Projected Growth Rate (column 5).
- (4) Average of Value Line Historical Growth Rate in EPS (column 2) and Average Projected Five-Year Growth Rate in EPS (column 9).
- (5) Average of Value Line Historical Growth Rate in DPS (column 1) and Average Projected Five-Year Growth Rate in DPS (column 3).
- (6) Equal weight given to historical and projected growth rates in earnings and dividends.

Source of Information: Value Line Investment Survey, January 15, 1993 and March 5, 1993
I/B/E/S Custom Report, March 18, 1993

Commonwealth Telephone Company
 Number of Standard of Deviations from the Mean of Historical
 and Projected Growth in Earnings and Dividends Per Share by Company

	Number of Standard Deviations from the Mean (1)					Student's t-statistics for 5 Observations at the 95% Level of Confidence
	Value Line Five Year Historical Growth Rate		Value Line Projected 1989-91 to 1995-97 Growth Rate		I/B/E/S Projected Five-Year Growth Rate	
	DPS	EPS	DPS	EPS	EPS	
<u>Proxy Group of Five Independent Operating Companies</u>						
Century Telephone Enterprises	1.0	0.3	0.6	1.6	0.2	2.8
Cincinnati Bell, Inc.	1.6	0.2	1.0	0.4	0.4	2.8
Lincoln Telecommunications Co.	0.1	1.6	0.3	0.3	1.1	2.8
Rochester Telephone Corp.	0.3	1.2	0.6	1.1	0.9	2.8
Telephone & Data Systems, Inc.	0.6	0.6	0.7	1.6	0.3	2.8
<u>Proxy Group Seven Regional Holding Companies</u>						
Ameritech	1.8	0.7	0.7	0.3	0.1	2.8
Bell Atlantic Corp.	1.2	0.5	0.8	0.8	1.0	2.8
BellSouth Corp.	1.0	1.5	0.5	0.5	0.5	2.8
NYNEX Corporation	1.0	1.6	0.3	0.2	0.5	2.8
Pacific Telesis Group	1.5	0.8	0.8	0.4	0.7	2.8
Southwestern Bell Corp.	0.0	1.5	0.2	1.2	0.5	2.8
U S West, Inc.	0.4	1.4	0.3	1.2	0.1	2.8

Notes: (1) Number of standard deviations from the mean calculated using the following formula:

$$D = \frac{|x - \bar{x}|}{\sigma} = \frac{|3.0 - 12.3|}{9.6}$$

$\sigma = 1.0$ (Century Telephone Enterprises, Inc. Value Line Five-Year Historic Growth Rate in DPS.)

Where:

- D = The number of standard deviations from the mean
- x = suspected outlying growth rate
- \bar{x} = mean of growth rates
- σ = standard deviation of growth rates

Source of Information: Howard Balsley, Quantitative Research Methods for Business and Economics, Random House, Inc., 1970, pp 296-297

Commonwealth Telephone Company
 Number of Standard of Deviations from the Mean Historical
 and Projected Growth in Earnings and Dividends Per Share by Group

	Number of Standard Deviations from the Mean (1)				
	Value Line Five Year Historical Growth Rate		Value Line Projected 1989-91 to 1995-97 Growth Rate		I/B/E/S Projected Five-Year Growth Rate
	DPS	EPS	DPS	EPS	EPS
<u>Proxy Group of Five Independent Operating Companies</u>					
Century Telephone Enterprises	1.0	0.7	0.9	1.1	0.9
Cincinnati Bell, Inc.	1.5	0.4	0.3	0.8	0.7
Lincoln Telecommunications Co.	0.1	0.6	0.6	0.8	1.0
Rochester Telephone Corp.	0.8	1.7	1.6	0.6	0.4
Telephone & Data Systems, Inc.	0.2	0.0	0.3	1.1	1.2
Student's t-statistic for 5 Observations at the 95% Level of Confidence					
	2.8	2.8	2.8	2.8	2.8
<u>Proxy Group Seven Regional Holding Companies</u>					
Ameritech	1.7	1.2	0.9	0.4	0.8
Bell Atlantic Corp.	0.0	0.9	0.6	1.1	0.8
BellSouth Corp.	0.0	1.0	1.3	0.1	0.3
NYNEX Corporation	0.0	1.0	0.6	0.6	0.7
Pacific Telesis Group	0.0	0.9	0.1	0.6	0.0
Southwestern Bell Corp.	1.7	0.2	1.6	1.3	1.8
U S West, Inc.	0.0	1.0	0.1	1.5	0.3
Student's t-statistic for 7 Observations at the 95% Level of Confidence					
	2.4	2.4	2.4	2.4	2.4

Notes: (1) Number of standard deviations from the mean calculated using the following formula:

$$D = \frac{|x - \bar{x}|}{\sigma} = \frac{|3.0 - 6.8|}{3.7}$$

$\sigma = 1.0$ (Century Telephone Enterprises, Inc. Value Line Five-Year Historic Growth Rate in DPS.)

Where:

- D = The number of standard deviations from the mean
- x = suspected outlying growth rate
- \bar{x} = mean of growth rates
- σ = standard deviation of growth rates

Source of Information: Howard Balsley, Quantitative Research Methods for Business and Economics, Random House, Inc., 1970, pp 296-297

CENTURY TEL. ENT. NYSE:CTL		RECENT PRICE	29 ^H	P/E RATIO	22.7 (Trailing: 27.0 Median: 12.0)	RELATIVE P/E RATIO	1.42	DYD	1.0%	VALUE LINE	755									
TIMELINESS (Relative Price Performance since Next 12 Mos.) 1 Highest SAFETY (Scale: 1 Highest to 5 Lowest) 3 Average BETA 1.20 (1.00 = Market)		High: 2.6	2.8	3.4	2.9	4.2	5.6	8.1	14.1	24.0	24.4	21.6	28.8	Target Price Range 1995 1996 1997						
1995-97 PROJECTIONS Ann'l Total Return High 60 (+105%) 21% Low 40 (-40%) 7%												80 60 50 40 32 24 20 16 12 10 8 6 4								
Institutional Decisions 1992 1991 1990 Buy 42 38 54 Sell 37 44 34 Net 5 6 20 Percent shares traded 6.0 4.0 2.0												Options: PACE								
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$415.8 mil. Due in 5 Yrs \$150.0 mil. LT Debt \$404.7 mil. LT Interest \$27.9 mil. Incl. \$115.0 mil. of 6% privately placed ('07) debt, convert at \$38.00 per share. Incl. \$3.1 mil. capitalized leases. (LT interest earned: 4.0%; total interest coverage: 3.8x) Pension Liability None Pfd Stock \$5 mil. Pfd Div'd \$ 1 mil. Incl. 4,260 shs. 8.1% cum., each cr. into 4.93 com. shs.; 13,902 shs. 7.0% cum., each cr. into 4.32 com. shs. All \$25 liquidation value. Common Stock 48,181,408 shs. (approx. 52.9 million fully diluted shs.) as of 10/31/92. (adjusted for 3-for-2 stock split paid on 12/31/92)		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	* VALUE LINE PUB. INC. 95-97 E Revenues per sh 11.40 "Cash Flow" per sh 4.00 Earnings per sh ^A 2.40 Div'ds Decl'd per sh ^B .40 Cap'l Spending per sh 1.90 Book Value per sh ^C 14.60 Common Shs Outst ^D 55.00 Avg Ann'l P/E Ratio 21.0 Relative P/E Ratio 1.60 Avg Ann'l Div'd Yield .8%
CURRENT POSITION 1990 1991 9/30/92 Cash Assets 32.6 11.6 34.5 Other 33.3 49.7 49.0 Current Assets 65.9 61.3 83.5 Accts Payable 13.8 18.4 33.1 Debt Due 37.5 28.1 11.1 Other 31.9 29.8 78.6 Current Liab. 83.2 78.1 122.8 Fix. Chg. Cov. 252% 334% 351%		92.1	99.5	111.0	135.1	146.0	156.9	184.0	213.2	248.8	281.0	350	425	Revenues (\$mil)	625					
ANNUAL RATES Past 10 Yrs Past 5 Yrs Est'd '89-'91 Revenues 2.0% 7.0% 15.5% "Cash Flow" 4.0% 8.5% 17.5% Earnings 7.0% 9.5% 28.0% Dividends 4.0% 3.0% 7.0% Book Value 7.5% 13.5% 19.0%		11.0	12.0	13.4	15.5	17.2	18.3	21.7	22.2	28.5	37.4	55.0	68.0	Net Profit (\$mil)	130					
QUARTERLY REVENUES (\$mil) Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 47.5 49.2 55.7 60.8 213.2 1990 60.4 60.7 62.8 64.9 248.8 1991 64.7 69.1 72.4 74.8 281.0 1992 75.2 88.2 92.7 93.9 350 1993 90.0 103 110 120 425		51.2%	50.7%	46.9%	48.9%	58.7%	40.8%	32.1%	32.6%	35.8%	34.9%	37.3%	37.0%	Income Tax Rate	36.8%					
EARNINGS PER SHARE^(A) Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .12 .12 .12 .13 .49 1990 .14 .14 .16 .18 .62 1991 .15 .18 .21 .26 .80 1992 .24 .27 .31 .33 1.15 1993 .31 .33 .37 .39 1.40		12.0%	12.1%	12.0%	11.5%	11.8%	11.7%	11.8%	10.4%	11.5%	13.3%	15.9%	16.1%	Net Profit Margin	20.4%					
QUARTERLY DIVIDENDS PAID^(B) Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .067 .068 .068 .068 .27 1990 .07 .07 .07 .07 .28 1991 .071 .071 .071 .071 .29 1992 .073 .073 .073 .073 .29		63.2%	63.1%	62.1%	63.0%	58.9%	54.9%	53.6%	50.0%	45.1%	44.3%	53.0%	53.5%	Long-Term Debt Ratio	25.6%					
BUSINESS: Century Telephone Enterprises, Inc. is an independent telecommunications company, serving 397,500 customers in 14 states in the South and Midwest. Other operations include radio paging and cellular (5.5 million POPs, 3.5 million in MSAs, 65,000 subscribers). '91 revenue breakdown: telephone, 84%; cellular, 14%; paging 2% (second highest cellular exposure of any regulated telephone co.). Acq. Universal Telephone in '89. Central Telephone of Ohio in '92. '91 depreciation rate: 6.6%. Est. plant age: 5 years. Has 2,020 employees, 5,440 stockholders. ESOP has 40% of voting power; GAMCO Investors, 4%. Chairman: Clarke Williams, Sr.; President/C.E.O.: Glen F. Post III. Incorporated: LA. Address: 520 Riverside Drive, Monroe, LA 71201. Tele.: 318-388-9500.		28.6%	29.9%	31.3%	32.9%	41.9%	43.7%	45.3%	49.6%	54.8%	55.6%	47.0%	44.5%	Common Equity Ratio ^F	74.5%					
Century Telephone's earnings momentum remains impressive. Century's cellular operating profits are growing dramatically. A significant portion of this is due to the rollout of service in many of Century's rural markets. The rural build-up is increasing Century's geographic coverage. Before, callers had to endure call dropoff once they drove into an unbuilt service area. Now, on the same route, the connection is maintained. This brings in revenues with few additional costs besides transmitting the call. Another benefit of these new calling areas is their locations, which border on the older markets that Century operates. This clustered geographic setup enables many expenses, including call transmissions and marketing, to be shared between the adjacent markets. Finally, Century has changed the commission schedules for its outside sales force in order to retain a more profitable mix of customers. Based on the timing of Century's cellular buildup, it's likely that these trends will continue to aid earnings in '93. And, going forward, rapid earnings advances should be fueled by cellular as well. Falling prices for cellular phone equipment continue to be supported by technology and the manufacturing economies of scale that are generated by higher numbers of new cellular subscribers. These factors, along with the increasing applications (such as data transmission) that cellular has for business users, should keep subscriber growth strong. Also, the new pocket-size phones will allow numbers to be assigned to customers rather than locations, thus ensuring that customers can always be reached. This increases the probability of cellular eventually achieving mass-market penetration. And as revenues continue to soar, margins should expand since many costs, such as overhead and depreciation, are likely to stay about flat. These shares merit our highest rank for Timeliness. There is the potential risk (slight, in our opinion) that the cellular industry's growth prospects may be diminished at some point either by the onset of new technology or regulatory restrictions. However, at the stock's current quote, we feel this risk is worth taking.		265.0	284.2	296.6	329.4	332.9	330.8	336.2	515.9	511.6	574.7	765	940	Total Capital (\$mil) ^G	1080					
Philip S. Mulqueen January 15, 1993		249.4	271.7	293.8	345.0	364.2	380.4	400.8	474.2	491.0	535.0	690	775	Net Plant (\$mil)	950					
Company's Financial Strength B++ Stock's Price Stability 45 Price Growth Persistence 90 Earnings Predictability 85		5.6%	7.5%	7.9%	8.0%	8.1%	8.6%	9.5%	6.3%	7.7%	8.3%	9.0%	9.0%	% Earned Total Cap'l	13.0%					

(A) Based on prim. shs. out. from '88-pres., fully-dil. before '88. Next egs. rpt. in early Feb. Excl. extra gain: '82, 1¢. Excl. nonrec. gains (loss): '83, (2¢); '84, 1¢; '87, 12¢; '88, 3¢; '90, 5¢; '92, 1¢. (B) Next divd. ming. about Feb. 15, goes ex about Feb. 20. Divd. pay. dates about 15th of Mar., June, Sept. Dec. @Divd. reinvest. plan avail. (C) Incl. intang. in '91: \$114.3 mil. (D) In mils., adj. for stock splits. (E) Full dilution 3-5 yrs. hence. (F) Infers FASB 106 adopt. in '92. (G) Doesn't add due to rounding. (H) All per sh. figs. adj. for 3-for-2 split paid 12/31/92. Factual material is obtained from sources believed to be reliable, but the publisher is not responsible for any errors or omissions contained here. For the confidential use of subscribers. Reprinting, copying, and distribution by permission only. Copyright 1993 by Value Line Publishing, Inc. ® Reg. TM—Value Line, Inc.

CINCINNATI BELL NYSE-CSN										RECENT PRICE	17	PE RATIO	21.5 (Trailing: 18.3 Median: 11.0)	RELATIVE P/E RATIO	1.34	DIV'D YLD	4.7%	VALUE LINE	756																																																																																																																																																																																																																												
TIMELINESS (Rating: Price Performance Next 12 Mos.) 4 Below Average SAFETY (Scale: 1 Highest to 5 Lowest) 3 Average BETA .90 (1.00 = Market)																																																																																																																																																																																																																																															
1995-97 PROJECTIONS Price High 35 (+105%) Low 25 (+45%) Gain Ann'l Total Return 27% 74%										Insider Decisions M A M J J A B O N to Buy 0 0 1 0 0 0 1 0 1 to Sell 0 0 0 0 0 0 0 0 0 Institutional Decisions 12/92 1/93 2/93 3/93 to Buy 19 18 25 to Sell 28 31 22 Net Buy 16271 16031 15947 Percent shares traded 3.0 2.0 1.0																																																																																																																																																																																																																																					
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$544.0 mill. Due in 5 Yrs \$200.0 mill. LT Debt \$351.0 mill. LT Interest \$35.0 mill. Includes \$33.9 capitalized leases (LT interest coverage: 3.9x; Total interest coverage: 3.2x) Pension Liability None Pfd Stock \$60.0 mill. Pfd. Div. \$4.4 mill. 1.6 million shares of 7.25% cumulative voting preferred convertible into 2 shares of common. Callable beginning 7/22/93 at \$39.38/sh. Subject to mandatory redemption 7/22/98 (privately placed). Common Stock 61,922,789 shares										<table border="1"> <tr><th>Year</th><td>1976</td><td>1977</td><td>1978</td><td>1979</td><td>1980</td><td>1981</td><td>1982</td><td>1983</td><td>1984</td><td>1985</td><td>1986</td><td>1987</td><td>1988</td><td>1989</td><td>1990</td><td>1991</td><td>1992</td><td>1993</td><td>1994</td></tr> <tr><td>Revenues per sh</td><td>3.57</td><td>4.19</td><td>4.62</td><td>4.81</td><td>4.81</td><td>5.04</td><td>5.28</td><td>5.86</td><td>6.62</td><td>6.97</td><td>7.48</td><td>8.91</td><td>11.87</td><td>15.02</td><td>16.62</td><td>17.66</td><td>18.15</td><td>18.63</td><td>18.63</td></tr> <tr><td>"Cash Flow" per sh</td><td>.86</td><td>1.03</td><td>1.22</td><td>1.24</td><td>1.15</td><td>1.19</td><td>1.32</td><td>1.56</td><td>1.69</td><td>1.81</td><td>1.77</td><td>2.54</td><td>3.17</td><td>3.36</td><td>3.17</td><td>2.97</td><td>2.95</td><td>3.40</td><td>3.40</td></tr> <tr><td>Earnings per sh</td><td>.35</td><td>.55</td><td>.66</td><td>.65</td><td>.53</td><td>.52</td><td>.53</td><td>.66</td><td>.72</td><td>.78</td><td>.89</td><td>1.00</td><td>1.31</td><td>1.50</td><td>1.44</td><td>1.00</td><td>.75</td><td>.95</td><td>.95</td></tr> <tr><td>Div's Dec'd per sh</td><td>.20</td><td>.22</td><td>.27</td><td>.30</td><td>.32</td><td>.33</td><td>.34</td><td>.35</td><td>.37</td><td>.42</td><td>.44</td><td>.48</td><td>.56</td><td>.68</td><td>.76</td><td>.80</td><td>.80</td><td>.80</td><td>.80</td></tr> <tr><td>Cap'l Spending per sh</td><td>1.01</td><td>1.21</td><td>1.43</td><td>1.54</td><td>1.52</td><td>1.64</td><td>1.04</td><td>.68</td><td>.89</td><td>1.51</td><td>1.19</td><td>1.36</td><td>1.71</td><td>3.19</td><td>3.26</td><td>2.62</td><td>2.58</td><td>2.40</td><td>2.40</td></tr> <tr><td>Book Value per sh</td><td>3.38</td><td>3.70</td><td>4.09</td><td>4.40</td><td>4.55</td><td>4.65</td><td>4.77</td><td>5.10</td><td>5.53</td><td>5.90</td><td>6.43</td><td>7.02</td><td>8.74</td><td>9.62</td><td>10.48</td><td>9.44</td><td>9.40</td><td>9.45</td><td>9.45</td></tr> <tr><td>Common Shs Outst'g</td><td>56.14</td><td>57.79</td><td>59.63</td><td>62.39</td><td>66.30</td><td>70.68</td><td>75.26</td><td>73.10</td><td>67.61</td><td>66.98</td><td>65.84</td><td>63.94</td><td>62.21</td><td>59.90</td><td>60.94</td><td>61.60</td><td>62.00</td><td>61.00</td><td>61.00</td></tr> <tr><td>Avg Ann'l P/E Ratio</td><td>7.6</td><td>6.1</td><td>5.5</td><td>5.6</td><td>6.3</td><td>6.4</td><td>6.9</td><td>7.0</td><td>6.7</td><td>7.7</td><td>10.9</td><td>11.9</td><td>11.8</td><td>18.1</td><td>16.2</td><td>21.4</td><td>23.0</td><td>23.0</td><td>23.0</td></tr> <tr><td>Relative P/E Ratio</td><td>.97</td><td>.80</td><td>.75</td><td>.81</td><td>.84</td><td>.78</td><td>.76</td><td>.59</td><td>.62</td><td>.63</td><td>.74</td><td>.80</td><td>.98</td><td>1.37</td><td>1.20</td><td>1.36</td><td>1.40</td><td>1.40</td><td>1.40</td></tr> <tr><td>Avg Ann'l Div'd Yield</td><td>7.5%</td><td>6.6%</td><td>7.3%</td><td>8.4%</td><td>9.4%</td><td>9.9%</td><td>9.2%</td><td>7.6%</td><td>7.7%</td><td>7.1%</td><td>4.5%</td><td>4.0%</td><td>3.6%</td><td>2.5%</td><td>3.3%</td><td>3.7%</td><td>4.6%</td><td>4.6%</td><td>4.6%</td></tr> </table>										Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Revenues per sh	3.57	4.19	4.62	4.81	4.81	5.04	5.28	5.86	6.62	6.97	7.48	8.91	11.87	15.02	16.62	17.66	18.15	18.63	18.63	"Cash Flow" per sh	.86	1.03	1.22	1.24	1.15	1.19	1.32	1.56	1.69	1.81	1.77	2.54	3.17	3.36	3.17	2.97	2.95	3.40	3.40	Earnings per sh	.35	.55	.66	.65	.53	.52	.53	.66	.72	.78	.89	1.00	1.31	1.50	1.44	1.00	.75	.95	.95	Div's Dec'd per sh	.20	.22	.27	.30	.32	.33	.34	.35	.37	.42	.44	.48	.56	.68	.76	.80	.80	.80	.80	Cap'l Spending per sh	1.01	1.21	1.43	1.54	1.52	1.64	1.04	.68	.89	1.51	1.19	1.36	1.71	3.19	3.26	2.62	2.58	2.40	2.40	Book Value per sh	3.38	3.70	4.09	4.40	4.55	4.65	4.77	5.10	5.53	5.90	6.43	7.02	8.74	9.62	10.48	9.44	9.40	9.45	9.45	Common Shs Outst'g	56.14	57.79	59.63	62.39	66.30	70.68	75.26	73.10	67.61	66.98	65.84	63.94	62.21	59.90	60.94	61.60	62.00	61.00	61.00	Avg Ann'l P/E Ratio	7.6	6.1	5.5	5.6	6.3	6.4	6.9	7.0	6.7	7.7	10.9	11.9	11.8	18.1	16.2	21.4	23.0	23.0	23.0	Relative P/E Ratio	.97	.80	.75	.81	.84	.78	.76	.59	.62	.63	.74	.80	.98	1.37	1.20	1.36	1.40	1.40	1.40	Avg Ann'l Div'd Yield	7.5%	6.6%	7.3%	8.4%	9.4%	9.9%	9.2%	7.6%	7.7%	7.1%	4.5%	4.0%	3.6%	2.5%	3.3%	3.7%	4.6%	4.6%	4.6%
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Revenues per sh	3.57	4.19	4.62	4.81	4.81	5.04	5.28	5.86	6.62	6.97	7.48	8.91	11.87	15.02	16.62	17.66	18.15	18.63	18.63																																																																																																																																																																																																																												
"Cash Flow" per sh	.86	1.03	1.22	1.24	1.15	1.19	1.32	1.56	1.69	1.81	1.77	2.54	3.17	3.36	3.17	2.97	2.95	3.40	3.40																																																																																																																																																																																																																												
Earnings per sh	.35	.55	.66	.65	.53	.52	.53	.66	.72	.78	.89	1.00	1.31	1.50	1.44	1.00	.75	.95	.95																																																																																																																																																																																																																												
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Book Value per sh	3.38	3.70	4.09	4.40	4.55	4.65	4.77	5.10	5.53	5.90	6.43	7.02	8.74	9.62	10.48	9.44	9.40	9.45	9.45																																																																																																																																																																																																																												
Common Shs Outst'g	56.14	57.79	59.63	62.39	66.30	70.68	75.26	73.10	67.61	66.98	65.84	63.94	62.21	59.90	60.94	61.60	62.00	61.00	61.00																																																																																																																																																																																																																												
Avg Ann'l P/E Ratio	7.6	6.1	5.5	5.6	6.3	6.4	6.9	7.0	6.7	7.7	10.9	11.9	11.8	18.1	16.2	21.4	23.0	23.0	23.0																																																																																																																																																																																																																												
Relative P/E Ratio	.97	.80	.75	.81	.84	.78	.76	.59	.62	.63	.74	.80	.98	1.37	1.20	1.36	1.40	1.40	1.40																																																																																																																																																																																																																												
Avg Ann'l Div'd Yield	7.5%	6.6%	7.3%	8.4%	9.4%	9.9%	9.2%	7.6%	7.7%	7.1%	4.5%	4.0%	3.6%	2.5%	3.3%	3.7%	4.6%	4.6%	4.6%																																																																																																																																																																																																																												
CURRENT POSITION 1990 1991 9/30/92 (\$mill.) Cash Assets 4.1 13.6 7.6 Other 332.9 366.2 305.7 Current Assets 337.0 378.8 313.3 Accts Payable 89.9 123.3 99.6 Debt Due 139.2 172.8 193.0 Other 106.0 119.3 99.6 Current Liab. 335.1 415.4 392.4 Fix. Chg. Cov. 314% 224% 248%										BUSINESS: Cincinnati Bell Inc. supplies telephone service to Cincinnati and adjacent counties in Kentucky, Indiana, and Ohio. Serves about 820,000 access lines. Unregulated operations are mainly in telemarketing services, information services, and software related to telecommunications. 100% of switching is electronic. 1991 revenue breakdown: local service, 33%; network access, 11%; toll service, 3%; other, 53%. 1991 depreciation rate: 8.1%. Estimated plant age: 8 years. Acquired Auxton Computer Enterprises 5/87; Vanguard Technologies 7/88. Has about 11,500 employees, 22,244 shareholders. Chairman & Chief Executive Officer: Dwight H. Hibbard. Incorporated: Ohio. Address: 201 East Fourth Street, Cincinnati, Ohio 45201. Telephone: 513-397-9900.																																																																																																																																																																																																																																					
ANNUAL RATES Past 10 Yrs Past 5 Yrs Est'd '89-'91 of change (per sh) Revenues 13.0% 18.5% 8.5% "Cash Flow" 10.0% 11.5% 7.0% Earnings 8.0% 8.5% 6.5% Dividends 9.0% 12.5% 5.0% Book Value 8.0% 10.5% 2.5%										Cincinnati Bell is restructuring its operations once again. The company plans to eliminate an additional 380 employees, on top of the 1,400 employees that have left since June, 1991. The total charge to earnings in the fourth quarter is expected to be about 20¢ a share, part of which results from costs associated with the IRS' refusal to renew its contract with Cincinnati Bell Information Services (CBIS). (This charge, along with an additional charge of 4¢ a share related to early retirement of debt, is excluded from our estimates.) The restructuring should save the company about 13¢ a share annually, starting in the second quarter of '93. The information services segment should provide the impetus for long-term growth. CBIS is developing an open-architecture platform for wireline and cellular communications companies. Instead of working from scratch to develop tailored systems for each individual client, the platform will dramatically cut customization time and expense, thereby making it very marketable. Although development costs are putting a drag on current earnings, the project should start producing profits in 1994. Meanwhile, Cincinnati Bell's telemarketing unit, Matrix Marketing, continues to do well domestically. Its French unit has been generating operating losses, however, due to the sluggish European economy. But it appears that the worst is over, and we expect this unit to break even by the middle of 1993. Slow growth continues at the telephone segment. Access lines increased 1.9% in the third quarter over last year's level, the best gain since the first quarter of 1991. The new restructuring plan should further reduce Cincinnati Bell Telephone's costs to offset increased depreciation expense, and new CLASS services (such as Caller ID) are now offered to 60% of the company's Ohio customers. These new services should be a good source of incremental revenue in 1993. Long-term investors might find appeal in this turnaround situation. Although this issue is ranked to underperform the year-ahead market and we expect only a partial earnings recovery in 1993, total return potential out to 1995-97 appears to be above average.																																																																																																																																																																																																																																					
QUARTERLY REVENUES (\$ mill.) <table border="1"> <tr><th>Calendar</th><th>Mar.31</th><th>Jun.30</th><th>Sep.30</th><th>Dec.31</th><th>Full Year</th></tr> <tr><td>1989</td><td>222.5</td><td>227.4</td><td>223.3</td><td>226.8</td><td>900.0</td></tr> <tr><td>1990</td><td>221.3</td><td>245.4</td><td>263.2</td><td>283.0</td><td>1012.9</td></tr> <tr><td>1991</td><td>274.7</td><td>256.3</td><td>285.2</td><td>271.8</td><td>1088.0</td></tr> <tr><td>1992</td><td>297.9</td><td>275.4</td><td>277.9</td><td>273.8</td><td>1125</td></tr> <tr><td>1993</td><td>290</td><td>295</td><td>305</td><td>310</td><td>1200</td></tr> </table>										Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year	1989	222.5	227.4	223.3	226.8	900.0	1990	221.3	245.4	263.2	283.0	1012.9	1991	274.7	256.3	285.2	271.8	1088.0	1992	297.9	275.4	277.9	273.8	1125	1993	290	295	305	310	1200	QUARTERLY DIVIDENDS PAID <table border="1"> <tr><th>Calendar</th><th>Mar.31</th><th>Jun.30</th><th>Sep.30</th><th>Dec.31</th><th>Full Year</th></tr> <tr><td>1989</td><td>.14</td><td>.17</td><td>.17</td><td>.17</td><td>.65</td></tr> <tr><td>1990</td><td>.17</td><td>.19</td><td>.19</td><td>.19</td><td>.74</td></tr> <tr><td>1991</td><td>.19</td><td>.20</td><td>.20</td><td>.20</td><td>.79</td></tr> <tr><td>1992</td><td>.20</td><td>.20</td><td>.20</td><td>.20</td><td>.80</td></tr> <tr><td>1993</td><td>.20</td><td>.20</td><td>.20</td><td>.20</td><td>.80</td></tr> </table>										Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year	1989	.14	.17	.17	.17	.65	1990	.17	.19	.19	.19	.74	1991	.19	.20	.20	.20	.79	1992	.20	.20	.20	.20	.80	1993	.20	.20	.20	.20	.80																																																																																																																																																				
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Company's Financial Strength Stock's Price Stability A Price Growth Persistence 60 Earnings Predictability 70										Jeffrey M. Bagley January 15, 1993																																																																																																																																																																																																																																					

