Exhibit No.:	
Issue:	Rate of Return
Witness:	David Murray
Sponsoring Party:	MoPSC Staff
Type of Exhibit:	Rebuttal Testimony
Case No.:	TT-2001-328

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

REBUTTAL TESTIMONY

OF

DAVID MURRAY

OREGON FARMERS MUTUAL TELEPHONE COMPANY

CASE NO. TT-2001-328

Jefferson City, Missouri
March, 2001

****Denotes Highly Confidential Information****

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REBUTTAL TESTIMONY

OF

DAVID MURRAY

OREGON FARMERS MUTUAL TELEPHONE COMPANY

CASE NO. TT-2001-328

Q. Please state your name.

A. My name is David Murray.

Q. Please state your business address.

A. My business address is P.O. Box 360, Jefferson City, Missouri, 65102.

Q. What is your present occupation?

A. I am employed as a Financial Analyst for the Missouri Public Service Commission (Commission). I accepted this position in June 2000.

Q. Were you employed before you joined the Commission's staff (Staff)?

A. Yes, I was employed by the Missouri Department of Insurance in a regulatory position.

Q. What is your educational background?

A. In May 1995, I earned a Bachelor of Science degree in Business Administration with an emphasis in Finance and Banking, and Real Estate from the University of Missouri-Columbia.

Q. What is the purpose of your testimony in this case?

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A. My testimony is presented to provide support for my recommendation to the Commission as to a fair and reasonable rate of return for the Missouri jurisdictional small telephone company rate base of Oregon Farmers Mutual Telephone Company (Oregon Farmers).

Q. Have you prepared any schedules to your analysis of the cost of capital for Oregon Farmers?

A. Yes. I am sponsoring a study entitled "An Analysis of the Cost of Capital for Oregon Farmers Mutual Telephone Company, Case No. TT-2001-328" consisting of 20 schedules, which are attached to this direct testimony.

Q. What do you conclude is the cost of capital for Oregon Farmers?

A. My analysis leads me to conclude that the current cost of capital for Oregon Farmers is 10.60 percent.

Determination of the Cost of Capital

Q. Please describe the approach for determining a utility company's cost of capital.

A. The total dollars of capital for the utility company are determined as of a specific point in time. This total dollar amount is then proportioned into each specific capital component. A weighted cost for each capital component is determined by multiplying each capital component ratio by the appropriate embedded cost or by the estimated cost of common equity component. The individual weighted costs are summed to arrive at a total weighted cost of capital. This total weighted cost of capital is synonymous with the fair rate of return for the utility company.

Q. Why is a total weighted cost of capital synonymous with a fair rate of return?

A. From a financial viewpoint, a company employs different forms of capital to support or fund the assets of the company. These funds are invested proportionately to support each dollar of the company's assets. Each different form of capital has a cost and these costs are weighted proportionately to fund each dollar invested in the assets.

Assuming that the various forms of capital are within a reasonable balance and are costed correctly, the resulting total weighted cost of capital, when applied to rate base, will provide the funds necessary to service the various forms of capital. Thus, the total weighted cost of capital corresponds to a fair rate of return for the utility company.

Capital Structure and Embedded Costs

Q. What capital structure have you employed in developing a weighted cost of capital for Oregon Farmers?

A. I have employed the capital structure that existed as of December 31, 2000 for Oregon Farmers. Schedule 20 presents Oregon Farmers' capital structure and associated capital ratios. The resulting capital structure consists of **__________** common equity and **__________** long-term debt.

Q. What was the embedded cost of long-term debt for Oregon Farmers at December 31, 2000?

A. I determined the embedded cost of long-term debt for Oregon Farmers at December 31, 2000, to be 7.11 percent (see Schedule 19).

Cost of Equity

Q. How did you analyze those factors by which the cost of equity for Oregon Farmers may be determined?

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A. Because Oregon Farmers does not have stock that is publicly traded, I performed an analysis of the cost of equity of a comparable group of five publicly traded telephone companies. I have used a weighted average of the discounted cash flow (DCF) model, the risk premium model and the capital asset pricing model (CAPM). I weighted these estimates as follows: DCF-75 percent, risk premium-10 percent, and CAPM-15 percent.

The DCF Model

Q. Please describe the DCF model.

A. The DCF model is a market-oriented approach for deriving the cost of equity. The return on equity calculated from the DCF model is inherently capable of attracting capital. This results from the theory that security prices adjust continually over time, so that an equilibrium price exists and the stock is neither undervalued nor overvalued. It can also be stated that stock prices continually fluctuate to reflect the required and expected return for the investor.

The continuous growth form of the DCF model was used in this analysis. This model relies upon the fact that a company's common stock price is dependent upon the expected cash dividends and upon cash flows received through capital gains or losses that result from stock price changes. The interest rate which discounts the sum of the future expected cash flows to the current market price of the common stock is the calculated cost of equity. This can be expressed algebraically as:

$$\text{Present Price} = \underset{\text{Discounted by k}}{\text{Expected Dividends}} + \underset{\text{Discounted by k}}{\text{Expected Price in 1 year}} \qquad (1)$$

Since the expected price of a stock in one year is equal to the present price multiplied by one plus the growth rate, equation (1) can be restated as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{(1+k)} + \frac{\text{Present Price }(1+g)}{(1+k)} \qquad (2)$$

where g equals the growth rate and k equals the cost of equity. Letting the present price equal P_0 and expected dividends equal D_1, the equation appears as:

$$P_0 = \frac{D_1}{(1+k)} + \frac{P_0(1+g)}{(1+k)} \qquad (3)$$

The cost of equity equation may also be algebraically represented as:

$$k = \frac{D_1}{P_0} + g \qquad (4)$$

Thus, the cost of common stock equity, k, is equal to the expected dividend yield (D_1/P_0) plus the expected growth in dividends (g) continuously summed into the future. The growth in dividends and implied growth in earnings will be reflected in the current price. Therefore, this model also recognizes the potential of capital gains or losses associated with owning a share of common stock.

The discounted cash flow method is a continuous stock valuation model. The DCF theory is based on the following assumptions:

1. Market equilibrium;
2. Perpetual life of the company;
3. Constant payout ratio;
4. Payout of less than 100% earnings;
5. Constant price/earnings ratio;

6. Constant growth in cash dividends;

7. Stability in interest rates over time;

8. Stability in required rates of return over time; and

9. Stability in earned returns over time.

Flowing from these, it is further assumed that an investor's growth horizon is unlimited and that earnings, book values and market prices grow hand-in-hand. Even though the entire list of the above assumptions is rarely met, the DCF model is a reasonable working model describing an actual investor's expectations and resulting behaviors.

Q. Can you directly analyze the cost of equity for Oregon Farmers?

A. No. In order to arrive at a company-specific DCF result, the company must have common stock that is market-traded and it must pay dividends. Oregon Farmers does not have publicly traded stock. Therefore, as indicated earlier in my testimony, I determined an initial cost of equity based on a comparable group of five publicly traded telephone companies (comparables). Please see Schedule 1 for the criteria used to select the five comparables.

Q. Please explain how you determined the growth term of the DCF formula for the comparables.

A. I calculated the comparables' historical growth rates of actual dividends per share (DPS), earnings per share (EPS