(A) Primary earnings. Next earnings report due late Jan. Excludes non-earning charge: '91, 37¢; extraordinary charge: '92, 3¢.
 (B) Next dividend meeting about March 1.
 (C) In millions, adjusted for stock splits.
 (D) Revenues include non-regulated operations as of 1987. (E) Includes intangibles: in '91, \$242.9 million, \$3.94/share.
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LINCOLN TELECOM. OTC-LTEC										RECENT PRICE	24	P/E RATIO	13.1 (Trading: 11.3 Median: 10.0)	RELATIVE P/E RATIO	0.79	DIV'D YLD	3.8%	VALUE LINE	190		
TIMELINESS (Relative Price Perform. since Next 12 Mos.)		3	Average	High: 6.3	8.3	7.0	7.4	11.1	13.8	14.5	18.3	34.6	33.5	29.3	28.5	Target Price Range		1995	1996	19	
SAFETY (Scale: 1 Highest to 5 Lowest)		3	Average	Low: 4.5	4.4	5.9	5.7	7.3	9.2	10.1	13.0	17.1	18.5	21.0	21.3						
BETA .90 (1.00 = Market)																					
1995-97 PROJECTIONS		Price	Gain	Ann'l Total																	
High	35	(+45%)	13%																		
Low	25	(+5%)	5%																		
Insider Decisions																					
Institutional Decisions																					
CAPITAL STRUCTURE as of 9/30/92																					
CURRENT POSITION																					
ANNUAL RATES																					
QUARTERLY REVENUES (\$mill)																					
EARNINGS PER SHARE																					
QUARTERLY DIVIDENDS PAID																					
BUSINESS:																					
INDUSTRY:																					
Steady population and business growth should continue to push Lincoln Telecommunication's earnings upward.																					
company's competitive position with respect to independent long-distance carriers.																					
Non-pension retirement cost accounting could also slow earnings growth.																					
These shares are ranked to keep pace with the market over the coming six to 12 months.																					
John Peter Dowd																					
March 5, 1993																					

(A) Based on average shares outstanding. Next earnings report due late April. (B) Next dividend meeting about Mar. 20. Goes ex about Mar. 26. Approximate dividend payment dates: 10th of January, April, July, October. Dividend reinvestment plan available. (C) In millions, adjusted for stock splits.

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Company's Financial Strength	B++
Stock's Price Stability	60
Price Growth Persistence	85
Earnings Predictability	95

ROCHESTER TEL. NYSE-RTC										RECENT PRICE	37	P/E RATIO	17.1	(Trailing: 18.3 Median: 11.0)	RELATIVE P/E RATIO	1.07	DIV'D YLD	4.3%	VALUE LINE	766																													
TIMELINESS (Ready for Performance Next 12 Mos.) 3 Average SAFETY (Scale: 1 Highest to 5 Lowest) 1 Highest BETA 85 (1.00 = Market)																				Target Price Range	1995	1996	1997																										
1995-97 PROJECTIONS High Price 55 (+50%) Low Price 45 (-20%) Ann'l Total Return 14% Ann'l Total Gain 9%										Insider Decisions M A M J J A S O N to Buy 0 0 0 2 1 1 1 0 0 to Sell 0 0 0 0 0 0 0 0 0 to Hold 0 0 0 0 0 0 0 0 0										Institutional Decisions 1992 2002 2012 to Buy 29 26 35 to Sell 43 36 27 Hld/100 9019 8125 8379 Percent shares traded 6.0 4.0										Options: None Shaded areas indicate recessions																			
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$589.4 mil. Due in 5 Yrs \$68.8 mil. LT Debt \$567.0 mil. LT Interest \$48.6 mil. Incl. \$5.3 mil. 10.46% dbcs., cv. into 47.4 shs. at \$21.075 each after 10/26/98. (Total interest coverage 3.1x) Leases, Uncapitalized Annual rentals \$16.3 mil. Pension Liability None Pfd Stock \$22.8 mil. Pfd Div'd \$1.2 mil. Common Stock 33,318,598 shs. as of 10/31/92										1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993										VALUE LINE PUB. INC. 85-97 Revenues per sh 27.85 "Cash Flow" per sh 6.85 Earnings per sh 3.00 Div'ds Decl'd per sh 1.75 Cap'l Spending per sh 2.85 Book Value per sh 22.60 Common Shs Outst'g 35.00 Avg Ann'l P/E Ratio 16.0 Relative P/E Ratio 1.25 Avg Ann'l Div'd Yield 3.7%																													
ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '89-'91 to '95-'97 Revenues 8.5% 4.5% 4.0% "Cash Flow" 5.5% 3.5% 6.0% Earnings 4.5% 1.0% 8.5% Dividends 6.0% 4.0% 3.0% Book Value 4.5% 3.5% 5.0%										CURRENT POSITION 1990 1991 9/30/92 (\$mil.) Cash Assets 21.0 42.6 47.8 Other 154.5 163.2 166.9 Current Assets 175.5 205.9 214.7 Accts Payable 77.5 101.1 85.4 Debt Due 87.0 12.3 22.4 Other 54.0 71.9 58.3 Current Liab. 198.5 185.3 176.1 Fix. Chg. Cov. 324% 309% 320%										QUARTERLY REVENUES (\$ mil.) Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 134.7 138.7 142.5 146.1 562.0 1990 146.6 145.3 150.4 157.7 600.0 1991 159.4 162.7 182.9 198.3 703.3 1992 191.7 195.8 201.6 205.9 795 1993 200 204 213 218 835										EARNINGS PER SHARE Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .53 .56 .49 .45 1.98 1990 .43 .41 .44 .44 1.72 1991 .44 .41 .47 .52 1.84 1992 .47 .49 .54 .55 2.05 1993 .52 .55 .58 .60 2.25										QUARTERLY DIVIDENDS PAID Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .355 .355 .355 .355 1.42 1990 .365 .365 .365 .365 1.46 1991 .375 .375 .375 .375 1.50 1992 .385 .385 .385 .385 1.54 1993 .395									
BUSINESS: Rochester Telephone Corp. serves Rochester & other areas of NY, parts of 15 other states through acquired & mostly rural telephone cos. (about 69% of '91 revs., 69% of op. inc.). Other revs. derived from unregulated ops. incl. regional long-distance, network systems, and cellular (licensed to serve 1.4 million population equivalents or "POPS"). Access lines: 889,000, 95% digital.										ROCHESTER TELEPHONE IS IN THE MIDST OF A SOLID EARNINGS UP-SWING. In the past few years, the company had been on an acquisition binge, buying up a number of small telephone companies in rural areas. The resulting earnings dilution from this program helped depress bottom-line results over that time. Since the company has accomplished its goal of achieving a substantial presence outside of its home base in Rochester (where the targeted maximum rate of return was set at a comparatively meager 11.7% by state regulators), such acquisitions are no longer a bottom-line problem.										LONG-TERM EARNINGS GROWTH IS LIKELY TO EXCEED HISTORICAL TRENDS. For one thing, the telephone network is served almost entirely by software-based digital switches. This allows the company to offer numerous add-on services (such as automatic redialing) to its customers. These services, which don't require much upgrading in the network, generate additional revenues that carry low incremental operating expenses. Also, this portion of Rochester Tel's profits isn't subject to earnings caps due to the discretionary nature of the services. Second, the company recently agreed to the formation of a joint venture with NYNEX to combine cellular operations in upstate New York. This will result in billing, marketing, and other functions being combined between the two companies. Also, the two communications firms combining their customer bases ensures that future improvements in the cellular plant will create higher returns. Third, the end of the company's acquisition program and a dropoff in capital outlays (due to the completion of the conversion of its switches to digital from analog as well as to a surplus of fiber cable) should allow excess cash to be generated by operations. Our projections assume that most of these funds will be used to reduce debt and accompanying interest cost.																													
Philip S. Mulqueen										January 15, 1993																																							
Company's Financial Strength A- Stock's Price Stability 85 Price Growth Persistence 70 Earnings Predictability 90										Company's Financial Strength A- Stock's Price Stability 85 Price Growth Persistence 70 Earnings Predictability 90																																							

(A) Fully diluted share earnings. Excludes non-recurring gains: '87, '88, '91, '92. Excludes extraordinary gains: '89, '90, '91, '92. Incl. unusual loss: '90, '92. Next earnings report due late Jan. (B) Next dividend meeting about Feb. 25. Goes ex about Mar. 10. Dividend payment dates: Feb. 2, May 1, Aug. 1, Nov. 3. (C) Dividend reinvestment plan available. (D) Quarterly earnings do not add due to change in shares outstanding. (E) In millions, adjusted for stock split.
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TELEPHONE&DATA SYS. ASE-TDS										RECENT PRICE	38	P/E RATIO	52.8 (Trading: 70.4 Median: 24.0)	RELATIVE P/E RATIO	3.30	DIV YLD	0.8%	VALUE LINE	770																																										
TIMELINESS (Rating: 1-3) Average: 3 SAFETY (Scale: 1 Highest to 5 Lowest) Average: 3 BETA 1.35 (1.00 = Market) 1995-97 PROJECTIONS High Price: 85 (+125%) Low Price: 60 (-60%) Gain: 23% Return: 13% Insider Decisions M A M J J A S O N Buy: 0 0 1 0 0 0 0 0 0 0 Options: 0 0 1 0 0 0 0 0 0 0 Sell: 0 0 0 1 0 1 0 0 0 0 Institutional Decisions Buy: 54 49 45 Sell: 27 24 35 Net: 25348 26910 26414 Percent shares traded: 6.0 4.0 2.0 Options: PACE Shaded areas indicate recessions																																																													
1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	VALUE LINE PUB. INC. 95-97 Revenues per sh: 18.70 "Cash Flow" per sh: 6.70 Earnings per sh: 2.65 Div'ds Decl'd per sh: 40 Cap'l Spending per sh: 3.20 Book Value per sh: 21.60 Common Shs Outst'g: 50.00 Avg Ann'l P/E Ratio: 27.5 Relative P/E Ratio: 2.10 Avg Ann'l Div'd Yield: 6%																																											
3.40	3.79	4.38	5.50	6.12	6.25	4.38	6.32	5.00	5.85	7.14	7.54	7.92	8.11	9.72	10.13	10.65	12.70	Revenues (\$mil): 985 Net Profit (\$mil): 135 Income Tax Rate: 36.5% Long-Term Debt Ratio: 28.5% Common Equity Ratio: 57.5% Total Capital (\$mil): 1880 Net Plant (\$mil): 1800 % Earned Total Cap'l: 8.0% % Earned Net Worth: 12.0% % Earned Comm Equity: 12.0% % Retained to Comm Eq: 10.5% % All Div'ds to Net Prof: 16%																																											
.95	1.07	1.21	1.47	1.61	1.62	1.18	1.44	1.48	1.73	1.98	2.12	2.17	2.18	2.93	2.75	3.00	3.60	Revenues (\$mil): 70.6 Net Profit (\$mil): 6.4 Income Tax Rate: 28.7% Long-Term Debt Ratio: 66.9% Common Equity Ratio: 26.9% Total Capital (\$mil): 222.9 Net Plant (\$mil): 202.8 % Earned Total Cap'l: 4.9% % Earned Net Worth: 8.7% % Earned Comm Equity: 9.0% % Retained to Comm Eq: 6.2% % All Div'ds to Net Prof: 42%																																											
.19	.23	.28	.33	.38	.44	.44	.41	.45	.41	.42	.47	.40	.35	.36	.39	.45	.50	Revenues (\$mil): 87.6 Net Profit (\$mil): 7.8 Income Tax Rate: 29.9% Long-Term Debt Ratio: 69.0% Common Equity Ratio: 26.1% Total Capital (\$mil): 251.1 Net Plant (\$mil): 227.2 % Earned Total Cap'l: 5.3% % Earned Net Worth: 10.1% % Earned Comm Equity: 10.6% % Retained to Comm Eq: 6.8% % All Div'ds to Net Prof: 43%																																											
.05	.07	.08	.09	.10	.12	.14	.16	.18	.20	.21	.23	.24	.26	.28	.30	.32	.34	Revenues (\$mil): 99.3 Net Profit (\$mil): 8.6 Income Tax Rate: 31.0% Long-Term Debt Ratio: 65.8% Common Equity Ratio: 30.5% Total Capital (\$mil): 285.5 Net Plant (\$mil): 237.5 % Earned Total Cap'l: 5.6% % Earned Net Worth: 9.6% % Earned Comm Equity: 9.6% % Retained to Comm Eq: 5.8% % All Div'ds to Net Prof: 45%																																											
1.92	1.36	2.00	2.41	2.63	2.54	3.11	2.80	2.32	2.43	2.20	2.42	2.50	2.68	3.38	4.34	4.00	3.70	Revenues (\$mil): 119.1 Net Profit (\$mil): 9.8 Income Tax Rate: 27.5% Long-Term Debt Ratio: 63.8% Common Equity Ratio: 29.4% Total Capital (\$mil): 296.4 Net Plant (\$mil): 235.2 % Earned Total Cap'l: 5.3% % Earned Net Worth: 8.4% % Earned Comm Equity: 8.9% % Retained to Comm Eq: 4.3% % All Div'ds to Net Prof: 48%																																											
2.30	2.46	2.66	2.92	3.16	3.33	3.71	3.98	4.08	4.28	4.83	5.89	7.81	12.00	14.17	18.46	18.25	18.45	Revenues (\$mil): 155.0 Net Profit (\$mil): 9.8 Income Tax Rate: 33.4% Long-Term Debt Ratio: 59.0% Common Equity Ratio: 31.8% Total Capital (\$mil): 329.3 Net Plant (\$mil): 292.8 % Earned Total Cap'l: 5.4% % Earned Net Worth: 7.7% % Earned Comm Equity: 7.7% % Retained to Comm Eq: 4.2% % All Div'ds to Net Prof: 49%																																											
6.43	6.51	6.74	6.82	7.35	9.70	16.18	16.47	19.86	20.35	21.69	23.15	24.79	29.57	30.32	34.96	42.75	44.45	Revenues (\$mil): 174.8 Net Profit (\$mil): 11.3 Income Tax Rate: 40.8% Long-Term Debt Ratio: 50.3% Common Equity Ratio: 41.4% Total Capital (\$mil): 467.2 Net Plant (\$mil): 379.2 % Earned Total Cap'l: 4.6% % Earned Net Worth: 5.0% % Earned Comm Equity: 3.1% % Retained to Comm Eq: 2.0% % All Div'ds to Net Prof: 64%																																											
..	6.5	9.2	14.9	10.0	11.5	18.6	25.5	46.3	NMF	38.7	56.4	81.0	..	Revenues (\$mil): 239.7 Net Profit (\$mil): 11.1 Income Tax Rate: 41.8% Long-Term Debt Ratio: 39.0% Common Equity Ratio: 54.1% Total Capital (\$mil): 655.6 Net Plant (\$mil): 463.1 % Earned Total Cap'l: 3.4% % Earned Net Worth: 3.0% % Earned Comm Equity: 3.1% % Retained to Comm Eq: 1.1% % All Div'ds to Net Prof: 65%																																											
..	7.9	10.1	12.6	.93	.93	1.26	1.71	3.84	NMF	2.87	3.60	3.05	..	Revenues (\$mil): 294.6 Net Profit (\$mil): 21.1 Income Tax Rate: 37.6% Long-Term Debt Ratio: 34.9% Common Equity Ratio: 58.1% Total Capital (\$mil): 739.6 Net Plant (\$mil): 624.5 % Earned Total Cap'l: 3.2% % Earned Net Worth: 3.1% % Earned Comm Equity: 3.0% % Retained to Comm Eq: 1.5% % All Div'ds to Net Prof: 53%																																											
..	4.3%	3.4%	2.6%	4.0%	4.1%	2.8%	1.9%	1.3%	7%	8%	9%	6%	..	Revenues (\$mil): 354.0 Net Profit (\$mil): 26.0 Income Tax Rate: 41.5% Long-Term Debt Ratio: 32.2% Common Equity Ratio: 57.5% Total Capital (\$mil): 1182.0 Net Plant (\$mil): 997.2 % Earned Total Cap'l: 3.0% % Earned Net Worth: 3.5% % Earned Comm Equity: 3.0% % Retained to Comm Eq: 1.5% % All Div'ds to Net Prof: 53%																																											
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$424.8 mil. Due in 5 Yrs \$125.0 mil. LT Debt \$407.8 mil. LT Interest \$31.0 mil. (LT Interest earned: 2.7%; total interest coverage: 2.6x) Pension Liability None-No defined benefit plan Pfd Stock \$41.7 mil. Pfd Div'd \$1.7 mil. Incl. 11 different series of redeemable and non-redeemable, mostly closely held with \$17.1 mil. liq. value w. res of 5%-9% and conv. into approx. 915,000 shs. Common Stock 40,769,991 shs. (Includes 6,860,697 Series A com. shs.) (41.7 million fully diluted shares)										BUSINESS: Telephone & Data Systems, Inc. is an independent telecommunications company, serving about 316,000 access lines in primarily rural areas through 88 telephone cos. in 28 states. Telephone operations provided 60% of 1991 revs. Other subsidiaries include American Paging (12% of revs.) and 83%-owned United States Cellular (28% of revs., 19.8 million population equivalents).																																																			
CURRENT POSITION <table border="1"> <tr><th></th><th>1990</th><th>1991</th><th>9/30/92</th></tr> <tr><td>Cash Assets</td><td>72.8</td><td>53.4</td><td>47.7</td></tr> <tr><td>Other</td><td>49.0</td><td>68.1</td><td>109.6</td></tr> <tr><td>Current Assets</td><td>121.8</td><td>121.5</td><td>157.3</td></tr> <tr><td>Accts Payable</td><td>37.2</td><td>43.7</td><td>39.4</td></tr> <tr><td>Debt Due</td><td>85.2</td><td>56.6</td><td>17.0</td></tr> <tr><td>Other</td><td>23.5</td><td>29.0</td><td>58.9</td></tr> <tr><td>Current Liab.</td><td>145.9</td><td>129.3</td><td>115.3</td></tr> <tr><td>Fix. Chg. Cov.</td><td>188%</td><td>125%</td><td>158%</td></tr> </table>											1990	1991	9/30/92	Cash Assets	72.8	53.4	47.7	Other	49.0	68.1	109.6	Current Assets	121.8	121.5	157.3	Accts Payable	37.2	43.7	39.4	Debt Due	85.2	56.6	17.0	Other	23.5	29.0	58.9	Current Liab.	145.9	129.3	115.3	Fix. Chg. Cov.	188%	125%	158%	Telephone & Data Systems' operations are performing well. Revenue growth in the telephone segment is now comparatively strong. And cellular sales are rising rapidly, due in part to the company's expanded market coverage. More importantly, strong revenue trends in cellular are causing operating income to move past the break-even level, since many expense items typically rise at slow rates or can be shared across different geographic markets. However, dilution from investments is restraining bottom-line growth. The company's cellular subsidiary, U.S. Cellular (reported on the following page), has been investing in new licenses and upgrading its infrastructure. The equity financing needed for such investments is spreading TeleData's profits over a larger number of shares. To some extent, we expect this factor to persist in the first half of 1993. But, by the latter part of the year, TeleData's results should look more impressive since we expect U.S. Cellular's investment activities to taper off. The company's extensive cellular assets should generate rapid share-net															
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DEC. 30 Dividend reinvest. plan avail. (5% discount). (C) In millions, adj. for stock splits. Common stock has 1 vote/sh.; Series A, 10 votes/sh.										Factual material is obtained from sources believed to be reliable, but the publisher is not responsible for any errors or omissions contained herein. For the confidential use of subscribers. Reprinting, copying, and distribution by permission only. Copyright 1993 by Value Line Publishing, Inc. ® Reg TM—Value Line, Inc.																																																			

AMERITECH NYSE-AIT		RECENT PRICE	71	P/E RATIO	14.1 (Trailing: 14.4 Median: 8.6)	RELATIVE P/E RATIO	0.88	DIV'D YLD	5.2%	VALUE LINE	751						
TIMELINESS (Rating: 3) Average (since Next 12 Mos.) SAFETY (Scale: 1 Highest to 5 Lowest) 1 Highest BETA .85 (1.00 = Market) 1995-97 PROJECTIONS Ann'l Total High Price 100 Gain (+40%) 13% Low Price 80 (-15%) 8%		High: 22.3 26.0 35.5 50.8 49.9 48.9 68.3 69.8 69.8 74.0 Low: 20.7 20.8 24.8 32.7 37.0 41.0 48.9 52.5 55.8 56.3		Target Price Range 1995 1996 1997 200 160 128 96 80 64 48 40 32 24 16 12		1.44 x Dividends p.sh. divided by Interest Rate 3-for-2 split 2-for-1 split Relative Price Strength		Shaded areas indicate recessions		Options: CBOE		Institutional Decisions 1992 1991 1990 to Buy 114 113 124 Percent 6.0 to Sell 149 134 113 shares 4.0 Held 77289 78089 78506 traded 2.0					
American Information Technologies Corp. (Ameritech) , is one of the seven regional holding companies resulting from the breakup of the American Telephone & Telegraph Co. on January 1, 1984. One share of Ameritech stock was exchanged for 10 shares of AT&T (pre-divestiture) common stock. The stock began trading on a when-issued basis on November 21, 1983. "Regular" trading of Ameritech shares began on February 16, 1984.		CAPITAL STRUCTURE as of 9/30/92 Total Debt \$6558.2 mil. Due in 5 Yrs \$2500.0 mil. LT Debt \$4785.8 mil. LT Interest \$362.2 mil. Incl. \$24.4 mil. capitalized leases. (LT interest earned: 6.2x; total interest coverage: 4.8x) Leases, Uncapitalized: Annual rentals \$80.1 mil.		CURRENT POSITION (\$MILL) Cash Assets 119.2 25.3 20.8 Other 2358.8 2500.8 2397.8 Current Assets 2478.0 2526.1 2418.4 Accts Payable 1398.8 1405.0 1500.0 Debt Due 1694.8 1973.2 1792.4 Other 1515.5 1693.8 1546.5 Current Liab. 4608.9 5072.0 4838.9 Fix. Chg. Cov. 481% 383% 475%		ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '89-'91 of change (per sh) Revenues 5.0% 2.5% "Cash Flow" 5.0% 4.0% Earnings 5.0% 5.5% Dividends 8.0% 5.0% Book Value 3.0% 6.0%		QUARTERLY REVENUES (\$mill) Cal-ender Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 2500 2552 2555 2604 10211 1990 2619 2680 2669 2695 10663 1991 2628 2742 2705 2743 10818 1992 2691 2806 2813 2800 11110 1993 2800 2900 2930 2950 11580		QUARTERLY DIVIDENDS PAID (\$mill) Cal-ender Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .73 .73 .73 .73 2.92 1990 .79 .79 .79 .79 3.16 1991 .85 .85 .85 .85 3.40 1992 .88 .88 .88 .88 3.52 1993 .92		AMERITECH'S '93 PROFIT PROSPECTS LOOK GOOD. The economies of the Midwestern markets served by the company are growing at a good clip. Ameritech also continues to upgrade its network's switching and transmission capabilities. This program will stimulate demand since the upgrades will enable new calling services to be offered to customers. These investments will also reduce maintenance expenses as well as the manpower required for network operations. Finally, a much larger portion of Ameritech's income is unconstrained by regulatory caps compared to past years. The long-term trend in the telecommunications industry is towards more competition. Cellular providers, firms with private fiber-optic networks, and other enterprises are now all capable of transmitting calls. Thus, Ameritech can no longer be considered a natural monopoly. The rate structures in some of the company's markets is an aid to some of Ameritech's rivals. Regulators have a tendency to set rates for local calls by residential users at below cost while longer-distance business users must pay a premium to route their calls through the		network access, 24%; other, 19%. Purchased 49.9% stake in Telecom Corp. of New Zealand on 9/90 (now 34.5% after 1991 equity offering). Customer lines/Bell employee: 258. '91 dep. rate: 7.1%. Has 73,965 employees, 1.04 million shareholders. Chairman/C.E.O.: William L. Weiss, Inc. DE. Address: 30 South Wacker Drive, Chicago, IL 60606. Tel.: 312-750-5000.		telephone network. This allows competitors, with alternate networks, to step in, undercut Ameritech on price for its premium services and still make a profit. As a result, one of the company's goals is to get rate structures more closely aligned to costs in a number of its markets. Cable TV operators are a potential threat. The outlays that cable operators would have to make in their plants in order to provide phone service is less than the investment (though the gap appears to be closing) required of Ameritech to provide video programming. Too, the market for telephone service is ten times bigger than the video market, making the competitive tradeoff still worse for Ameritech. However, Ameritech has better finances, superior billing and marketing functions, and switching capabilities in the network that allows interactive video services to be offered. And, cable operators are still prohibited from providing an audio tone. All told, Ameritech's eventual fate in the newly competitive marketplace is hard to predict. However, earnings volatility is more likely for this equity in the future.	
1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993		REVENUES PER SH 45.60 "CASH FLOW" PER SH 14.85 EARNINGS PER SH (D) 6.40 Div'd Dec'd per sh (C) 4.15 Cap'l Spending per sh 9.05 Book Value per sh 35.90 Common Shs Outst'g (E) 277.00 Avg Ann'l P/E Ratio 14.0 Relative P/E Ratio 1.10 Avg Ann'l Div'd Yield 4.3%		REVENUES (\$mill) 12620 Net Profit (\$mill) 1760 Income Tax Rate 33.5% Net Profit Margin 13.9% Long-Term Debt Ratio 33.5% Common Equity Ratio 66.5% Total Capital (\$mill) 14950 Net Plant (\$mill) 18500 % Earned Total Cap'l 13.0% % Earned Net Worth 17.5% % Earned Comm Equity 17.5% % Retained to Comm Eq 6.0% % All Div'ds to Net Prof 65%		1989 1990 1991 1992 1993 1.12 1.19 1.06 1.22 4.59 1.13 1.33 1.18 1.09 4.73 1.07 1.15 1.15 1.27 4.64 1.16 1.28 1.23 1.28 4.95 1.22 1.31 1.37 1.40 5.30		1989 1990 1991 1992 1993 .73 .73 .73 .73 2.92 .79 .79 .79 .79 3.16 .85 .85 .85 .85 3.40 .88 .88 .88 .88 3.52 .92		Excl. extra. charge: '91, 53¢. Includes unusual loss: 1990, 12¢. Next reg. rpt. due mid-Jan. (C) Next div'd meeting about Mar. 18. Goes ex about Mar. 25. Div'd payment dates about the 1st of Feb., May, Aug., and Nov. Div'd reinvest. plan available. (D) In millions, adj. for stock splits. (E) FASB 108 adopted year-end '92 as 1-time charge (\$1.7 bil.)		Company's Financial Strength A+ Stock's Price Stability 95 Price Growth Persistence 80 Earnings Predictability 100					

(A) Figures from before divestiture (11/1/84) not comparable to post-divestiture estimates and results. (B) Based on avg. shs. outstanding. Excl. nonrecr. gain: '88, 13¢; '91, 28¢, '92, 12¢. Excl. extra. charge: '91, 53¢. Includes unusual loss: 1990, 12¢. Next reg. rpt. due mid-Jan. (C) Next div'd meeting about Mar. 18. Goes ex about Mar. 25. Div'd payment dates about the 1st of Feb., May, Aug., and Nov. Div'd reinvest. plan available. (D) In millions, adj. for stock splits. (E) FASB 108 adopted year-end '92 as 1-time charge (\$1.7 bil.)

Company's Financial Strength A+
 Stock's Price Stability 95
 Price Growth Persistence 80
 Earnings Predictability 100

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BELL ATLANTIC NYSE-BEL		RECENT PRICE	51	P/E RATIO	15.5	(Trading: 16.7 Median: 14.6)	RELATIVE P/E RATIO	0.97	DIVD YLD	5.1%	VALUE LINE	752			
TIMELINESS (Relative Price Performance Next 12 Mos.) 4 Below Average SAFETY (Scale: 1 Highest to 5 Lowest) 1 Highest BETA .95 (1.00 = Market)		High: 17.8	20.8	26.8	38.5	39.9	37.3	56.1	57.1	54.1	53.9	Target Price Range 1995 1996 1997			
1995-97 PROJECTIONS Price Gain Ann'l Total High 60 (+20%) 9% Low 50 (Nil) 5%		16.3	16.4	19.4	25.0	30.3	31.1	34.7	38.5	43.0	40.3	160	120		
Insider Decisions M A M J J A S O N to Buy 1 1 0 0 0 0 0 0 0 to Sell 0 0 0 0 0 0 0 0 0		1.48 x Dividends p sh	2-for-1 split		2-for-1 split		2-for-1 split		2-for-1 split		80	64			
Institutional Decisions 1992 1991 1990 to Buy 156 178 178 to Sell 159 178 148 Net Buy 115287 123462 126799		Percent 6.0 shares 4.0 traded 2.0		Relative Price Strength		Relative Price Strength		Relative Price Strength		Relative Price Strength		48			
Options; CBOE Shaded areas indicate positions												24			
Bell Atlantic is one of the seven regional holding companies resulting from the breakup of the American Telephone & Telegraph Company on January 1, 1984. Each AT&T shareholder received one share of Bell Atlantic common for every 10 shares of AT&T (pre-divestiture) common stock held. The stock began trading on a when-issued basis on November 21, 1983. "Regular" trading of Bell Atlantic shares began on February 16, 1984.		1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	VALUE LINE PUB. INC. 95-97	12
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$10084 mil. Due in 5 Yrs \$4120 mil. LT Debt \$7627 mil. LT Interest \$560.0 mil. Incl. \$180.0 mil. capitalized leases. (LT interest earned: 5.0%; total interest coverage: 4.3x) Leases, Uncapitalized Annual rentals \$112.8 mil. Pension Liability None Pfd Stock None Common Stock 432,909,827 shs. as of 10/31/92.		20.30	22.74	24.93	25.99	27.61	29.02	31.28	31.01	28.00	28.75	28.75	28.75	Revenue per sh ^(A)	32.85
CURRENT POSITION 1990 1991 9/30/92 Cash Assets 109.7 245.3 231.2 Other 3717.9 3604.1 3772.9 Current Assets 3827.8 3849.4 4004.1 Accts Payable 2171.0 1876.0 1615.9 Debt Due 2597.0 2014.3 2457.4 Other 1197.0 1284.9 1368.3 Current Liab. 5965.0 5175.2 5439.6 Fix. Chg. Cov. 398% 358% 399%		2.49	2.74	2.93	3.12	3.33	3.34	3.38	3.41	3.25	3.45	3.45	3.45	"Cash Flow" per sh	10.25
ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '89-'91 of change (per sh) Revenues 7.0% 8.0% 1.5% "Cash Flow" 7.0% 7.0% 2.0% Earnings 4.5% 4.5% 4.0% Dividends 7.0% 7.0% 4.0% Stock Value 1.5% 1.5% 1.0%		1.60	1.70	1.80	1.92	2.04	2.20	2.36	2.52	2.60	2.65	2.65	2.65	Earnings per sh ^(B)	4.25
QUARTERLY REVENUES (\$ mil.) Calendar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 2768 2882 2910 2888 11448 1990 3018 3077 3098 3105 12298 1991 2996 3081 3104 3099 12290 1992 3077* 3149 3167 3177 12570 1993 3200 3225 3250 3275 12950		4.80	5.41	5.76	5.97	6.23	6.55	6.41	6.21	6.30	6.50	6.50	6.50	Div'ds Decl'd per sh ^(C)	3.00
QUARTERLY DIVIDENDS PAID (%) Calendar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .84 .87 .86 .77 3.34 1990 .90 .92 .91 .65 3.38 1991 .88 .89 .96 .68 3.41 1992 .81* .83 .82 .79 3.25 1993 .84 .85 .87 .89 3.45		18.84	19.83	20.91	22.07	23.29	21.78	22.71	19.77	18.65	19.45	19.45	19.45	Cap'l Spending per sh	6.30
BUSINESS: Bell Atlantic Corp. is a holding company for the Chesapeake & Potomac Telephone Cos., N.J. Bell, Diamond State Tel., and Bell Co. of PA. Bell Atlantic is a major supplier of telephone services in DE, MD, NJ, VA, West Virginia, and Washington, D.C. Owns 10.7% of the assets of the former AT&T; 50% of joint acquisition of Telecom Corp. Access lines in service: 17.8 mil.		396.46	399.49	397.94	396.19	394.03	394.45	393.19	396.05	433.50	433.50	433.50	433.50	Book Value per sh	23.05
AN IMPROVING ECONOMY, LOW INTEREST RATES, AND TIGHT COST CONTROLS SHOULD CONTINUE TO FUEL BELL ATLANTIC'S PROFIT GAINS. Although economic growth is still somewhat sluggish in its operating areas, growth in access lines and minutes of usage is on an upward trend. In addition, the company is taking advantage of today's low interest rate environment to refinance a good portion of its long-term debt. As a result, we expect pre-tax interest savings of over \$15 million annually. Meanwhile, Bell Atlantic continues to become more and more efficient. It already boasts the lowest cost structure among the seven Baby Bells. Management remains focused on additional productivity gains, and savings resulting from additional workforce reductions should further enhance the company's operating leverage. Meanwhile, Bell Atlantic's cellular unit is enjoying excellent growth. The company is signing on new customers at an annual rate of about 28%, with annual revenue growth of 22%. After Bell Atlantic's recent merger with Metro Mobile CTS, the company is now the fourth largest cellular operator in the U.S. When the		7.3	8.2	11.1	11.2	10.5	13.4	14.5	14.0	14.0	14.0	14.0	14.0	Avg Ann'l P/E Ratio	13.0
Two systems are fully integrated and support functions centralized. Bell Atlantic Mobile will enjoy enhanced economies of scale in the well-travelled Northeast corridor. The proposed AT&T-McCaw Cellular deal will likely increase competitive pressures. AT&T is negotiating to acquire a 33% stake in McCaw, the country's largest cellular operator. Although Bell Atlantic would compete directly with the formidable power of AT&T only in its Pittsburgh cellular market, the proposed pact would put AT&T back into the local, albeit wireless, telephone market. On the bright side, however, the transaction would give Bell Atlantic and other Regional Bells a strong argument to convince regulators that the traditional monopoly on local service is eroding, and that restrictions should be eased so that they can compete more effectively. Bell Atlantic stock is ranked to underperform the market in the coming year. At its current price, total return potential out to 1995-97 appears to be sub-par as well.		.68	.67	.75	.75	.87	1.01	1.08	.89	.85	.85	.85	.85	Relative P/E Ratio	1.00
Jeffrey M. Bagley January 15, 1993		8.8%	7.6%	5.5%	5.5%	5.8%	4.9%	4.8%	5.3%	5.7%	5.7%	5.7%	5.7%	Avg Ann'l Div'd Yield	5.4%
Company's Financial Strength Stock's Price Stability A+ Price Growth Persistence 80 Earnings Predictability 100		88%	96%	65%	62%	61%	61%	60%	65%	69%	73%	80%	77%	% All Div'ds to Net Prof	71%

(A) Historical figures (pre-1984) are not comparable to post-divestiture estimates and results. (B) Based on avg. shs. outstanding. Excl. nonrecurring charge: '89, 60c; '91, \$3.94; '92, 1¢ (net). Excludes extra. charge: '92, 7¢. Next earnings report due late-Jan. (C) Next dividend meeting about Mar. 23. Goes ex-div. about Apr. 6. Expected div. payment dates: Feb. 1, May 3, Aug. 2, Nov. 1. (D) In millions, adjusted for stock splits. (E) Includes finance sub. from 1988. (F) Restated for Metro Mobile merger. Factual material is obtained from sources believed to be reliable, but the publisher is not responsible for any errors or omissions contained herein. For the confidential use of subscribers. Reprinting, copying, and distribution by permission only. Copyright 1993 by Value Line Publishing, Inc. ® Reg. TM—Value Line, Inc.

BELLSOUTH NYSE-BLS				RECENT PRICE	52	P/E RATIO	15.8	(Trailing: 15.4 Median: 14.1)	RELATIVE P/E RATIO	0.99	DIV'D YLD	5.3%	VALUE LINE	753												
TIMELINESS (Relative Price Performance Next 12 Mos.) 4 Below Average SAFETY (Scale: 1 Highest to 5 Lowest) 1 Highest BETA .85 (1.00 = Market)				High: 20.1	23.9	32.8	46.0	44.3	43.9	58.1	55.0	55.4	Target Price Range	1995	1996	1997										
1995-97 PROJECTIONS High Price 70 (+35%) Low Price 55 (-5%) Ann'l Total Return 12% Gain (+5%) 7%														160	120	100	80	64	48	40	32	24	20	16	12	8
Insider Decisions M A M J J A S O N to Buy 1 0 1 0 0 0 0 0 0 0 to Sell 0 0 0 0 0 0 0 0 0 0 to Hold 0 0 0 0 0 0 0 0 0 0				Institutional Decisions 10/92 3/92 9/92 to Buy 128 171 178 to Sell 208 189 155 Shares 117643 118874 122209 Percent shares traded 6.0 4.0 2.0										Options: ASE Shaded areas indicate recessions												
BellSouth Corporation is the largest regional telephone company resulting from the breakup of the American Telephone & Telegraph Company on January 1, 1984. Each AT&T shareholder received one share of BellSouth common for each 10 shares of AT&T (pre-divestiture) held. The stock began trading on a when-issued basis on November 21, 1983. "Regular" trading of BellSouth shares began on February 16, 1984.				1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	VALUE LINE PUBL. INC. 95-97										
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$889.0 mil Due in 5 Yrs \$242.0 mil LT Debt \$757.3 mil LT Interest \$59.5 mil Incl. \$438.7 million capitalized leases. (LT interest earned: 5.7%; total interest coverage: 4.4x)				10354	10724	9631.4	10664	11444	12269	13597	13996	14345	14446	15100	15700	Revenues per sh ^(A)	35.35	35.35	35.35							
Pension Liability None Pfd Stock None Common Stock 493,625,927 shs. as of 11/9/92.				41.7%	43.1%	43.0%	42.9%	45.1%	38.4%	31.5%	30.9%	32.3%	33.3%	36.0%	36.0%	"Cash Flow" per sh	11.05	11.05	11.05							
CURRENT POSITION 1990 1991 9/30/92 Cash Assets 469.1 428.9 350.8 Other 3180.4 3208.6 3298.6 Current Assets 3649.5 3637.5 3647.4 Accts Payable 1037.9 855.6 888.7 Debt Due 1122.5 1667.8 1316.7 Other 216.0 2220.1 2437.0 Current Liab. 4276.4 4843.5 4842.4 Fix. Chg. Cov. 391% 350% 407%				1351.8	1371.5	1257.2	1417.8	1588.7	1664.8	1665.5	1642.2	1631.5	1508.9	1645	1915	Income Tax Rate	35.0%	35.0%	35.0%							
ANNUAL RATES Past 10 Yrs. Past 5 Yrs. Est'd '85-'91 to '95-'97 Revenues 5.5% 3.0% "Cash Flow" 6.5% 3.0% Earnings 1.0% 6.0% Dividends 7.0% 3.5% Book Value 4.0% 3.0%				14574	15855	16669	17517	18299	18870	20157	20447	20850	21300	21985	21985	Net Profit Margin	34.0%	34.0%	34.0%							
QUARTERLY REVENUES (\$ mil) Calendar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 3367 3469 3545 3615 13996 1990 3524 3619 3551 3651 14345 1991 3540 3582 3629 3695 14446 1992 3739 3817 3736 3808 15100 1993 3850 3925 3950 3975 15700				19082	20396	21234	22169	22678	23455	23742	23907	24059	23960	24120	24720	Long-Term Debt Ratio	34.0%	34.0%	34.0%							
QUARTERLY EARNINGS PER SHARE (\$) Calendar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .82 .87 .89 .90 3.48 1990 .88 .91 .84 .75 3.38 1991 .82 .76 .73 .80 3.11 1992 .86 .94 .78 .77 3.35 1993 .85 .90 .93 .97 3.65				11.4%	9.8%	10.3%	10.7%	10.6%	10.4%	9.6%	9.5%	8.6%	9.5%	10.0%	10.0%	% Earned Total Cap'l	14.5%	14.5%	14.5%							
QUARTERLY DIVIDENDS PAID (\$) Calendar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .59 .63 .63 .63 2.48 1990 .63 .67 .67 .67 2.64 1991 .67 .69 .69 .69 2.74 1992 .69 .69 .69 .69 2.76				16.6%	13.4%	13.9%	14.1%	13.9%	14.1%	12.9%	12.9%	11.5%	12.0%	12.5%	12.5%	% Earned Comm Equity	14.1%	14.1%	14.1%							
BUSINESS: BellSouth Corp. is the largest telephone holding company resulting from the AT&T breakup (owns 14% of the former AT&T's assets). Through Southern Bell and South Central Bell subsidiaries serves customers in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. Access lines in service; 18.4 million; '91 telco revenue breakdown: local service, 40%; access charges, 26%; toll, 10%; other, 24%. Telephone company employees per 10,000 access lines: 44.7. '91 depreciation rate: 7.9%. Estimated plant age: 5 yrs. Has 98,975 employees, about 1.3 mil. shareholders. Chairman, C.E.O. & President: John L. Clendinning, Inc.: GA. Address: 1165 Peachtree St., N. E., Atlanta, GA 30367. Tel: 404-249-2000.				75%	81%	61%	60%	60%	64%	66%	72%	78%	75%	82%	79%	% All Div'ds to Net Prof	4.0%	4.0%	4.0%							
BellSouth is benefiting from a relatively strong Southeast economy. In the third quarter, the company posted the best annual access line growth of all the Baby Bells. Minutes of usage, although inflated by Hurricane Andrew, showed strong gains as well. Despite the added near-term expense, there may be some positive consequences from Hurricane Andrew's devastation. As insurance claims are settled, there will be vast sums of money injected into the Florida and Louisiana economies to rebuild homes and purchase durable goods. In addition, BellSouth enjoys good population growth in its operating areas. Together, these factors should add up to increased demand for the company's services, thus enhancing its long-term profit growth potential.				The wireless segment promises long-term growth ... BellSouth and other Regional Bells are investing heavily in wireless technologies, such as cellular, paging, and mobile data. Indeed, as a result of acquisitions and expansion in the customer base, total subscribers to its cellular services grew by 50% over last year's total. Although its recent investments will dilute earnings in the near term, we view these investments as necessary to insure long-term gains as its markets are opened up to increased competition.										... but the proposed AT&T-McCaw Cellular deal will likely increase competitive pressures. AT&T is negotiating to acquire a 33% stake in McCaw, the country's largest cellular operator. If the deal is approved, BellSouth's cellular operations will compete directly with the formidable AT&T in some of its markets. In addition, the pact would put AT&T back into the local, albeit wireless, telephone market. On the bright side, however, the transaction would give BellSouth and other Regional Bells a strong argument to convince regulators and the courts that the monopoly on local service is eroding, and that restrictions should be eased so that they can compete more effectively.												
Jeffrey M. Bagley				January 15, 1993										Company's Financial Strength A+ Stock's Price Stability 95 Price Growth Persistence 80 Earnings Predictability 100												

(A) Historical figures (pre-1984) are not comparable to post-divestiture estimates and relating. (B) Based on average shares outstanding. Next earnings report due late-Jan. Excludes extraordinary gain (loss): '89, (\$6); '92, (\$6). Excludes nonrecurring gain (loss): '89, 21; '91, (7); '92, \$6. (C) Next dividend meeting about March 23. Goes ex-dividend about April 8. Dividend payment dates: Feb. 1, May 1, Aug. 1, Nov. 1. Dividend reinvestment plan available. (D) In millions, adjusted for stock splits. Factual material is obtained from sources believed to be reliable, but the publisher is not responsible for any errors or omissions contained herein. For the confidential use of subscribers. Reprinting, copying, and distribution by permission only. Copyright 1993 by Value Line Publishing, Inc. ® Reg. TM—Value Line, Inc.

PACIFIC TELESIS NYSE-PAC			RECENT PRICE	45	P/E RATIO	16.1	(Trailing: 16.1 Median: NMF)	RELATIVE P/E RATIO	1.01	DYD YLD	4.8%	VALUE LINE	765		
TIMELINESS (Relating Price Performance since Next 12 Mos.) 3 Average SAFETY (Scale: 1 Highest to 5 Lowest) 1 Highest BETA .90 (1.00 = Market)			High	14.6	17.8	21.5	31.1	33.8	32.5	51.1	51.5	45.5	47.0	Target Price Range	
			Low	12.8	13.1	16.7	19.4	22.5	24.9	30.4	36.3	38.5	38.9	1995 1996 1997	
1995-97 PROJECTIONS Price Gain Ann'l Total High 85 (+45%) 13% Low 55 (+20%) 9%													100 80 64 48 40 32 24 20 16 12 8 6		
Insider Decisions M A M J J A S O N to Buy 0 1 0 0 0 0 0 0 0 0 to Sell 2 0 0 0 0 0 0 0 0 0															
Institutional Decisions 1992 1991 1990 to Buy 149 152 166 to Sell 176 175 153 Net Buy 140110 140312 143623													Percent 6.0 shares 4.0 traded 2.0		
Pacific Telesis Group is one of the seven regional holding companies that resulted from the breakup of American Telephone & Telegraph on January 1, 1984. One share of Pacific Telesis stock was exchanged for every 10 shares of AT&T common (pre-divestiture). PacTel shares began trading on a when-issued basis on November 21, 1983. "Regular" trading began on February 16, 1984.			1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	VALUE LINE PUB. INC. 95-97
			Revenue per sh ^A	27.00	21.38	22.64	23.94	24.32	24.87	24.50	24.65	24.85	24.65	27.00	
			"Cash Flow" per sh ^B	8.55	6.22	7.24	7.69	7.55	7.42	7.35	7.70	7.35	7.70	8.55	
			Earnings per sh ^C	3.80	2.21	2.81	3.02	2.77	2.81	2.80	2.85	2.85	2.85	3.80	
			Div'ds Dec'd per sh ^D	2.35	1.64	1.78	1.88	2.02	2.14	2.18	2.22	2.18	2.22	2.35	
			Cap'l Spending per sh	6.05	4.75	3.58	4.22	4.85	4.66	4.66	4.66	4.66	4.66	6.05	
			Book Value per sh ^E	23.80	18.47	19.30	19.68	18.53	19.27	20.50	21.20	21.20	21.20	23.80	
			Common Shs Outst'g ^F	395.10	418.91	400.79	399.46	401.02	404.70	405.70	405.70	405.70	405.70	395.10	
			Avg Ann'l P/E Ratio	16.0	10.4	10.4	13.4	16.0	14.8	15.0	15.0	15.0	15.0	16.0	
			Relative P/E Ratio	1.25	.83	.88	1.01	1.19	.94	.90	.90	.90	.90	1.25	
			Avg Ann'l Div'd Yield	3.9%	8.1%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	3.9%	
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$6425 mil. Due in 5 Yrs \$2500.0 mil. LT Debt \$5339 mil. LT Interest \$422.1 mil. (LT interest earned: 5.1x; total interest coverage: 4.4x)			1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	Revenue (\$mil) ^A
			8132.6	7824.3	8498.6	8977.3	9131.0	9483.0	9593.0	9716.0	9895.0	9910	10010	10640	
			631.2	828.5	929.1	1079.4	950.0	1188.0	1242.0	1102.0	1109.0	1110	1170	1480	
			39.9%	41.5%	44.7%	44.3%	40.2%	38.7%	37.4%	36.6%	36.6%	37.0%	38.5%	Income Tax Rate	
			7.8%	10.6%	10.9%	12.0%	10.4%	12.9%	12.9%	11.3%	11.2%	11.2%	11.7%	Net Profit Margin	
			47.2%	44.1%	43.5%	41.4%	40.2%	40.3%	40.1%	42.8%	41.6%	38.0%	37.0%	Long-Term Debt Ratio	
			48.6%	52.0%	54.9%	58.2%	59.6%	59.5%	59.4%	56.5%	58.4%	62.0%	63.0%	Common Equity Ratio ^F	
Leases, Uncapitalized None Pension Liability None Pfd Stock None Common Stock 404,384,944 shs. as of 10/31/92			1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	Total Capital (\$mil) ^F
			12302	12456	13339	13318	13233	13597	13279	13105	13233	13395	13700	15125	
			15129	16000	16968	17245	17192	17155	17079	17160	17117	17200	17450	17900	
			8.1%	9.2%	9.2%	10.1%	9.1%	10.7%	11.3%	10.7%	10.3%	10.0%	10.0%	% Earned Total Cap'l	
			10.6%	12.8%	12.7%	13.9%	12.0%	14.7%	15.7%	14.9%	14.3%	13.5%	13.5%	% Earned Net Worth	
			10.6%	12.8%	12.7%	13.9%	12.0%	14.7%	15.7%	14.9%	14.3%	13.5%	13.5%	% Earned Comm Equity	
			2.4%	4.6%	4.6%	5.5%	3.1%	6.4%	6.9%	4.9%	4.3%	3.5%	3.5%	% Retained to Comm Eq	
			78%	64%	64%	61%	74%	57%	59%	67%	70%	75%	73%	% All Div'ds to Net Prof	
CURRENT POSITION 1990 1991 9/30/92 Cash Assets 110 86 125 Other 2368 2433 2390 Current Assets 2478 2519 2515 Accts Payable 1970 1772 1556 Debt Due 120 967 1088 Other 1446 804 754 Current Liab. 3536 3543 3398 Fix. Chg. Cov. 343% 396% 435%			BUSINESS: Pacific Telesis Group is one of 7 regional holding cos. previously owned by AT&T. Serves 63 of 58 California counties through Pacific Bell subsidiary (97% of regulated revenues) and about one-third of Nevada through Nevada Bell (3%). Also markets cellular and paging services and business information systems. Has 14.5 million access lines in service, 31.5 million cellular POPs in U.S., about 30-35 million more POPs overseas mostly in Germany and Japan. '91 revenue breakdown: local service, 34%; network access, 23%; toll, 22%; unregulated, 21%. '91 depreciation rate: 7.1%. Has 62,238 employees, 1.1 million shareholders. Chairman & CEO: Sam L. Ginn, Inc.: NV. Address: 130 Kearny Street, San Francisco, CA 94108. Tele.: 415-394-3000.												
ANNUAL RATES Past Past Est'd '89-'91 of change (per sh) 10 Yrs. 5 Yrs. to '95-'97 Revenues 4.0% 1.5% "Cash Flow" 7.5% 5.0% Earnings 4.5% 5.0% Dividends 7.0% 4.5% Book Value 2.5% 3.5%			Pacific Telesis plans to fully spin off its wireless operations. In about a year, the company plans to divest its cellular, paging, and other wireless businesses through a combination of public and private equity sales. The wireless operations are to be folded into a new corporation named "PacTel Corporation". "PacTel" shares aren't likely to pay dividends, which is typical of cellular stocks. After the spinoff, Pacific Telesis will consist of the leftover segments, namely the Pacific and Nevada Bell subsidiaries. Pacific Telesis shares are likely to be high in quality and income payout in line with traditional phone company stocks. We like this strategy. Ironically, the sum of Pacific Telesis' parts appears to be less when together than when separated. This is due to regulations, stemming from the '84 AT&T breakup, that prohibit the wireless subsidiaries from manufacturing their own equipment and from providing long-distance services while they're affiliated with a Regional Bell Company. Also, the new wireless entity will be capitalized solely with equity. Such financial strength should allow it to continue to sustain its significant investment activities in new and existing wireless projects even if it can no longer obtain financing from its parent company. Meanwhile, earnings momentum is slow. PacTel's cellular segment is either building or rolling out calling service in Germany, Japan, and Portugal. These activities will continue to hurt near-term profits (though we expect long-term returns from these projects to be worthwhile) since the initial revenue stream from these ventures is far lower than the depreciation, interest, and operating startup costs being incurred. Domestic cellular operations may also be hurt by a recent ruling, currently under review, by California regulators that could limit the pricing flexibility and profitability of cellular operations in that state. The stock's total return potential looks solid after adjusting for its low-risk profile. Also, the spinoff should generate incremental value for shareholders. However, we don't expect these shares to perform better than the market in the next six to 12 months. Philip S. Mulqueen January 15, 1993												
QUARTERLY REVENUES (\$mil) Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 2343 2407 2368 2475 9593.0 1990 2373 2434 2468 2441 9716.0 1991 2410 2520 2499 2466 9895.0 1992 2474 2498 2512 2428 9910 1993 2475 2500 2550 2485 10010			QUARTERLY DIVIDENDS PAID^F Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .44 .47 .47 .47 1.85 1990 .47 .505 .505 .505 1.99 1991 .505 .535 .535 .535 2.11 1992 .535 .545 .545 .545 2.17												
EARNINGS PER SHARE^B Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 1989 .76 .79 .68 .79 3.02 1990 .65 .72 .72 .68 2.77 1991 .68 .73 .70 .70 2.81 1992 .68 .71 .70 .71 2.80 1993 .68 .70 .72 .75 2.85			Company's Financial Strength Stock's Price Stability A+ Price Growth Persistence 80 Earnings Predictability 85												

(A) Historical figures (pre-'84) not comparable to post-divestiture results. (B) Based on weighted avg. shs. out. Next egs. report in mid-Feb. Excl. nonrecr. losses: In '90, (17c); '91, (23c). (C) Excl. nonrecr. gains: In '82, \$226.1 mil.; '83, \$216.4 mil. (D) Next divd. meeting about Mar. 10. Goes ex about Apr. 5. Divid. payment dates: Feb. 1, May 1, Aug. 1, Nov. 1. (E) Divid. reinvestment plan (3.5% discount) available. (F) In millions, adj. for stock splits. (F) Assumes adoption of FASB 108 in '93 with previous yr. accruals amortized over 20 yrs. Factual material is obtained from sources believed to be reliable, but the publisher is not responsible for any errors or omissions contained herein. For the confidential use of subscribers. Reprinting, copying, and distribution by permission only. Copyright 1993 by Value Line Publishing, Inc. ® Reg. TM—Value Line, Inc.

S.W. BELL NYSE-SBC			RECENT PRICE	74	P/E RATIO	16.4	(Trailing: 17.6 Median: 16.6)	RELATIVE P/E RATIO	1.03	DIVID YLD	4.0%	VALUE LINE	768			
TIMELINESS (Relative Price Performance Next 12 Mos.) 3 Average SAFETY (Scale: 1 Highest to 5 Lowest) 1 Highest BETA .95 (1.00 = Market)			High: 20.7	23.8	29.5	38.8	45.5	42.8	64.4	64.2	74.8	Target Price Range	1995: 160			
1995-97 PROJECTIONS Price Gain Ann'l Total High 95 (+30%) 10% Low 80 (-10%) 6%			Low: 19.4	16.3	22.8	26.3	28.3	33.0	39.9	47.3	56.8	1996: 100	1997: 80			
Insider Decisions M A M J J A S O N Buy 1 0 0 0 0 1 0 0 0 Options 0 0 0 0 0 0 0 0 0 Sell 0 0 0 1 0 0 1 0 0																
Institutional Decisions 1992 1991 1990 Buy 157 173 180 Sell 163 141 140 Shares 110508 108551 110441			Options: PACE Percent 6.0 Shares 4.0 Traded 2.0													
Southwestern Bell is one of the seven regional holding companies that resulted from the breakup of American Telephone & Telegraph Co. on January 1, 1984. One share of Southwestern Bell stock was issued for each 10 shares of AT&T (pre-divestiture). The stock began trading on a when-issued basis on November 21, 1983. "Regular" trading of SWB shares began on February 16, 1984.			1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	VALUE LINE PUB. INC.	95-97
CAPITAL STRUCTURE as of 9/30/92 Total Debt \$7309 mil. Due in 5 Yrs \$2880 mil. LT Debt \$5658 mil. LT Interest \$490 mil. Incl. \$55.7 mil. capitalized leases. (LT Interest earned: 4.7%; total interest coverage: 4.3x) Leases, Uncapitalized Annual rentals \$66.3 mil. Pension Liability None Pfd Stock None Common Stock 299,648,490 shs. as of 10/31/92			24.08	26.52	26.35	26.64	28.14	29.04	30.39	31.09	33.35	35.45	Revenue per sh ^A	44.80		
CURRENT POSITION 1990 1991 9/30/92 Cash Assets 250.2 327.5 547.3 Other 2435.8 2396.4 2567.6 Current Assets 2686.0 2723.9 3114.9 Accts Payable 2144.8 2281.9 2403.5 Debt Due 1253.1 1599.3 1650.9 Other 207.1 213.0 219.0 Current Liab. 3605.0 4094.2 4273.4 Fix. Chg. Cov. 352% 349% 403%			6.78	7.69	8.04	8.98	9.67	9.93	9.31	9.73	10.80	11.65	"Cash Flow" per sh	15.35		
ANNUAL RATES Past Past Est'd '89-'91 of change (per sh) 10 Yrs. 5 Yrs. to '95-'97 Revenues --- 3.0% 7.0% "Cash Flow" --- 6.0% 8.0% Earnings --- 2.5% 9.0% Dividends --- 6.0% 5.5% Book Value --- 3.0% 5.5%			3.01	3.33	3.42	3.48	3.53	3.64	3.67	3.85	4.35	4.79	Earnings per sh ^B	6.30		
QUARTERLY REVENUES (\$ mil.) Full Year Cal-ender Mar.31 Jun.30 Sep.30 Dec.31 1989 2058 2140 2209 2323 8730 1990 2129 2169 2367 2448 9113 1991 2143 2243 2424 2522 9332 1992 2287 2389 2618 2701 9995 1993 2430 2530 2750 2870 10600			1.87	2.00	2.13	2.32	2.48	2.60	2.76	2.84	2.90	2.98	Div'ds Decl'd per sh ^C	3.74		
QUARTERLY DIVIDENDS PAID Full Year Cal-ender Mar.31 Jun.30 Sep.30 Dec.31 1989 .62 .65 .65 .65 2.57 1990 .65 .69 .69 .69 2.72 1991 .69 .71 .71 .71 2.82 1992 .71 .73 .73 .73 2.90			6.04	6.99	6.57	4.94	4.07	4.93	5.93	6.08	5.35	5.70	Cap'l Spending per sh	6.75		
BUSINESS: Southwestern Bell Corporation is one of the seven regional holding companies formerly owned by the American Telephone & Telegraph Company. Owns 10.2% of the assets of the former AT&T. Provides communications service in most of Arkansas (8.1% of access lines), Kansas (8.9%), Missouri (16.7%), Oklahoma (10.8%), and Texas (57.6%). Access lines in service: 12.4 mil.			23.43	24.75	26.07	27.26	28.31	27.83	28.62	29.52	31.16	32.90	Book Value per sh ^D	40.00		
1991 revenue breakdown: local service, 38%; access charges, 26%; toll, 11%; directory advertising, 9%; other, 16%. Telco employees per 10,000 access lines: 42.2. '91 depreciation rate: 6.9%. Est'd plant age: 5 years. Has 61,230 employees, 1.05 million shareholders. Chairman and C.E.O.: Edward E. Whitacre, Jr. Inc.: DE. Address: 1 Bell Ctr., St. Louis, MO 63101. Phone: 314-235-9800.			298.60	298.86	299.88	300.45	300.41	300.58	299.87	300.16	299.50	299.00	Common Shs Outst'g ^E	296.00		
Southwestern Bell's stock price is up over 12% since our October report. A favorable yield and solid third-quarter earnings helped attract investors. Double-digit sales growth from SWB's cellular business, Bell Mobile Systems, an increased earnings contribution from Tel-mex, and steady access line expansion at the telephone company, produced record results for the September period. We think positive top- and bottom-line trends will continue as the southwest economy expands. Mobile Systems currently has one of the highest market penetration rates in the industry, demand in Mexico for cellular and wired telephones is likely to remain strong, and higher advertising revenues should boost the Yellow Pages' results. Moreover, SWB's telephone business will benefit from aggressive cost containment efforts. This stock is ranked to perform in line with the year-ahead market.			6.8	7.8	9.8	10.9	10.8	14.0	14.2	14.7	14.7	14.7	Arg Ann'l P/E Ratio	14.0		
But the region's regulatory climate leaves much to be desired. Last August, Oklahoma regulators ordered SWB to reduce its rates by \$92.8 million and refund \$148.4 million to ratepayers. The allowed return on common equity was cut to 12.2% from 14.25%. An appeal is now pending with the state supreme court. In Missouri, the telephone company has filed a \$153 million rate proposal that provides for network modernization, incentive regulation, and rate cuts. In addition to SWB's application, the state authorities will consider two other plans filed by the commission's staff and the Office of the Public Counsel. The final outcome of the above cases is uncertain. Our projections to '95-'97 assume that the Oklahoma ruling will stand, and that a workable decision will come down from the Missouri commission.			.63	.63	.68	.73	.90	1.06	1.10	.91	.89	.89	Relative P/E Ratio	1.10		
We believe utility investors can find better alternatives. In the coming 3 to 5 years, management plans to focus on non-regulated businesses since growth opportunities for the telephone company appear limited. These operations could help support annual earnings advances of 9% to '95-'97. But even at this pace, SWB's profit growth will probably lag behind that of most other telephone issues. Moreover, due to the recent share price runup, the stock's total return potential to mid-decade is subpar.			8.1%	7.7%	6.4%	6.1%	6.5%	5.1%	5.1%	5.2%	4.5%	4.5%	Arg Ann'l Div'd Yield	4.2%		
David M. Reimer January 15, 1993			87%	88%	62%	60%	62%	61%	63%	67%	67%	All Div'ds to Comm. Eq	69%			

(A) Historical figures (pre-1984) not comparable to post-divestiture est's and reports.
 (B) Primary earnings. Next earnings report due late Jan. Excludes nonrecurring loss: '91, 27¢.
 (C) Next dividend meeting about Mar. 15. Goes ex about Apr. 5. Approximate dividend payment dates: Feb. 3, May 1, Aug. 3, Nov. 2. Dividend reinvestment plan available.
 (D) Includes intangibles. In '91: \$1401.3 million, \$4.67/share.
 (E) In millions, adjusted for stock split.
 (F) Doesn't add due to rounding.
 Company's Financial Strength A+
 Stock's Price Stability 90
 Price Growth Persistence 100
 Earnings Predictability 100
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Commonwealth Telephone Company
Discounted Cash Flow Model Using Only Projected
Growth in Earnings and Dividends Per Share Summary of Conclusion

<u>Line No.</u>	<u>Proxy Group of Five Independent Operating Companies</u>	<u>Proxy Group of Seven Regional Holding Companies</u>
1. Dividend Yield (1)	2.8%	5.0%
2. Dividend Growth Component (2)	<u>0.1</u>	<u>0.1</u>
3. Yield	2.9	5.1
4. Growth in Earnings and Dividends Per Share (3)	<u>9.1</u>	<u>5.4</u>
5. Indicated Return Rate	<u>12.0%</u>	<u>10.5%</u>

- Notes: (1) From page 4 of Schedule 15.
 (2) This reflects a growth rate component equal to one-half the average of the Value Line five-year projected growth rate in earnings and dividends per share and I/B/E/S projected five-year growth rate in earnings per share (from page 4 of this Schedule) x line 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, $2.8\% \times (1/2 \times 9.1\%) = 0.1\%$.
 (3) Conclusion of growth from page 4 of this Schedule.

Commonwealth Telephone Company
Discounted Cash Flow Model Using Only
Projected Growth in Earnings and Dividends Per Share
for the Proxy Group of Five Independent Operating Companies

<u>Line No.</u>	<u>Century Telephone Enterprises</u>	<u>Cincinnati Bell, Inc.</u>	<u>Lincoln Telecom. Company</u>	<u>Rochester Telephone Corp.</u>	<u>Telephone & Data Systems, Inc.</u>
1. Dividend Yield (1)	1.1%	4.1%	3.7%	4.4%	0.9%
2. Dividend Growth Component (2)	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>
3. Yield	1.2	4.2	3.8	4.5	1.0
4. Growth in Earnings and Dividends Per Share (3)	<u>14.1</u>	<u>5.8</u>	<u>6.3</u>	<u>5.6</u>	<u>13.9</u>
5. Indicated Return Rate	<u>15.3%</u>	<u>10.0%</u>	<u>10.1%</u>	<u>10.1%</u>	<u>14.9%</u>

- Notes: (1) From page 4 of Schedule 15.
(2) This reflects a growth rate component equal to one-half the average of the Value Line five-year projected growth rate in earnings and dividends per share and I/B/E/S projected five-year growth rate in earnings per share (from page 4 of this Schedule) x line 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, 1.1% x (1/2 x 14.1%) = 0.1%.
(3) Conclusion of growth from page 4 of this Schedule.

Commonwealth Telephone Company
Discounted Cash Flow Model Using Only
Projected Growth in Earnings and Dividends Per Share
for the Proxy Group of Seven Regional Holding Companies

Line No.	Ameritech	Bell Atlantic Corp.	BellSouth Corp.	NYNEX Corp.	Pacific Telesis Group	Southwestern Bell Corp.	U S West, Inc.
1. Dividend Yield (1)	5.0%	5.1%	5.1%	5.4%	4.8%	4.1%	5.2%
2. Dividend Growth Component (2)	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>
3. Yield	5.1	5.2	5.2	5.5	4.9	4.2	5.4
4. Growth in Earnings and Dividends Per Share (3)	<u>5.3</u>	<u>4.7</u>	<u>4.8</u>	<u>4.7</u>	<u>5.1</u>	<u>6.9</u>	<u>6.2</u>
5. Indicated Return Rate	<u>10.4%</u>	<u>9.9%</u>	<u>10.0%</u>	<u>10.2%</u>	<u>10.0%</u>	<u>11.1%</u>	<u>11.6%</u>

Notes: (1) From page 4 of Schedule 15.

(2) This reflects a growth rate component equal to one-half the average of the Value Line five-year projected growth rate in earnings and dividends per share and I/B/E/S projected five-year growth rate in earnings per share (from page 4 of this Schedule) x line 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, 5.0% x (1/2 x 5.3%) = 0.1%.

(3) Conclusion of growth from page 4 of this Schedule.

Commonwealth Telephone Company
Discounted Cash Flow Model Using Only
Projected Growth in Earnings and Dividends Per Share

	1	2	3	4	5	6	7	8
	Value Line Projected 1989-'91 to 1995-97 Growth Rate(1)		1/B/E/S Projected Five-Year Growth Rate(2)	No. of Analysts	Mean of all Growth Rates	Standard Deviation of All Growth Rates	Average Projected Five-Year EPS Growth Rate(3)	Conclusion of Growth(4)
	DPS	EPS	EPS (Mean)					
<u>Proxy Group of Five Independent Operating Companies</u>								
Century Telephone Enterprises	7.0%	28.0%	14.1%	[3]	16.4%	10.7%	21.1%	14.1%
Cincinnati Bell, Inc.	5.0	6.5	6.6	[5]	6.0	0.9	6.6	5.8
Lincoln Telecommunications Co.	6.5	6.5	5.5	[2]	6.2	0.6	6.0	6.3
Rochester Telephone Corp.	3.0	8.5	7.9	[7]	6.5	3.0	8.2	5.6
Telephone & Data Systems, Inc.	6.0	28.0	15.3	[2]	16.4	11.0	21.7	13.9
Average	5.5%	15.5%	9.9%				12.7%	9.1%
	====	=====	=====				=====	=====
Standard Deviation	1.6%	11.4%	4.5%					
	====	=====	=====					
<u>Proxy Group Seven Regional Holding Companies</u>								
Ameritech	5.0%	5.5%	5.7%	[18]	5.4%	0.4%	5.6%	5.3%
Bell Atlantic Corp.	4.0	4.0	6.7	[20]	4.9	1.6	5.4	4.7
BellSouth Corp.	3.5	6.0	6.0	[20]	5.2	1.4	6.0	4.8
NYNEX Corporation	4.0	5.0	5.8	[15]	4.9	0.9	5.4	4.7
Pacific Telesis Group	4.5	5.0	6.2	[19]	5.2	0.9	5.6	5.1
Southwestern Bell Corp.	5.5	9.0	7.3	[15]	7.3	1.8	8.2	6.9
U S West, Inc.	4.5	9.5	6.0	[17]	6.7	2.6	7.8	6.2
Average	4.4%	6.3%	6.2%				6.3%	5.4%
	====	=====	=====				=====	=====
Standard Deviation	0.7%	2.1%	0.6%					
	====	=====	=====					

Notes:

- (1) As shown on pages 8 through 19 of Schedule 15. Historical growth rates are five-year compound growth rates. Stock turnover rates for the five years ended 1991 based on shares traded and shares outstanding for the Proxy Group of Five Independent Telephone Operating Companies and the Proxy Group of Seven Regional Holding Companies were 3.3 and 3.2 years, respectively (see Schedule 7). Thus, this indicates the propriety of five year compound growth rates since the approximate investors' holding period horizon is no more than five years.
- (2) Compound growth rates in earnings per share are the only projected growth rates available from the 1/B/E/S monthly summary.
- (3) Average of Value Line Projected Growth Rate in EPS (column 2) and 1/B/E/S Projected Growth Rate (column 3).
- (4) Equal weight given to projected earnings and dividends per share.

Source of Information: Value Line Investment Survey, January 15, 1993 and March 5, 1993
1/B/E/S Custom Report, March 18, 1993

Commonwealth Telephone Company
 Number of Standard of Deviations from the Mean of
Projected Growth in Earnings and Dividends Per Share by Company

	<u>Number of Standard Deviations from the Mean (1)</u>			Student's t-statistics for 3 Observations at the 95% Level of Confidence
	<u>Value Line Projected</u> 1989-91 to 1995-97 Growth Rate		<u>I/B/E/S Projected</u> Five-Year Growth Rate	
	<u>DPS</u>	<u>EPS</u>	<u>EPS</u>	
<u>Proxy Group of Five</u>				
<u>Independent Operating Companies</u>				
Century Telephone Enterprises	0.9	1.1	0.2	4.3
Cincinnati Bell, Inc.	1.1	0.6	0.7	4.3
Lincoln Telecommunications Co.	0.5	0.5	1.2	4.3
Rochester Telephone Corp.	1.2	0.7	0.5	4.3
Telephone & Data Systems, Inc.	0.9	1.1	0.1	4.3
<u>Proxy Group Seven</u>				
<u>Regional Holding Companies</u>				
Ameritech	1.0	0.3	0.8	4.3
Bell Atlantic Corp.	0.6	0.6	1.1	4.3
BellSouth Corp.	1.2	0.6	0.6	4.3
NYNEX Corporation	1.0	0.1	1.0	4.3
Pacific Telesis Group	0.8	0.2	1.1	4.3
Southwestern Bell Corp.	1.0	0.9	0.0	4.3
U S West, Inc.	0.8	1.1	0.3	4.3

Notes: (1) Number of standard deviations from the mean calculated using the following formula:

$$D = \frac{|x - \bar{x}|}{\sigma} = \frac{|7.0 - 16.4|}{10.7}$$

$\sigma = 0.9$ (Century Telephone Enterprises, Value Line Five-Year Projected Growth Rate in DPS.)

Where:

- D = The number of standard deviations from the mean
- x = suspected outlying growth rate
- \bar{x} = mean of growth rates
- σ = standard deviation of growth rates

Source of Information: Howard Balsley, Quantitative Research Methods for Business and Economics, Random (1) Inc., 1970, pp 296-297

Commonwealth Telephone Company
 Number of Standard of Deviations from the Mean of
Projected Growth in Earnings and Dividends Per Share by Company

	<u>Number of Standard Deviations from the Mean (1)</u>		
	<u>Value Line Projected</u>	<u>1/B/E/S Projected</u>	
	<u>1989-91 to 1995-97</u>	<u>Five-Year</u>	
	<u>Growth Rate</u>	<u>Growth Rate</u>	
	<u>DPS</u>	<u>EPS</u>	<u>EPS</u>
<u>Proxy Group of Five</u>			
<u>Independent Operating Companies</u>			
Century Telephone Enterprises	0.9	1.1	0.9
Cincinnati Bell, Inc.	0.3	0.8	0.7
Lincoln Telecommunications Co.	0.6	0.8	1.0
Rochester Telephone Corp.	1.6	0.6	0.4
Telephone & Data Systems, Inc.	0.3	1.1	1.2
Student's t-statistic for 5			
Observations at the 95%			
Level of Confidence	2.8	2.8	2.8
<u>Proxy Group Seven</u>			
<u>Regional Holding Companies</u>			
Ameritech	0.9	0.4	0.8
Bell Atlantic Corp.	0.6	1.1	0.8
BellSouth Corp.	1.3	0.1	0.3
NYNEX Corporation	0.6	0.6	0.7
Pacific Telesis Group	0.1	0.6	0.0
Southwestern Bell Corp.	1.6	1.3	1.8
U S West, Inc.	0.1	1.5	0.3
Student's t-statistic for 7			
Observations at the 95%			
Level of Confidence	2.4	2.4	2.4

Notes: (1) Number of standard deviations from the mean calculated using the following formula:

$$D = \frac{|x - \bar{x}|}{\sigma} = \frac{|7.0 - 5.5|}{1.6}$$

$\sigma = 0.9$ (Century Telephone Enterprises, Value Line Five-Year Projected Growth Rate in DPS.)

Where:

- D = The number of standard deviations from the mean
- x = suspected outlying growth rate
- \bar{x} = mean of growth rates
- σ = standard deviation of growth rates

Source of Information: Howard Balsley, Quantitative Research Methods for Business and Economics, Random House, Inc., 1970, pp 296-297

Commonwealth Telephone Company
Discounted Cash Flow Model Using the New York Public Service
Commission - Staff Recommended Methodology
Summary of Conclusion

<u>No.</u>	<u>Proxy Group of Five Independent Operating Companies</u>	<u>Proxy Group of Seven Regional Holding Companies</u>
1. Dividend Yield (1)	2.99%	5.27%
2. Average of Projected Growth in Earnings Per Share and Projected BR + SV (2)	<u>10.9</u>	<u>5.9</u>
3. Indicated Return Rate	13.89% =====	11.17% =====
4. Use	13.9% =====	11.2% =====

Notes: (1) From page 3, column 6 of this Schedule.
(2) Conclusion of growth from page 4, column 6 of this Schedule.

Commonwealth Telephone Company
 Discounted Cash Flow Model Using the New York Public Service
 Commission - Staff Recommended Methodology

	Adjusted Dividend Yield (1)	Average of Growth in Earnings Per Share and Projected BR + SV (2)	DCF Derived Cost of Equity
<u>Proxy Group of Five</u>			
<u>Independent Operating Companies</u>			
Century Telephone Enterprises	1.10%	16.1%	17.20%
Cincinnati Bell, Inc.	4.60	7.2	11.80
Lincoln Telecommunications Co.	3.73	6.3	10.03
Rochester Telephone Corp.	4.60	9.0	13.60
Telephone & Data Systems, Inc.	0.94	15.7	16.64
<u>Proxy Group Seven</u>			
<u>Regional Holding Companies</u>			
Ameritech	5.31%	5.7%	11.01%
Bell Atlantic Corp.	5.33	6.1	11.43
BellSouth Corp.	5.57	5.2	10.77
NYNEX Corporation	5.59	4.9	10.49
Pacific Telesis Group	5.06	5.9	10.96
Southwestern Bell Corp.	4.26	7.0	11.26
U S West, Inc.	5.76	6.3	12.06

Notes: (1) From page 3, column 6 of this Schedule.
 (2) From page 4, column 6 of this Schedule.

Commonwealth Telephone Company
Calculation of the Adjusted Dividend Yield

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
	Quarterly	Six Month	Adjustment	Adjusted	Annual	Adjusted
	<u>Dividend(1)</u>	<u>Price(2)</u>	<u>Factor (3)</u>	<u>Price (4)</u>	<u>Dividend(5)</u>	<u>Yield (6)</u>
<u>Proxy Group of Five</u>						
<u>Independent Operating Companies</u>						
Century Telephone Enterprises	\$0.076	\$27.702	0.038	\$27.664	\$0.305	1.10%
Cincinnati Bell, Inc.	0.203	17.719	0.100	17.619	0.810	4.60
Lincoln Telecommunications Co.	0.231	24.938	0.114	24.824	0.925	3.73
Rochester Telephone Corp.	0.398	34.792	0.197	34.595	1.592	4.60
Telephone & Data Systems, Inc.	0.086	36.594	0.043	36.551	0.345	<u>0.94</u>
Average						2.99%
<u>Proxy Group Seven</u>						
<u>Regional Holding Companies</u>						
Ameritech	\$0.933	\$70.771	0.461	\$70.310	\$3.730	5.31%
Bell Atlantic Corp.	0.670	50.657	0.331	50.326	2.680	5.33
BellSouth Corp.	0.726	52.490	0.359	52.131	2.905	5.57
NYNEX Corporation	1.180	85.000	0.584	84.416	4.720	5.59
Pacific Telesis Group	0.560	44.511	0.277	44.234	2.240	5.06
Southwestern Bell Corp.	0.750	70.855	0.371	70.484	3.000	4.26
U S West, Inc.	0.560	39.177	0.277	38.900	2.240	<u>5.76</u>
Average						5.27%

- Notes: (1) (Column 5 ÷ 4).
(2) From page 9, column 4 of this Schedule.
(3) ((45) ÷ (91) × Column 1).
(4) Column 2 - Column 3.
(5) Estimated quarterly dividends payments from the second quarter 1993 through the first quarter 1994 from Value line.
(6) Column 5 ÷ Column 4.

Source of Information: Standard & Poor's Compustat Services, Inc., Telecommunications Compustat II Value Line Investment Survey, January 15, 1993 and March 5, 1993

Commonwealth Telephone Company
Discounted Cash Flow Model using
Projected Growth in Earnings per share and BR + SV

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
		I/B/E/S Projected Five-Year Growth Rate(2)		Mean of all Growth Rates	Standard Deviation of All Growth Rates	Conclusion of Growth(3)
	<u>BR + SV (1)</u>	No. of EPS Analysts (Mean)				
<u>Proxy Group of Five</u>						
<u>Independent Operating Companies</u>						
Century Telephone Enterprises	18.0%	14.1%	[3]	16.1%	2.8%	16.1%
Cincinnati Bell, Inc.	7.7	6.6	[5]	7.2	0.8	7.2
Lincoln Telecommunications Co.	7.1	5.5	[2]	6.3	1.1	6.3
Rochester Telephone Corp.	10.0	7.9	[7]	9.0	1.5	9.0
Telephone & Data Systems, Inc.	<u>16.0</u>	<u>15.3</u>	[2]	15.7	0.5	<u>15.7</u>
Average	11.8%	9.9%				10.9%
	====	===				===
Standard Deviation	5.0%	4.5%				
	===	===				
<u>Proxy Group Seven</u>						
<u>Regional Holding Companies</u>						
Ameritech	5.7%	5.7%	[18]	5.7%	0.0%	5.7%
Bell Atlantic Corp.	5.5	6.7	[20]	6.1	0.8	6.1
BellSouth Corp.	4.4	6.0	[20]	5.2	1.1	5.2
NYNEX Corporation	4.0	5.8	[15]	4.9	1.3	4.9
Pacific Telesis Group	5.5	6.2	[19]	5.9	0.5	5.9
Southwestern Bell Corp.	6.6	7.3	[15]	7.0	0.5	7.0
U S West, Inc.	<u>6.5</u>	<u>6.0</u>	[17]	6.3	0.4	<u>6.3</u>
Average	5.5%	6.2%				5.9%
	====	====				===
Standard Deviation	1.0%	0.6%				
	====	====				

- Notes: (1) From page 7, Column 12 of this Schedule.
(2) Compound growth rates in earnings per share are the only projected growth rates available from the I/B/E/S monthly summary.
(3) Equal weight given to projected I/B/E/S growth rates in earnings and Br + SV.

Source of Information: Value Line Investment Survey, January 15, 1993 and March 5, 1993
I/B/E/S Custom Report, March 18, 1993

Commonwealth Telephone Company
 Number of Standard of Deviations from the Mean of
 Projected Growth in I/B/E/S Earnings Per Share and BR + SV by Company

	Number of Standard Deviations from the Mean(1)		
	Value Line Projected 1989-91 to 1995-97 Growth Rate	I/B/E/S Projected Five-Year Growth Rate	Student's t-statistics for 2 Observations at the 95% Level of Confidence
	(BR+ SV)	EPS	
<u>Proxy Group of Five</u>			
<u>Independent Operating Companies</u>			
Century Telephone Enterprises	0.7	0.7	12.7
Cincinnati Bell, Inc.	0.6	0.8	12.7
Lincoln Telecommunications Co.	0.7	0.7	12.7
Rochester Telephone Corp.	0.7	0.7	12.7
Telephone & Data Systems, Inc.	0.6	0.8	12.7
<u>Proxy Group Seven</u>			
<u>Regional Holding Companies</u>			
Ameritech	NMF	NMF	12.7
Bell Atlantic Corp.	0.7	0.8	12.7
BellSouth Corp.	0.7	0.7	12.7
NYNEX Corporation	0.7	0.7	12.7
Pacific Telesis Group	0.8	0.6	12.7
Southwestern Bell Corp.	0.8	0.6	12.7
U S West, Inc.	0.5	0.7	12.7

Notes: (1) Number of standard deviations from the mean calculated using the following formula:

$$D = \frac{|x - \bar{x}|}{\sigma} = \frac{|18.0 - 16.1|}{2.8}$$

$\sigma = 0.7$ (Century Telephone Enterprises Five-Year Projected Growth Rate in BR + SV.)

Where:

- D = The number of standard deviations from the mean
- x = suspected outlying growth rate
- \bar{x} = mean of growth rates
- σ = standard deviation of growth rates

Source of Information: Howard Balsley, Quantitative Research Methods for Business and Economics, Random House, Inc., 1970, pp 296-297

Commonwealth Telephone Company
 Number of Standard Deviations from the Mean of
 Projected Growth in I/B/E/S Earnings Per Share and BR + SV by Company

	<u>Number of Standard Deviations from the Mean (1)</u>	
	<u>Value Line Projected 1989-91 to 1995-97 Growth Rate (BR+ SV)</u>	<u>I/B/E/S Projected Five-Year Growth Rate EPS</u>
<u>Proxy Group of Five Independent Operating Companies</u>		
Century Telephone Enterprises	1.2	2.2
Cincinnati Bell, Inc.	0.8	0.7
Lincoln Telecommunications Co.	0.9	1.0
Rochester Telephone Corp.	0.4	0.4
Telephone & Data Systems, Inc.	0.8	1.2
Student's t-statistic for 5 Observations at the 95% Level of Confidence		
	2.6	2.6
<u>Proxy Group Seven Regional Holding Companies</u>		
Ameritech	0.2	0.8
Bell Atlantic Corp.	0.0	0.8
BellSouth Corp.	1.1	0.3
NYNEX Corporation	1.5	0.7
Pacific Telesis Group	0.0	0.0
Southwestern Bell Corp.	1.1	1.8
U S West, Inc.	1.0	0.3
Student's t-statistic for 7 Observations at the 95% Level of Confidence		
	2.4	2.4

Notes: (1) Number of standard deviations from the mean calculated using the following formula:

$$D = \frac{|x - \bar{x}|}{\sigma} = \frac{|18.0 - 11.8|}{5.0}$$

$\sigma = 1.2$ (Century Telephone Enterprises Five-Year Projected Growth Rate in BR + SV.)

Where:

- D = The number of standard deviations from the mean
- x = suspected outlying growth rate
- \bar{x} = mean of growth rates
- σ = standard deviation of growth rates

Source of Information: Howard Balsley, Quantitative Research Methods for Business and Economics, Random House, Inc., 1970, pp 296-297

Commonwealth Telephone Company
Discounted Cash Flow Model
Calculation of Projected Growth in "BR + SV"

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
	Value Line Projected 1995 -1997 (1)			1995	Avg.	Rate of Return on Book Common Equity (4)	Retention Rate (5)	"BR"(6)	"S"(7)	"V"(8)	"SV"(9)	"Br+SV"(10)
	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>BVPS (2)</u>	<u>BVPS (3)</u>							
<u>Proxy Group of Five</u>												
<u>Independent Operating Companies</u>												
Century Telephone Enterprises	\$2.40	\$0.40	\$14.60	\$12.60	\$13.60	17.65%	83.33%	14.71%	4.51%	72.79%	3.28%	17.99%
Cincinnati Bell, Inc.	1.90	1.00	11.35	10.45	10.90	17.43	47.37	8.26	(1.30)	46.95	(0.61)	7.65
Lincoln Telecommunications Co.	2.25	1.10	16.50	15.35	15.93	14.12	51.11	7.22	(0.17)	52.82	(0.09)	7.13
Rochester Telephone Corp.	3.00	1.75	22.60	21.35	21.98	13.65	41.67	5.69	9.18	46.76	4.29	9.98
Telephone & Data Systems, Inc.	2.65	0.40	21.60	19.35	20.48	12.94	84.91	10.99	10.19	49.26	5.02	16.01
Average								9.37%	4.48%	53.72%	2.38%	11.75%
								====	====	=====	=====	=====
<u>Proxy Group Seven</u>												
<u>Regional Holding Companies</u>												
Ameritech	\$6.40	\$4.15	\$35.90	\$33.65	\$34.78	18.40%	35.16%	6.47%	(1.37%)	59.23%	(0.81%)	5.66%
Bell Atlantic Corp.	4.25	3.00	23.05	21.80	22.43	18.95	29.41	5.57	(0.09)	61.37	(0.06)	5.51
Bellsouth Corp.	4.65	3.30	32.50	31.15	31.83	14.61	29.03	4.24	0.43	47.04	0.20	4.44
NYNEX Corporation	7.90	5.75	55.10	52.95	54.03	14.62	27.22	3.98	0.11	45.26	0.05	4.03
Pacific Telesis Group	3.80	2.35	23.80	22.35	23.08	16.46	38.16	6.28	(1.40)	54.65	(0.77)	5.51
Southwestern Bell Corp.	6.30	3.74	40.00	37.44	38.72	16.27	40.63	6.61	0.02	56.31	0.01	6.62
U S West, Inc.	4.30	2.60	29.65	27.95	28.80	14.93	39.53	5.90	1.58	37.97	0.60	6.50
Average								5.58%	(0.10%)	51.69%	(0.11%)	5.47%
								====	====	=====	=====	=====

Notes:

- (1) From pages 8 through 19 of Schedule 15. Assumed for the year 1996.
- (2) Column 3 - Column 1 + Column 2. Assumed for the year 1995.
- (3) (Column 3 + Column 4) ÷ 2.
- (4) Column 1 ÷ Column 5.
- (5) (Column 1 - Column 2) + Column 1.
- (6) Column 6 x Column 7.
- (7) From page 8 of this Schedule.
- (8) From page 9, column 5 of this Schedule.
- (9) Column 9 x Column 10.
- (10) Column 8 + Column 11.

Source of Information: Value Line Investment Survey, January 15, 1993 and March 5, 1993
Standard & Poor's Compustat Services, Inc., Telecommunications Compustat II

Commonwealth Telephone Company
Calculation of Five Year Average Growth in Common Shares Outstanding

	1986		1987		1988		1989		1990		1991		Five Year
	Common	86-87	Common	87-88	Common	88-89	Common	89-90	Common	90-91	Common	Share	Average
	Shares	Growth	Shares	Growth	Shares	Growth	Shares	Growth	Shares	Growth	Shares	Share	Share
	Outstanding		Outstanding		Outstanding		Outstanding		Outstanding		Outstanding	Share	Growth
<u>Proxy Group of Five Independent Operating Companies</u>													
Century Telephone Enterprises	37.881	5.09%	39.808	2.05%	40.626	12.69%	45.782	1.02%	46.251	1.72%	47.048	47.048	4.51%
Cincinnati Bell, Inc.	65.836	(2.87)	63.944	(2.71)	62.208	(3.71)	59.902	1.73	60.937	1.08	61.595	61.595	(1.30)
Lincoln Telecommunications Co.	16.596	4.46	17.336	(4.88)	16.490	0.00	16.490	(0.14)	16.467	(0.27)	16.422	16.422	(0.17)
Rochester Telephone Corp.	20.572	5.65	21.734	5.59	22.948	10.00	25.242	14.34	28.861	10.33	31.843	31.843	9.18
Telephone & Data Systems, Inc.	21.695	6.73	23.155	7.08	24.794	19.25	29.566	2.54	30.317	15.33	34.964	34.964	10.19
Average													4.48%
													====
<u>Proxy Group Seven Regional Holding Companies</u>													
Ameritech	285.915	(3.95%)	274.610	(1.97%)	269.198	0.37%	270.191	(2.17%)	264.326	0.87%	266.633	266.633	(1.37%)
Bell Atlantic Corp.	397.942	(0.44)	396.186	(0.54)	394.030	0.11	394.454	(0.32)	393.191	0.73	396.051	396.051	(0.09)
BellSouth Corp.	476.969	0.89	481.225	(3.57)	464.043	3.77	481.553	0.09	481.972	0.98	486.698	486.698	0.43
NYNEX Corporation	202.700	(0.61)	201.468	(2.25)	196.945	0.05	197.045	1.55	200.096	1.81	203.724	203.724	0.11
Pacific Telesis Group	430.550	(0.80)	427.122	(1.92)	418.911	(0.50)	416.810	(4.16)	399.459	0.39	401.018	401.018	(1.40)
Southwestern Bell Corp.	299.880	0.19	300.448	(0.01)	300.414	0.06	300.583	(0.24)	299.869	0.10	300.158	300.158	0.02
U S West, Inc.	379.952	(2.31)	371.158	(1.58)	365.284	2.38	373.992	5.21	393.493	4.18	409.936	409.936	1.58
Average													(0.10%)
													====

Source of Information: Standard & Poor's Compustat Services, Inc., Telecommunications Compustat II

Commonwealth Telephone Company
Calculation of the Premium/Discount of a
Company's Stock Price Relative to It's Book Value

	<u>1</u> Beginning Book Value Per Share(1)	<u>2</u> Ending Book Value Per Share(2)	<u>3</u> Average Book Value Per Share(3)	<u>4</u> Six Month Average Price (4)	<u>5</u> V Factor(5)
<u>Proxy Group of Five</u>					
<u>Independent Operating Companies</u>					
Century Telephone Enterprises	\$ 7.391	\$ 7.685	\$ 7.538	\$27.702	72.79%
Cincinnati Bell, Inc.	9.410	9.390	9.400	17.719	46.95
Lincoln Telecommunications Co.	11.510	12.020	11.765	24.938	52.82
Rochester Telephone Corp.	18.075	18.975	18.525	34.792	46.76
Telephone & Data Systems, Inc.	18.690	18.445	18.568	36.594	<u>49.26</u>
Average					53.72% -----
<u>Proxy Group Seven</u>					
<u>Regional Holding Companies</u>					
Ameritech	\$31.400	\$26.300	\$28.850	\$70.771	59.23%
Bell Atlantic Corp.	20.300	18.840	19.570	50.657	61.37
BellSouth Corp.	27.520	28.080	27.800	52.490	47.04
NYNEX Corporation	46.020	47.030	46.525	85.000	45.26
Pacific Telesis Group	19.735	20.635	20.185	44.511	54.65
Southwestern Bell Corp.	30.510	31.400	30.955	70.855	56.31
U S West, Inc.	24.010	24.590	24.300	39.177	<u>37.97</u>
Average					51.69% -----

- Notes: (1) Estimated using Value Line data at the end of the third quarter, 1992.
(2) Estimated using Value Line data at the end of the first quarter, 1993.
(3) (Column 1 + Column 2) ÷ 2.
(4) Six-month average ending March 1993 of monthly high and low stock prices.
(5) (1 - (Column 3 ÷ Column 4)).

Source of Information: Standard & Poor's Compustat Services, Inc., Telecommunications Compustat II
Value Line Investment Survey, January 15, 1993 and March 5, 1993

Commonwealth Telephone Company
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model

<u>Line No.</u>		<u>Proxy Group of Five Independent Operating Companies</u>	<u>Proxy Group of Seven Telephone Holding Companies</u>
1.	Prospective Yield on A Rated Public Utility Bonds (1)	7.9%	7.9%
2.	Adjustment to Reflect Bond Rating of Difference	<u>(0.1)</u> (2)	<u>(0.2)</u> (3)
3.	Adjusted Prospective Yield	7.8	7.7
4.	Equity risk premium (4)	<u>5.5</u>	<u>5.4</u>
5.	Risk Premium Derived Common Equity Cost Rate	<u>13.3%</u>	<u>13.1%</u>

Notes: (1) Average forecast based upon five quarterly estimates of A rated seasoned public utility bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated April 1993 (see page 2 of this Schedule). The estimates are detailed below.

Second Quarter 1993	7.7%
Third Quarter 1993	7.8
Fourth Quarter 1993	7.9
First Quarter 1994	8.0
Second Quarter 1994	<u>8.1</u>
Average	<u>7.9%</u>

- (2) One-third of the average 1988-1992 yield spread of A over AA rated public utility bonds of 23 basis points (from page 5 of this Schedule) ($1/3 \times .23 = .077$, rounded to .1%) in order to reflect the A+ bond rating of the proxy group.
- (3) The average 1988-1992 yield spread of A over AA rated public utility bonds of 23 basis points (from page 5 of this Schedule) rounded to .2% in order to reflect the AA bond rating of the proxy group.

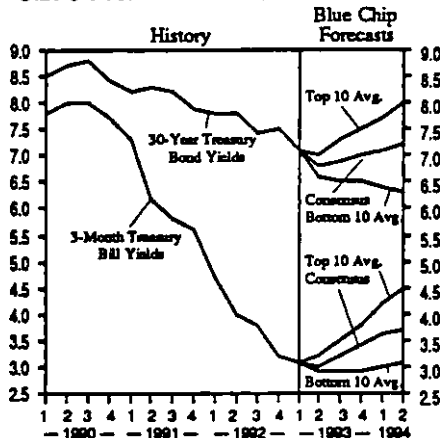
Consensus Forecasts Of U.S. Interest Rates And Key Assumptions¹

Instrument	History								Consensus Forecasts - Quarterly Avg. --					
	Week Ending				Month				Latest Q*	2Q 1993	3Q 1993	4Q 1993	1Q 1994	2Q 1994
	Mar.26	Mar.19	Mar.12	Mar.5	Feb.	Jan.	Dec.	1Q 1993						
Prime Rate	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.0	6.0	6.1	6.3	6.5	
LIBOR 3-Mo.	3.13	3.13	3.13	3.08	3.12	3.22	3.50	3.13	3.3	3.4	3.7	3.9	4.1	
Fed Funds Rate	2.93	3.04	3.02	3.24	3.03	3.02	2.92	3.04	3.0	3.1	3.4	3.6	3.8	
Commercial Paper, 1-Mo.	3.14	3.16	3.15	3.13	3.14	3.21	3.71	3.17	3.2	3.3	3.6	3.8	4.0	
Treasury Bill Yield, 3-Mo.	3.00	3.06	3.04	3.04	3.01	3.13	3.32	3.06	3.0	3.2	3.4	3.6	3.7	
Treasury Bill Yield, 6-Mo.	3.14	3.21	3.18	3.14	3.08	3.27	3.50	3.17	3.2	3.3	3.5	3.7	3.9	
Treasury Bill Yield, 1-Yr.	3.30	3.36	3.39	3.30	3.39	3.50	3.71	3.41	3.4	3.5	3.7	3.9	4.1	
Treasury Note Yield, 2-Yr.	3.93	3.99	4.03	3.85	4.10	4.39	4.67	4.15	4.0	4.2	4.4	4.6	4.8	
Treasury Note Yield, 5-Yr.	5.20	5.23	5.24	5.09	5.43	5.83	6.08	5.48	5.2	5.4	5.6	5.7	5.9	
Treasury Note Yield, 7-Yr.	5.67	5.73	5.65	5.54	5.87	6.26	6.46	5.93	5.7	5.8	6.0	6.1	6.2	
Treasury Note Yield, 10-Yr.	5.98	6.03	5.96	5.90	6.26	6.60	6.77	6.28	6.0	6.1	6.3	6.4	6.5	
Treasury Bond Yield, 30-Yr.	6.83	6.85	6.76	6.79	7.09	7.34	7.44	7.08	6.8	6.9	7.0	7.1	7.2	
Corporate Aaa Bond Yield	7.59	7.61	7.54	7.56	7.71	7.91	7.98	7.73	7.5	7.5	7.6	7.7	7.8	
A Utility Bond Yield	7.73	7.58	7.62	7.47	7.80	8.13	8.27	7.84	7.7	7.8	7.9	8.0	8.1	
Home Mortgage Rate	7.50	7.57	7.47	7.44	7.68	8.02	8.22	7.73	7.5	7.6	7.7	7.9	7.9	

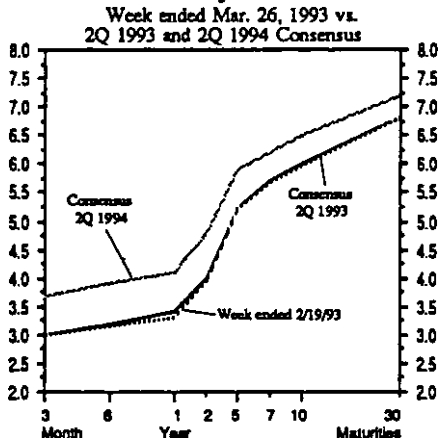
Key Assumptions	History								Consensus Forecasts - Quarterly Avg. --								
	1Q 1991		2Q 1991		3Q 1991		4Q 1991		1Q 1992	2Q 1992	3Q 1992	4Q 1992	2Q 1993	3Q 1993	4Q 1993	1Q 1994	2Q 1994
	1991	1991	1991	1991	1991	1991	1991	1991									
Fed's Trade-Weighted \$ Index	84.6	93.0	93.3	88.2	88.2	88.0	81.8	88.5	93.1	94.2	94.9	95.0	95.3				
Real Gross Domestic Product	-3.0	1.7	1.2	0.6	2.9	1.5	3.4	4.7	3.0	3.3	3.3	3.2	3.0				
GDP Implicit Deflator	5.3	3.5	2.4	2.4	3.1	2.7	2.0	2.3	2.7	2.8	2.9	3.1	3.2				
Consumer Price Index	3.3	2.4	2.7	3.6	2.9	3.5	2.6	3.2	3.0	3.1	3.2	3.4	3.5				

¹Panel members' forecasts are on pages 4 through 8. Historical data for interest rates (except LIBOR) is from Federal Reserve Statistical Release (FRSR) H.15 and Fed Bulletin. LIBOR quotes available from Telerate. Definitions of interest rates reported here are same as those in FRSR H.15. Treasury bill history and forecasts are on an investment or bond equivalent yield basis. Trade-weighted U.S. \$ Index is from FRSR G.5 and Fed Bulletin. Real GDP, GDP Implicit Deflator and Consumer Price Index history from "Survey of Current Business," U.S. Department of Commerce. *Through week ended March 26.

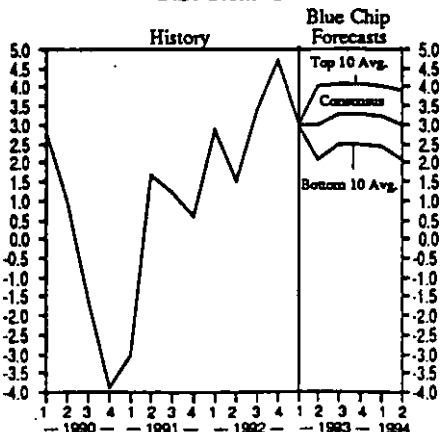
U.S. 3-Mo. T-Bills & 30-Yr. T-Bonds¹



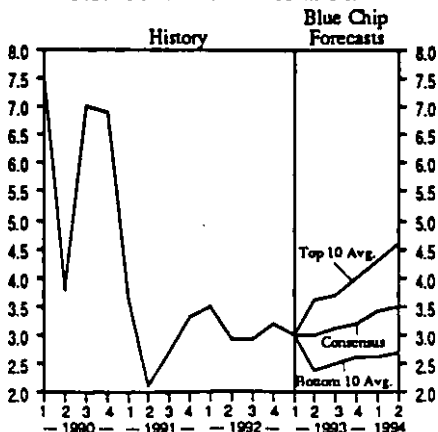
U.S. Treasury Yield Curve



U.S. Real GDP¹



U.S. Consumer Price Index¹



¹T-Bill and T-bond yields through the week ended March 26 were used for 1st quarter 1993. Consensus forecasts from February 1993 issue were used for 1st quarter 1993 GDP and CPI.

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EDITOR: RANDELL E. MOORE
(703) 683-4100
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ASSOCIATE PUBLISHER: Cynthia Carter
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PRODUCT MANAGER: Claudia Moran
CUSTOMER SERVICE MANAGER: Liz Soper

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Commonwealth Telephone Company
 Comparison of Bond Ratings for the Proxy Group of
 Five Independent Operating Companies and the Proxy
 Group of Seven Regional Holding Companies

	March 1993		
	Standard & Poor's Bond Rating		
Bond Rating	Numerical Weighting (1)	Average Numerical Weighting	
<u>Proxy Group of Five Independent Operating Companies</u>			
Century Telephone Enterprises	NR		N/A
Cincinnati Bell, Inc.			
Cincinnati Bell Telephone Co.	AA-		4.0
Lincoln Telecommunications			
Lincoln Telephone & Telegraph	AAA		1.0
Rochester Telephone Co.	A+		5.0
Telephone and Data Systems	<u>BBB</u>		<u>9.0</u>
Average for the Group	A+		4.8
	===		===
<u>Proxy Group of Seven Regional Holding Companies</u>			
<u>American Information Tech.</u>			
Wisconsin Bell	AAA	1	
Ohio Bell Telephone Company	AAA	1	
Illinois Bell Telephone Co.	AAA	1	
Michigan Bell Telephone Co.	AAA	1	
Indiana Bell Telephone Co.	<u>AAA</u>	1	
Average	AAA		1.0
<u>Bell Atlantic Corporation</u>			
Chesapeake & Potomac Tel-MD	AA	3	
Chesapeake & Potomac Tel-WVA	AA	3	
Bell Telephone Co. of PA	AA	3	
Diamond State Telephone Co.	AAA	1	
Chesapeake & Potomac Tel-DC	AA	3	
New Jersey Bell Telephone Co.	AAA	1	
Chesapeake & Potomac Tel-VA	<u>AA+</u>	2	
Average	AA+		2.3
<u>Bell South Corporation</u>			
Bell South Telecommunications Inc.	AAA	1	
South Central Bell Telephone	<u>AAA</u>	1	
Average	AAA		1.0
<u>NYNEX Corp.</u>			
New England Tele & Teleg	AA-	4	
New York Telephone Co.	<u>A</u>	6	
Average	A+		5.0
<u>Pacific Telesis Group</u>			
Pacific Bell	AA-		4.0
<u>Southwestern Bell Corp.</u>			
Southwestern Bell Telephone	A+		5.0
<u>U S West Inc.</u>			
U S West Communications, Inc.(2)	<u>AA-</u>		<u>4.0</u>
Average for the Group	AA		3.2
	===		===

Note: (1) As developed on page 3 of this Schedule.
 (2) Ratings are those of Mountain States Telephone & Telegraph, Pacific Northwest Bell Telephone Company and Northwestern Bell Telephone Company.

Source of Information: Standard & Poor's Bond Guide

Numerical Assignment for
Standard & Poor's Bond Ratings

<u>Standard & Poor's Bond Rating</u>	<u>Numerical Bond Weighting</u>
AAA	1
AA+	2
AA	3
AA-	4
A+	5
A	6
A-	7
BBB+	8
BBB	9
BBB-	10
BB+	11
BB	12
BB-	13

Standard & Poor's
 Comparison of Interest Rate Trends
 for Investor-Owned Public Utility and Industrial Companies
 for the Years 1983 - 1992 and 1993 to Date

Years	AAA Rated			AA Rated			A Rated			BBB Rated			Spread on Public Utility Bonds	
	Public Utilities	Industrials	Spread	Public Utilities	Industrials	Spread	Public Utilities	Industrials	Spread	Public Utilities	Industrials	Spread	A over AA	
1983	11.88	11.45	0.43	12.01	11.71	0.30	12.29	12.05	0.24	12.81	12.76	0.05	0.28	
1984	N/A	12.43	N/A	13.08	12.80	0.28	13.38	13.12	0.26	14.09	13.85	0.24	0.30	
1985	N/A	10.94	N/A	11.38	11.45	(0.07)	11.77	11.54	0.23	12.12	12.20	(0.08)	0.39	
1986	N/A	9.02	N/A	9.23	9.57	(0.34)	9.60	9.66	(0.06)	10.00	10.37	(0.37)	0.37	
1987	N/A	9.32	N/A	9.55	9.77	(0.22)	9.86	9.98	(0.12)	10.29	10.46	(0.17)	0.31	
1988	N/A	9.55	N/A	9.93	9.92	0.01	10.21	10.35	(0.14)	10.52	10.79	(0.27)	0.28	
1989	N/A	9.16	N/A	9.43	9.47	(0.04)	9.72	9.94	(0.22)	9.93	10.35	(0.42)	0.29	
1990	N/A	9.34	N/A	9.67	9.66	0.01	9.88	10.07	(0.19)	10.17	10.86	(0.69)	0.21	
1991	N/A	8.69	N/A	9.23	9.04	0.19	9.39	9.51	(0.12)	9.53	10.04	(0.51)	0.16	
Jan. 1992	N/A	8.13	N/A	8.79	8.38	0.41	8.97	8.90	0.07	8.98	9.25	(0.27)		
Feb. 1992	N/A	8.32	N/A	8.89	8.61	0.28	9.06	9.12	(0.06)	9.13	9.44	(0.31)		
Mar. 1992	N/A	8.57	N/A	8.95	8.74	0.21	9.15	9.29	(0.14)	9.24	9.47	(0.23)		
Apl. 1992	N/A	8.57	N/A	8.97	8.75	0.22	9.16	9.28	(0.12)	9.23	9.42	(0.19)		
May 1992	N/A	8.50	N/A	8.93	8.68	0.25	9.12	9.22	(0.10)	9.15	9.25	(0.10)		
Jun. 1992	N/A	8.45	N/A	8.91	8.63	0.28	9.09	9.18	(0.09)	9.11	9.20	(0.09)		
Jul. 1992	N/A	8.21	N/A	8.82	8.37	0.45	9.00	8.98	0.02	8.97	9.01	(0.04)		
Aug. 1992	N/A	8.02	N/A	8.79	8.19	0.60	8.91	8.85	0.06	8.92	8.89	0.03		
Sep. 1992	N/A	7.98	N/A	8.71	8.15	0.56	8.94	8.72	0.22	8.91	8.98	(0.07)		
Oct. 1992	N/A	8.17	N/A	8.48	8.35	0.13	8.97	8.78	0.19	8.95	9.13	(0.18)		
Nov. 1992	N/A	8.23	N/A	8.55	8.40	0.15	8.75	8.81	(0.06)	8.85	9.14	(0.29)		
Dec. 1992	N/A	8.06	N/A	8.45	8.22	0.23	8.66	8.57	0.09	8.72	8.99	(0.27)		
Avg. 1992	N/A	8.27	N/A	8.77	8.46	0.31	8.98	8.98	0.01	9.01	9.18	(0.17)	0.21	
													====	
													0.28	
													====	
													Average spread 1988 through 1992	
													0.23	
													====	
Jan. 1993	N/A	7.99	N/A	8.20	8.13	0.07	8.63	8.48	0.15	8.52	8.94	(0.42)		
Feb. 1993	N/A	7.82	N/A	8.10	7.87	0.23	8.58	8.28	0.30	8.31	8.81	(0.50)		
Avg. 1993	N/A	7.91	N/A	8.15	8.00	0.15	8.61	8.38	0.22	8.42	8.88	(0.46)	0.46	
													====	

Note: (1) In January 1984 the AAA Public Utility Bond Yield was suspended because of lack of appropriate issues.

Source of Information: Standard & Poor's Statistical Service - Security Price Index Record
Standard & Poor's Monthly Bond Guide

Commonwealth Telephone Company
Judgment of Equity Risk Premium for the Proxy Group of Five Independent Operating
Companies and the Proxy Group of Seven Regional Holding Companies

<u>Line</u> <u>No.</u>		<u>Proxy Group</u> <u>of Five</u> <u>Independent</u> <u>Operating</u> <u>Companies</u>	<u>Proxy Group</u> <u>of Seven</u> <u>Regional</u> <u>Holding</u> <u>Companies</u>
1.	Calculated equity risk premium based on the total market using the beta approach (1)	6.9%	5.9%
2.	Mean equity risk premium based on two studies using holding period returns of public utilities (2)	<u>4.0</u>	<u>4.8</u>
3.	Average equity risk premium	<u>5.5%</u>	<u>5.4%</u>

Notes:

(1) From page 7 of this Schedule.

(2) From page 8 of this Schedule.

Commonwealth Telephone Company
 Derivation of Equity Risk Premium on the Total Market Approach
 Using the Beta for the Proxy Group of Five Independent Operating Companies
 and the Proxy Group of Seven Regional Holding Companies

<u>Line No.</u>		<u>Proxy Group of Five Independent Operating Companies</u>	<u>Proxy Group of Seven Regional Holding Companies</u>
1.	Arithmetic mean total return rate on the Standard & Poor's 500 Composite Index - 1926-1992 (1)	12.4%	12.4%
2.	Arithmetic mean total return rate on the Salomon Brothers Long-Term High-Grade Corporate Bond Index 1926-1992 (1)	<u>(5.8)</u>	<u>(5.8)</u>
3.	Equity risk premium	6.6	6.6
4.	Adjusted Value Line Beta (2)	<u>x1.04</u>	<u>x0.90</u>
5.	Beta adjusted equity risk premium	<u>6.9%</u>	<u>5.9%</u>

Notes: (1) From Stocks, Bonds, Bills and Inflation - Quarterly Market Reports, Volume 10, Number 4, 1992, Ibbotson Associates, Inc., Chicago, IL

(2) See page 11 of this Schedule.

Commonwealth Telephone Company
Derivation of Mean Equity Risk Premium Based on Two Studies
Using Holding Period Returns of Public Utilities

Line No.	Time Period	Over A Rated Public Utility Bonds		Over Aa Rated Public Utility Bonds	
		AUS Consultants Utility		AUS Consultants Utility	
		Services Group Study (1)	Soldofsky Study (2)	Services Group Study (1)	Soldofsky Study (2)
		<u>1</u> 1928-1991	<u>2</u> 1972-1981	<u>3</u> 1928-1991	<u>4</u> 1972-1981
1.	Arithmetic Mean Holding Period Returns (3):				
	Standard & Poor's Public Utility Index	10.9%	-	10.9%	-
	Public Utility Securities	-	9.2%	- ;	8.7%
2.	a.) Salomon Brothers Long-Term High-Grade Corporate Based Index	(5.7)	-	(5.7)	-
	b.) Aa Rated Public Utility Bonds	-		-	(4.2)(4)
	c.) A Rated Public Utility Bonds		(6.0)(4)		
3.	Equity Risk Premium	5.2	3.2 (5)	5.2	4.5 (5)
4.	a.) Adjustment to reflect yield spread between Aa rated public utility bonds and bonds used in the study	-	-	(0.1)(7)	-
	b.) Adjustment to reflect yield spread between A rated public utility bonds and bonds used in the study	(0.5)(6)	-	-	-
5.	Adjusted Equity Risk Premium	<u>4.7%</u>	<u>3.2%</u>	<u>5.1%</u>	<u>4.5%</u>
6.	Midpoint of Range		<u>4.0%</u>		<u>4.8%</u>

Notes:

- (1) S&P Public Utility Index and Long-Term Corporate Bonds (Salomon Brothers Long-Term High-Grade Corporate Bond Index) year-by-year total returns 1928-1991, AUS Consultants - Utility Services Group, 1992.
- (2) Robert M. Soldofsky, "Return Premiums on Utility Common Stock", Quarterly Review of Economics, Summer 1985.
- (3) Holding period returns are calculated based upon income received (dividends and interest) plus the relative change in market value of a security over a one-year holding period.
- (4) Debt return rate shown in column 2 is based on public utilities with Aa rated bonds. Debt return rate shown in column 4 is based on public utilities with A rated bonds. Study also reported that the debt return rate for public utilities with Baa rated bonds was 5.7%.
- (5) Premium shown in column 2 is based on public utilities with Aa rated bonds. Premium shown in column 4 is based on public utilities with A rated bonds. Study also reported that the premium for public utilities with Baa rated bonds was 4.0%.
- (6) Spread calculated as the difference in the arithmetic mean yields on A rated public utility bonds of 6.5% and Aaa and Aa rated corporated bonds, as a proxy for the Salomon Brothers Long-Term High-Grade Corporate Bonds Index, of 6.0% for the years 1928-1992, inclusive.
- (7) Spread calculated as the difference in the arithmetic mean yields on Aa rated public utility bonds of 6.1% and Aaa and Aa rated corporate bonds, as a proxy for the Salomon Brothers Long-Term High-Grade Corporate Bonds Index, of 6.0% for the years 1928-1992, inclusive.

Commonwealth Telephone Company
 Mean Equity Risk Premium Based on Three Studies Encompassing
Shorter Time Periods and Based on DCF Used Only as a Check

<u>Line No.</u>	<u>Average Risk Premium (1)</u>		<u>Average Yield</u>
	<u>Over A</u> <u>Rated Public</u> <u>Utility Bonds</u>	<u>Over Aa</u> <u>Rated Public</u> <u>Utility Bonds</u>	<u>20-Year</u> <u>U.S. Treasury</u> <u>Bonds</u>
1.	Other Studies Used as a Check		
	(a) Brigham, Shome & Vinson (1966-1984)		
	3.6%	3.9%	8.4%(4)
	(b) Brigham, Shome & Vinson (1980-6/1984)		
	2.6	3.2	12.4 (4)
	(c) AUS Consultants (1981-1986)		
	<u>3.0</u>	<u>3.0</u>	<u>11.5 (4)</u>
2.	Average		
	3.1%	3.4%	10.8%
	====	====	
3.	Prospective yield on 20-year U.S. Treasury Bonds (2)		<u>6.7</u>
4.	Spread		4.1
5.	Equity risk premium increase per one percentage point decrease in bond yield (3)		x .63
6.	Increase in equity risk premium		2.6
7.	Average equity risk premium from other other studies used as a check:		
	Over Aa rated public utility bonds		<u>+ 3.1</u>
	Over A rated public utility bonds		+ 3.4
8.	Average equity risk premium from other studies used as a check adjusted to reflect the increase in equity risk premium occasioned by a decrease in bond yield:		
	Over Aa rated public utility bonds		<u>5.7%</u>
	Over A rated public utility bonds		<u>6.0%</u>
	====		====

- Notes:
- (1) From page 10 of Schedule 20.
 - (2) Average forecast based upon five quarterly estimates of 10- and 30-year Treasury Bond yields of 6.3% and 7.0%, respectively, per the consensus of nearly 50 economists reported in the Blue Chip Financial Forecasts dated April 1993 (see page 2 of this Schedule). The resulting average of 6.7% $((6.3\% + 7.0\%) \div 2) = 6.7\%$ is used as a proxy for the prospective yield on 20-year U.S. Treasury bonds.
 - (3) Brigham, Shome & Vinson have shown that for every one percentage point decrease in the yield on a 20-year T-Bond, the equity risk premium would increase by 0.63%. Please see Mr. Hanley's testimony for a complete explanation.
 - (4) Ibbotson Associates, Stocks, Bonds, Bills and Inflation - 1992 Yearbook Market Results for 1926-1991, Exhibit A-9, p. 148.

Commonwealth Telephone Company
 Derivation of Mean Equity Risk Premium Based on Three Studies Encompassing
 Shorter Time Periods and Based on DCF Studies
 Used Only as a Check

Line No.	Over A Rated Public Utility Bonds			Over Aa Rated Public Utility Bonds		
	Brigham, Shome & Vinson Studies(1)		AUS Consultants - Utility Services Group Study (2)	Brigham, Shome & Vinson Studies(1)		AUS Consultants - Utility Services Group Study (2)
Time Periods	1966-1984	1980-6/1984	1981-1986	1966-1984	1980-6/1984	1981-1986
DCF Indicated Arithmetic Mean Common Equity Return Rate:						
1. Dow Jones Utilities	13.1%(3)	17.1%(3)		13.1%(3)	17.1%(3)	
2. Seventy-Six Electric Companies			15.9%(4)			15.9%(4)
Arithmetic Mean Bond Yield						
3. 20-Year Treasury Bonds	(8.0)	(12.3)		(8.0)	(12.3)	
4. Company Specific Bonds	-	-	(12.9)	-	-	(12.9)
5. Risk Premium	5.1	4.8	3.0	5.1	4.8	3.0
6. b) Adjustment to reflect yield spread between Aa rated public utility bonds and bonds used in the study				(1.2)(8)	(1.6)(9)	-(7)
a) Adjustment to reflect yield spread between A rated public utility bonds and bonds used in the study	(1.5)(5)	(2.2)(6)	-(7)			
7. Adjusted Equity Risk Premium	3.6%	2.6%	3.0%	3.9%	3.2%	3.0%

- Notes: (1) Eugene F. Brigham, Dilip K. Shome and Steve R. Vinson, The Risk Premium Approach to Measuring a Utility's Cost of Equity, Financial Management Spring 1985.
- (2) Comparison of cost of long-term debt and cost rate spread in long-term debt and common equity for seventy-six electric companies using Value Line projected growth rates and historical dividend growth rates for 1981-1986, inclusive, AUS Consultants - Utility Services Group, 1986.
- (3) Two-stage DCF cost rate calculated using non-constant growth DCF model, forecasted constant growth in dividends per share and long-term growth rates.
- (4) Single-stage DCF cost rate calculated using constant growth DCF model, monthly dividend yields and forecasted growth rates.
- (5) Spread calculated as difference in average yields on A rated public utility bonds of 9.89% and 20-year constant maturity Treasury bonds of 8.37% for the years 1966-1984.
- (6) Spread calculated as difference in average yields on A rated public utility bonds of 14.57% and 20-year constant maturity Treasury bonds of 12.37% for the years 1980-1984.
- (7) No adjustment is necessary since study was performed using public utility common equity returns and long-term debt yields of public utilities with various bond ratings.
- (8) Spread calculated as difference in average yields on Aa rated public utility bonds of 9.54% and 20-year constant maturity Treasury bonds of 8.37% for the years 1966-1984.
- (9) Spread calculated as difference in average yields on Aa rated public utility bonds of 13.92% and 20-year constant maturity Treasury bonds of 12.37% for the years 1980-1984.

Commonwealth Telephone Company
Value Line Adjusted Betas for the
the Proxy Group of Five Independent Operating Companies
and the Proxy Group of Seven Regional Holding Companies

<u>Proxy Group of Five Independent Operating Companies</u>	<u>Value Line Adjusted Beta</u>
Century Telephone Enterprises	1.20
Cincinnati Bell, Inc.	0.90
Lincoln Telecommunications Co.	0.90
Rochester Telephone Corp.	0.85
Telephone & Data Systems, Inc.	<u>1.35</u>
Average	<u>1.04</u>
<u>Proxy Group Seven Regional Holding Companies</u>	
Ameritech	0.85
Bell Atlantic Corp.	0.95
BellSouth Corp.	0.85
NYNEX Corporation	0.90
Pacific Telesis Group	0.90
Southwestern Bell Corp.	0.95
U S West, Inc.	<u>0.90</u>
Average	<u>0.90</u>

Source of Information: Value Line Investment Survey,
January 15, 1993 and March 5, 1993

Commonwealth Telephone Company
 Indicated Common Equity Cost Rate Through Use
 of the Capital Asset Pricing Model for
 The Proxy Group of Five Independent Operating Companies and
 the Proxy Group of Seven Regional Holding Companies

<u>Line No.</u>		<u>Proxy Group Five Independent Operating Companies</u>	<u>Proxy Group Seven Regional Holding Companies</u>
1.	Risk-Free Rate (1)	7.0%	7.0%
2.	Average Company-Specific Market Premium (2)	<u>8.7</u>	<u>7.5</u>
3.	Capital Asset Pricing Model Derived Company Equity Cost Rate	<u>15.7%</u>	<u>14.5%</u>

Notes: (1) Developed in note 3 of page 3 of this Schedule.

(2) Developed on page 2 of this Schedule.

Commonwealth Telephone Company
 Development of the Market-Required Rate of Return on Common Equity
 Using the Capital Asset Pricing Model for
 the Proxy Group of Five Independent Operating Companies
 and the Proxy Group of Seven Regional Holding Companies
Adjusted to Reflect a Forecasted Risk-Free Rate and Market Return

<u>Proxy Group of Five Independent Operating Companies</u>	<u>Value Line Adjusted Beta</u>	<u>Company-Specific Risk Premium Based on Market Premium of 8.3%(2)</u>	<u>CAPM Result Including Risk-Free Rate of 7.0%(3)</u>
Century Telephone Enterprises	1.20	10.0%	17.0%
Cincinnati Bell, Inc.	0.90	7.5	14.5
Lincoln Telecommunications Co.	0.90	7.5	14.5
Rochester Telephone Corp.	0.85	7.1	14.1
Telephone & Data Systems, Inc.	1.35	11.2	18.2
Average	<u>1.04</u>	<u>8.7%</u>	<u>15.7%</u>
	====	=====	=====
<u>Proxy Group Seven Regional Holding Companies</u>			
Ameritech	0.85	7.1%	14.1%
Bell Atlantic Corp.	0.95	7.9	14.9
BellSouth Corp.	0.85	7.1	14.1
NYNEX Corporation	0.90	7.5	14.5
Pacific Telesis Group	0.90	7.5	14.5
Southwestern Bell Corp.	0.95	7.9	14.9
U S West, Inc.	0.90	7.5	14.5
Average	<u>0.90</u>	<u>7.5%</u>	<u>14.5%</u>
	====	=====	=====

See page 3 for notes.

Commonwealth Telephone Company
 Development of the Market-Required Rate of Return on Common Equity
 Using the Capital Asset Pricing Model for
 the Proxy Group of Five Independent Operating Companies
 and the Proxy Group of Seven Regional Holding Companies
Adjusted to Reflect a Forecasted Risk-Free Rate and Market Return

Notes:

(1) The Capital Asset Pricing Model (CAPM) is applied using the following formula:

$$R_s = R_f + \beta (R_M - R_f)$$

where R_s = Return rate of common stock
 R_f = Risk Free Rate
 β = Value Line Adjusted Beta
 R_M = the return on the market as a whole

(2) From the twelve previous month-end (Apr. '92-Mar. '93), as well as most recently available (Apr. 2, 1993), Value Line Summary & Index, a forecasted 3-5 year total annual market return of 16.2% can be derived by averaging the 12-month, 6-month, 3-month and spot forecasted total 3-5 year total appreciation, converting it into an annual market appreciation and adding the Value Line average forecasted annual dividend yield.

The 3-5 year average total market appreciation of 66%, produces a four-year average annual return of 13.51% $((1.66^{25}) - 1)$. When the average annual forecasted dividend yield of 2.68% is added, a total average market return of 16.19% $(2.68\% + 13.51\%)$ rounded to 16.2% is derived.

The average of the 12-month, 6-month, 3-month and spot total market return of 16.2% minus the risk free rate of 7.0% (developed in Note 3) is 9.2% $(16.2\% - 7.0\%)$. The Ibbotson Associates calculated market premium of 7.3% for the period 1926-1992 results from a total market return of 12.4% less the average income return on long-term U.S. Government Securities of 5.1% $(12.4\% - 5.1\% = 7.3\%)$. This is then averaged with the 9.2% Value Line market premium resulting in an 8.25%, rounded to 8.3%, market premium. The 8.3% market premium is then multiplied by the beta in column 1 of page 2 of this schedule.

(3) Average forecast based upon five quarterly estimates of 30-year Treasury Bond yields per the consensus of nearly 50 economists reported in the Blue Chip Financial Forecasts dated April 1993 (see page 2 of Schedule 18). The estimates are detailed below:

	<u>Treasury Bond Yield</u>
	<u>30-Year</u>
Second Quarter 1993	6.8%
Third Quarter 1993	6.9
Fourth Quarter 1993	7.0
First Quarter 1994	7.1
Second Quarter 1994	<u>7.2</u>
Average	<u>7.0%</u>
	=====

Source of Information: Value Line Summary & Index
Blue Chip Financial Forecasts, April 1993
Value Line Investment Survey, January 15, 1993 and March 5, 1993
 Ibbotson Associates, Stocks, Bonds, Bills and Inflation - Quarter Market Report, Volume 10, Number 4, 1992
 Ibbotson Associates, Inc., Chicago, IL
 I/IDEAS Database

Commonwealth Telephone Company
Comparable Earnings Analysis
for a Non-Utility Group Comparable to
the Proxy Group of Five Independent Operating Companies

Non-Utility Group Comparable to the Proxy Group of Five Independent Operating Companies	Adj. Beta	Unadj. Beta	Residual Standard Deviation	Rate of Return on Net Worth			
				1989	1990	1991	3-Year Average
Affiliated Publications	1.00	0.95	3.9850	21.7%	11.3%	5.8%	12.9%
Aflac Inc.	1.10	1.09	4.0705	11.5	14.8	16.1	14.1
Alaska Air Group	1.20	1.24	3.7480	12.6	5.0	3.0	6.9
Alberto Culver 'B'	1.10	1.13	3.9868	18.4	15.2	12.1	15.2
Alexander & Alexande	1.00	0.97	3.2561	14.5	12.2	NMF	13.4
Alexander & Baldwin	0.80	0.68	3.5708	33.5	16.9	12.7	21.0
Allegheny Ludlum	1.00	0.92	3.9019	40.6	19.6	11.3	23.8
Amax Inc.	1.25	1.30	4.0475	18.0	10.2	1.4	9.9
Amerada Hess	0.85	0.74	3.6257	19.8	12.7	NMF	16.3
Amer. Bankers Ins.	0.90	0.84	4.0524	10.3	15.6	17.3	14.4
Amer. Business Prod.	0.85	0.70	3.4388	13.2	13.0	13.8	13.3
Amer. General Corp.	1.10	1.13	3.6611	10.0	13.5	11.1	11.5
Amer. Greetings	1.05	1.05	3.4044	11.9	12.6	11.3	11.9
Amer. Maize 'A'	0.95	0.92	4.0098	10.8	9.8	9.5	10.0
Anadarko Petroleum	1.00	0.95	4.1225	7.9	8.9	5.1	7.3
Archer Daniels Midl'	1.05	1.02	3.2504	14.0	13.5	11.9	13.1
Armstrong World Inds	1.30	1.39	3.9822	15.7	12.9	6.8	11.8
Arvin Ind.	1.00	0.95	4.1403	4.3	6.8	4.5	5.2
Asarco Inc.	1.10	1.11	4.0468	16.5	13.3	3.5	11.1
Avery Dennison	1.10	1.09	3.4469	16.1	8.5	7.6	10.7
Avon Products	1.25	1.35	4.1519	66.8	49.6	NMF	58.2
Ball Corp.	0.90	0.80	3.3622	9.3	12.2	10.9	10.8
Banc One Corp.	1.15	1.22	3.7316	15.9	14.6	13.9	14.8
Bankers Trust NY	1.25	1.36	3.4403	NMF	22.0	19.5	20.8
Banta Corp.	1.20	1.24	3.5875	12.2	14.2	12.4	12.9
Bassett Furniture	0.80	0.67	3.1953	7.2	8.2	7.2	7.5
BB&T Financial	1.00	0.92	3.3714	14.2	14.4	12.4	13.7
Bearings, Inc.	0.85	0.77	3.6219	13.6	10.7	3.2	9.2
Beckman Instruments	1.05	1.00	3.5277	15.6	11.1	11.1	12.6
Belo (A.H.) 'A' Corp	0.80	0.68	3.2413	10.0	13.2	5.4	9.5
Bemis Co.	1.25	1.31	3.4597	17.7	17.2	16.1	17.0
Bergen Brunswick	1.10	1.09	3.7409	12.2	14.0	14.1	13.4
Berkley (W.R.)	0.90	0.79	3.2155	16.0	10.3	11.0	12.4
Blair Corp.	0.85	0.75	3.7199	24.7	29.0	21.6	25.1
Bob Evans Farms	0.90	0.82	3.6844	12.6	13.9	14.3	13.6
Boise Cascade	1.05	1.00	3.5961	17.0	4.8	NMF	10.9
Bowater Inc.	1.15	1.22	3.7976	14.7	8.7	4.5	9.3
Brinker Int'L	1.10	1.07	4.1154	17.9	13.7	12.6	14.7
Brown Group	0.90	0.83	3.2890	9.1	9.5	6.0	8.2
Bruno's, Inc.	0.95	0.85	3.2068	16.4	17.8	17.1	17.1
Brush Wellman	0.90	0.84	4.0674	6.3	8.1	NMF	7.2
Burlington Northern	1.15	1.20	3.4777	22.2	17.7	13.6	17.8
Cabot Corp.	0.95	0.88	3.1915	8.6	8.3	9.3	8.7
Carter-Wallace	1.15	1.17	3.9343	14.6	13.5	13.2	13.8
Caterpillar Inc.	1.15	1.21	3.4756	11.1	4.6	NMF	7.9
CBI Inds.	1.05	1.05	3.8237	8.9	10.8	9.2	9.6
Centex Corp.	1.25	1.37	4.0238	13.8	9.0	6.7	9.8
Chemical Waste Mgmt.	1.20	1.27	3.7470	18.0	18.2	13.4	16.5
Chesapeake Corp.	1.05	1.06	3.8625	15.2	6.1	4.8	8.7
Chris-Craft	1.00	0.99	3.4336	64.8	30.0	5.5	33.4
Church & Dwight	0.80	0.68	3.7531	15.9	18.9	19.0	17.9
Cintas Corp.	1.05	1.00	3.4349	16.5	16.9	16.9	16.8
CLARCOR Inc.	0.85	0.72	3.8896	15.9	23.1	19.2	19.4
Clark Equipment	1.20	1.29	3.6397	13.2	7.9	NMF	10.6
Cleveland-Cliffs	0.90	0.83	3.7810	24.2	8.9	13.0	15.4
Coca Cola Bottling C	0.90	0.83	3.9429	34.2	35.9	36.6	35.6
Colonial Companies	0.85	0.70	3.4957	12.9	12.9	14.0	13.3

Commonwealth Telephone Company
Comparable Earnings Analysis
for a Non-Utility Group Comparable to
the Proxy Group of Five Independent Operating Companies

Non-Utility Group Comparable to the Proxy Group of Five Independent Operating Companies	Adj. Beta	Unadj. Beta	Residual Standard Deviation	Rate of Return on Net Worth			
				1989	1990	1991	3-Year Average
Communic. Satellite	0.95	0.91	3.2445	10.5	10.1	9.7	10.1
Computer Sciences	1.05	1.01	3.4843	12.7	12.0	11.2	12.0
Cont'L Corp.	1.10	1.08	3.6087	6.7	6.8	2.7	5.4
Cooper Tire & Rubber	1.25	1.36	4.1077	18.8	18.0	18.1	18.3
Corestates Fin'L	1.20	1.28	3.3128	15.9	8.3	14.8	13.0
CPI Corp.	0.90	0.84	3.7416	23.2	22.2	16.9	20.8
Crane Co.	1.00	0.97	3.6277	19.7	19.8	15.0	18.2
Cross (A.T.) 'A'	0.95	0.89	3.4356	23.3	16.8	13.1	17.7
Cummins Engine	1.05	1.02	3.8044	NMF	NMF	NMF	NMF
Dekalb Genetics 'B'	0.90	0.82	3.9482	11.5	13.2	14.7	13.1
Delta Air Lines	1.10	1.11	3.2422	17.6	11.6	NMF	14.6
Dexter Corp.	0.90	0.85	3.8307	13.2	12.3	NMF	12.8
Dibrell Brothers	0.95	0.92	4.1341	19.4	18.0	21.8	19.7
Dillard Dept. Stores	1.20	1.25	3.3674	13.5	13.4	13.0	13.3
Domtar Inc.	0.85	0.74	4.0164	1.2	NMF	NMF	1.2
Donaldson Co.	0.90	0.83	3.8566	15.6	16.3	17.3	16.4
Dow Jones & Co.	1.05	1.03	3.7513	10.9	7.4	5.0	7.8
Dresser Ind.	1.20	1.23	4.0580	10.2	9.9	7.9	9.3
Echlin Inc.	1.05	1.01	3.4440	6.9	7.1	6.4	6.8
Ecolab Inc.	1.05	1.05	4.0549	0.6	11.9	18.7	10.4
Edison Bros. Stores	0.90	0.79	4.0613	25.1	17.2	15.8	19.4
Engelhard Corp.	1.10	1.12	3.5085	9.6	9.9	11.6	10.4
Ennis Business Forms	0.90	0.78	3.2747	34.6	37.8	31.2	34.5
Equifax, Inc.	1.00	0.96	3.8152	18.0	21.7	15.4	18.4
Federal Express	1.15	1.21	3.9922	11.1	7.0	6.3	8.1
Federal Signal	0.90	0.81	3.6417	17.6	19.2	18.8	18.5
Ferro Corp.	1.25	1.32	4.1367	16.7	10.3	12.0	13.0
First Bank System	1.00	0.95	3.9445	0.2	10.1	12.4	7.6
First Hawaiian Inc.	1.05	1.02	3.3360	20.4	16.0	16.4	17.6
First Union Corp.	1.00	0.96	3.4415	31.3	22.1	19.0	24.1
Fleetwood Enterprise	1.25	1.31	4.1019	13.0	7.1	8.6	9.6
FlightSafety	1.20	1.30	3.6079	19.5	18.8	14.8	17.7
Florida Rock	0.85	0.74	3.7137	14.6	9.9	1.2	8.6
Fluke (John) Mfg.	1.05	1.05	3.9102	14.1	10.3	9.0	11.1
FMC Corp.	0.95	0.85	3.9611	--	NMF	NMF	0.0
Food Lion 'B'	1.20	1.24	3.8855	26.0	25.8	24.8	25.5
Forest Labs.	1.25	1.37	4.0066	13.3	14.3	13.3	13.6
Garan Inc.	0.80	0.69	3.9374	13.2	14.1	13.4	13.6
GATX Corp.	1.05	1.07	3.8132	13.0	14.8	13.5	13.8
Genovese Drug 'A'	0.80	0.68	4.0367	7.7	13.8	16.0	12.5
Gibson Greetings	1.00	0.94	3.7514	16.8	15.8	13.8	15.5
Gilbert Assoc.	0.85	0.73	3.7958	8.8	9.0	5.5	7.8
Goodrich (B.F.)	1.20	1.25	3.9130	13.3	6.6	NMF	10.0
Goodyear Tire	1.05	1.04	3.9345	13.8	NMF	1.1	7.5
Goulds Pumps	1.15	1.20	3.8793	15.4	14.8	14.3	14.8
Graco Inc.	0.90	0.77	3.6856	19.0	19.3	10.0	16.1
G'T Atlantic & Pacif	1.15	1.19	3.3826	13.4	12.4	5.6	10.5
G'T Lakes Chemical	1.25	1.36	3.4555	20.8	18.9	17.5	19.1
Halliburton Co.	1.00	0.98	3.8118	6.2	8.8	5.1	6.7
Hancock fabrics	0.90	0.77	3.6854	30.3	30.1	23.7	28.0
Hanna (M.A.) Co.	0.95	0.89	3.6631	13.3	9.3	7.2	9.9
Hannaford Brothers	0.90	0.81	3.2095	17.3	16.3	14.4	16.0
Harnischfeger Inds.	1.25	1.35	3.8868	10.5	12.0	10.9	11.1
Harris Corp.	1.20	1.29	3.6090	12.3	12.1	9.0	11.1
Harsco Corp.	0.85	0.71	3.6770	2.9	15.9	16.0	11.6
Hartford Steam Boile	0.95	0.88	3.3044	23.1	22.2	18.0	21.1
Hasbro, Inc.	1.20	1.25	3.6798	11.5	10.3	12.8	11.5
Helene Curtis	0.95	0.91	3.9933	11.5	4.4	11.6	9.2
Helmerich & Payne	0.90	0.77	3.5420	5.1	9.9	4.3	6.4
Hormel (Geo. A.)	0.90	0.83	3.8445	14.9	15.0	14.8	14.9
IBP, Inc.	0.85	0.76	3.9261	7.1	9.5	0.3	5.6

Commonwealth Telephone Company
Comparable Earnings Analysis
for a Non-Utility Group Comparable to
the Proxy Group of Five Independent Operating Companies

Non-Utility Group Comparable to the Proxy Group of Five Independent Operating Companies	Adj. Beta	Unadj. Beta	Residual Standard Deviation	Rate of Return on Net Worth			
				1989	1990	1991	3-Year Average
IMC Fertilizer	1.00	0.95	3.8757	17.9	10.1	13.7	13.9
IMCERA Group	1.10	1.10	3.6528	7.9	6.8	9.0	7.9
Inland Steel	1.20	1.23	4.0349	7.7	NMF	NMF	7.7
Ionics, Inc.	1.00	0.94	4.1055	5.3	6.3	6.5	6.0
Johnson Controls	1.15	1.21	3.6601	10.0	8.9	8.9	9.3
Jostens, Inc.	1.00	0.98	3.3471	24.5	23.4	21.7	23.2
Katy Inds.	0.95	0.89	3.9766	5.7	5.6	0.5	3.9
Kaydon Corp.	0.90	0.79	3.4256	25.2	22.9	18.5	22.2
Kelly Services 'A'	0.95	0.91	3.4763	25.0	21.1	10.9	19.0
Kennametal Inc.	1.05	1.05	3.5228	14.7	13.9	11.3	13.3
Keycorp	1.05	1.07	3.4812	13.9	13.7	12.7	13.4
Keystone Int'l	1.15	1.22	3.8920	18.5	18.6	16.9	18.0
Kimball Int'l 'B'	0.85	0.73	3.8423	13.9	15.6	10.2	13.2
La Quinta Mtr. Inns	0.80	0.69	3.8085	4.0	1.7	1.1	2.3
Lawson Products	0.85	0.76	4.0213	23.9	20.7	13.8	19.5
Lawter Int'l	0.95	0.91	3.4639	22.3	22.3	22.7	22.4
La-Z-Boy Chair	0.90	0.78	3.7996	13.2	10.2	10.2	11.2
LeaRonald Inc.	0.85	0.75	3.9514	14.3	10.2	9.8	11.4
Legg Mason	1.20	1.28	3.7941	10.2	10.2	14.3	11.6
Lilly Inds. 'A'	0.85	0.70	3.6934	16.9	13.7	8.6	13.1
Lockheed Corp.	0.90	0.81	3.4822	0.3	14.5	12.3	9.0
Loctite Corp.	1.10	1.10	3.2579	23.7	21.1	20.8	21.9
Longview Fibre	1.05	1.04	4.0549	17.3	15.8	4.4	12.5
Louisiana Land Expl.	0.95	0.90	3.5989	8.3	12.2	4.7	8.4
Louisiana-Pacific	1.15	1.21	3.6665	16.4	7.8	4.6	9.6
Lukens Inc.	0.90	0.82	4.0630	17.1	18.7	9.3	15.0
Luria (L.) & Son	0.90	0.80	4.0913	4.1	1.4	1.5	2.3
Lyondell Petrochem	0.95	0.92	4.0421	NMF	NMF	NMF	NMF
Manitowoc Co.	0.85	0.71	3.7183	10.5	7.3	9.2	9.0
Marsh Supermarkets '	0.90	0.78	3.9708	15.0	15.6	11.0	13.9
Marshall Industries	1.15	1.22	3.8593	15.9	14.3	10.9	13.7
Media General	1.00	0.95	3.4896	8.0	7.8	NMF	7.9
Medicine Shoppe Int'	0.90	0.84	4.1031	18.7	18.9	18.8	18.8
Medtronic, Inc.	1.15	1.23	3.4770	20.1	20.2	20.3	20.2
Mellon Bank Corp.	1.15	1.22	3.5800	11.0	5.7	13.5	10.1
Mercantile Bancorp.	0.85	0.76	3.2809	0.1	12.9	12.2	8.4
Meridian Bancorp	1.10	1.14	3.7845	12.8	7.0	13.3	11.0
Miller (Herman)	0.85	0.72	3.5948	15.3	14.8	11.7	13.9
Millipore Corp.	1.10	1.13	3.7413	12.5	12.7	12.6	12.6
Modine Mfg.	0.80	0.68	3.8740	13.7	9.2	12.4	11.8
Molex Inc.	1.05	1.05	3.6127	14.9	12.4	11.7	13.0
Monarch Mach. Tool	1.00	1.00	3.8075	3.2	0.6	1.8	1.9
Morrison Knudsen	1.15	1.17	3.3425	12.8	12.5	8.0	11.1
Mosinee Paper	0.85	0.72	3.9496	2.2	14.4	1.1	5.9
Motorola, Inc.	1.25	1.31	3.4346	14.0	11.7	9.8	11.8
Multimedia, Inc.	0.95	0.86	3.3908	NMF	NMF	NMF	NMF
Myers Inds.	0.90	0.77	3.8890	18.1	17.0	14.5	16.5
National Medical Ent	1.25	1.35	3.8023	17.4	19.2	15.7	17.4
Newell Co.	1.25	1.37	4.0445	18.7	18.9	18.5	18.7
Newhall Land & Farmi	1.05	1.05	3.9362	43.1	32.8	25.5	33.8
Noble Affiliates	0.80	0.67	4.0785	3.7	11.4	7.3	7.5
Nordson Corp.	0.90	0.83	3.4153	32.0	22.5	22.1	25.5
Norwest Corp.	1.10	1.13	3.2230	18.5	17.1	15.4	17.0
NOVA Corp.	0.95	0.86	3.6655	7.7	6.4	3.0	5.7
Nucor Corp.	1.25	1.35	3.4220	9.9	11.5	9.1	10.2
N.Y. Times	1.05	1.05	3.3040	6.4	6.1	4.4	5.6
Olin Corp.	1.05	1.05	3.5712	18.6	11.7	10.7	13.7
Oneida Ltd.	0.90	0.78	3.7254	14.3	7.3	7.8	9.8
Orion Capital	0.90	0.83	3.5437	12.6	12.0	4.0	9.5
Overseas Shipholding	0.90	0.81	3.7882	7.4	7.9	7.2	7.5
Owens & Minor	0.95	0.87	3.7778	3.2	10.3	10.1	7.9

Commonwealth Telephone Company
Comparable Earnings Analysis
for a Non-Utility Group Comparable to
the Proxy Group of Five Independent Operating Companies

Non-Utility Group Comparable to the Proxy Group of Five Independent Operating Companies	Adj. Beta	Unadj. Beta	Residual Standard Deviation	Rate of Return on Net Worth			
				1989	1990	1991	3-Year Average
PACCAR Inc	1.10	1.13	3.5978	18.8	6.7	3.8	9.8
Pall Corp.	1.10	1.12	3.3934	16.5	15.0	16.4	16.0
Parker-Hannifin	1.05	1.00	3.1733	13.3	11.8	6.3	10.5
Pentair, Inc.	0.85	0.76	3.7432	11.8	10.4	11.8	11.3
Pep Boys	1.25	1.34	3.9580	11.2	10.9	10.2	10.8
Perkin-Elmer	1.00	0.99	3.4104	7.7	11.3	19.3	12.8
Phelps Dodge	1.20	1.26	3.9059	37.3	27.0	14.7	26.3
Phillips Petroleum	0.95	0.88	3.5830	23.4	23.2	3.6	16.7
Pioneer Hi-Bred	1.00	0.99	3.5948	11.7	11.2	15.3	12.7
Pittston	1.15	1.16	4.0078	4.2	8.7	14.2	9.0
PNC Bank Corp.	1.25	1.34	4.0657	13.3	2.7	11.8	9.3
Policy Mgmt. Sys.	1.25	1.33	3.4917	9.4	11.4	9.6	10.1
Polygram Nv (Ny Shs)	0.90	0.78	3.6436	22.8	24.8	22.3	23.3
Premark Int'L	1.05	1.07	4.1254	9.8	10.0	12.2	10.7
Premier Industrial	0.90	0.80	3.3015	32.8	29.7	25.6	29.4
Primark Corp.	1.00	0.94	4.1028	2.2	0.3	0.2	0.9
Progressive (Ohio)	1.00	0.99	3.5262	17.9	20.4	10.1	16.1
Reynolds Metals	1.25	1.32	3.1998	19.8	13.1	5.2	12.7
Reynolds & Reynolds	1.10	1.09	4.0923	12.3	10.4	9.1	10.6
Roadway Services	1.15	1.20	3.3385	13.3	15.3	14.3	14.3
Rogers Corp.	0.85	0.75	3.6941	2.9	4.2	NMF	3.6
Rouse Co.	1.20	1.26	4.0706	13.3	NMF	14.0	13.7
Russell Corp.	1.20	1.26	3.8545	15.9	14.7	11.2	13.9
Rykoff-Sexton	0.80	0.67	3.8085	6.3	7.4	6.7	6.8
Salomon Inc.	1.15	1.20	3.7274	13.2	8.6	12.6	11.5
Schulman (A.)	0.90	0.78	3.6949	18.5	16.1	16.9	17.2
Scott Paper	1.15	1.16	3.3694	14.6	11.4	5.7	10.6
Scripps (E.W.) 'A'	1.10	1.11	3.7367	13.9	11.2	10.5	11.9
Sealed Air	1.15	1.21	4.1379	0.0	15.6	NMF	7.8
Service Corp. Int'L	0.95	0.91	4.0342	9.1	14.6	11.9	11.9
Sigma-Aldrich	0.95	0.88	3.2895	21.4	19.3	18.1	19.6
Smith'S Food & Drug	1.15	1.19	3.6641	10.4	12.4	9.4	10.7
Smucker (J.M.) 'A'	0.90	0.78	3.4405	18.1	16.7	16.1	17.0
Stanhope Inc.	1.00	0.96	4.0214	26.2	23.8	18.7	22.9
State Street Boston	1.25	1.36	3.8122	17.4	16.9	17.1	17.1
Student Loan Marketi	1.25	1.33	3.3354	24.8	27.5	30.0	27.4
Sundstrand Corp.	1.20	1.23	3.4150	19.3	18.0	15.7	17.7
Tandy Corp.	1.25	1.33	3.5495	18.1	16.8	11.2	15.4
Thermo Electron	1.00	0.98	3.4277	11.7	11.0	9.8	10.8
Thermo Instrument	0.85	0.74	3.8700	15.8	10.3	9.9	12.0
Thomas Inds.	1.00	0.93	4.0881	10.4	8.3	2.7	7.1
Time Warner	1.25	1.31	3.6365	NMF	NMF	NMF	NMF
Timken Co.	1.15	1.17	3.6135	5.2	5.1	NMF	5.2
Tootsie Roll Ind.	0.85	0.74	3.2155	18.4	17.4	17.4	17.7
Toro Co.	1.05	1.04	4.1318	21.3	10.9	6.0	12.7
Travelers Corp.	1.20	1.27	4.0858	7.2	NMF	5.4	6.3
Trinity Inds.	1.10	1.11	3.9464	13.4	8.9	6.4	9.6
Trinova Corp.	1.20	1.29	3.9980	5.1	7.1	NMF	6.1
Tyco Labs.	1.15	1.19	3.5523	17.4	3.5	13.1	11.3
Tyson Foods 'A'	0.90	0.83	4.0048	22.5	18.1	17.7	19.4
UniFirst Corp.	0.90	0.78	3.5981	14.5	15.3	12.9	14.2
United Asset Managem	1.00	0.98	3.4372	NMF	11.8	13.2	12.5
Unocal Corp.	1.00	1.00	3.6847	10.7	13.7	3.0	9.1
UNUM Corp.	1.05	1.07	3.4277	12.8	13.9	13.6	13.4
Upjohn Co.	1.00	0.99	3.4316	22.3	25.7	26.8	24.9
Varian Associates	1.25	1.32	3.7495	7.4	11.1	13.2	10.6
V.F. Corp.	1.20	1.25	3.8337	21.5	12.8	17.2	17.2
Washington Fed'L S&L	1.20	1.27	3.4338	20.6	19.6	18.8	19.7
Washington National	0.80	0.68	3.5622	NMF	NMF	NMF	NMF
Wausau Paper	1.00	0.93	3.9171	22.6	13.3	23.4	19.8
West Co.	0.85	0.70	3.5519	11.5	2.4	8.4	7.4

Commonwealth Telephone Company
Comparable Earnings Analysis
 for a Non-Utility Group Comparable to
the Proxy Group of Five Independent Operating Companies

Non-Utility Group Comparable to the Proxy Group of Five Independent Operating Companies	Adj. Beta	Unadj. Beta	Residual Standard Deviation	Rate of Return on Net Worth			
				1989	1990	1991	3-Year Average
Westinghouse Electri	1.25	1.36	3.3501	21.0	25.7	14.1	20.3
Whirlpool Corp.	1.20	1.29	3.5413	13.6	7.2	11.2	10.7
Willamette Ind.	1.10	1.09	3.8426	21.2	13.1	4.6	13.0
Wolohan Lumber	0.95	0.85	4.0260	17.8	16.3	11.7	15.3
Woolworth Corp.	1.25	1.35	3.3382	15.8	13.5	9.6	13.0
Worthington Inds.	0.90	0.79	3.4313	20.0	16.0	12.6	16.2
Wynn'S Int'L	0.90	0.79	3.2613	7.0	7.1	4.9	6.3
Yellow Freight Sys.	1.15	1.17	3.7390	4.2	13.9	5.6	7.9
Zero Corp.	0.95	0.85	3.5942	13.9	12.2	7.9	11.3
Zions Bancorp.	0.85	0.70	3.2050	8.5	14.5	14.1	12.4
Average	1.03	1.01	3.6973				
	====	====	=====				
Median							12.6%
							====
Comparable to the Proxy Group of Five Independent Operating Companies	1.04	1.03	3.6707				
	====	====	=====				

Notes: (1) The Non-Utility Proxy Group was selected based upon an unadjusted beta range of 0.67 - 1.39 residual standard deviation range of 3.1878 - 4.1536 as explained in Mr. Hanley's direct testimony.

Source of Information: Value Line Investment Survey
 Value Line, Inc.

Commonwealth Telephone Company
Comparable Earnings Analysis
 for a Non-Utility Group Comparable to
the Proxy Group of Seven Regional Holding Companies

Non-Utility Group Comparable to the Proxy Group of Seven Regional Holding Companies	Adj. Beta	Unadj. Beta	Residual Standard Deviation	Rate of Return on Net Worth			
				1989	1990	1991	3-Year Average
Anheuser-Busch	1.05	1.02	2.2478	24.7%	22.9%	21.2%	22.9%
Bandag, Inc.	0.95	0.86	2.3724	35.7	33.4	26.8	32.0
CPC Int'L	1.05	1.00	2.3907	26.9	25.7	24.8	25.8
Dover Corp.	0.95	0.90	2.4577	19.3	19.8	15.1	18.1
Genuine Parts	0.95	0.88	2.1992	20.5	20.0	18.4	19.6
Heinz (H.J.)	0.95	0.91	2.4647	26.7	25.0	21.0	24.2
Int'L Business Mach.	0.95	0.87	2.4700	13.6	14.1	5.7	11.1
Longs Drug Stores	0.95	0.88	2.4459	18.3	15.7	13.1	15.7
Marsh & McLennan	0.95	0.87	2.4517	33.8	28.0	29.5	30.4
Mobil Corp.	0.75	0.60	2.2408	10.8	11.3	11.0	11.0
Pennzoil Company	0.75	0.58	2.3784	10.6	7.5	2.5	6.9
Ralston Purina	0.90	0.83	2.2392	40.8	60.7	43.8	48.4
Raytheon Co.	0.80	0.63	2.4227	21.8	19.6	17.8	19.7
Thomas & Betts	0.80	0.68	2.4517	16.0	13.8	13.3	14.4
Torchmark Corp.	1.00	0.98	2.4775	23.6	25.2	22.8	23.9
Wachovia Corp.	0.95	0.86	2.3535	15.5	15.4	14.7	15.2
Average	0.92	0.83	2.3790				
	====	====	=====				
Median							19.7%
							====
Average for the Proxy Group of Seven Regional Holding Companies	0.90	0.80	2.1951				
	====	====	=====				

Notes: (1) The Non-Utility Proxy Group was selected based upon an unadjusted beta range of 0.58 - 1.02 and a residual standard deviation range of 1.9063 - 2.4839 as explained in Mr. Hanley's direct testimony.

Source of Information: Value Line Investment Survey
 Value Line, Inc.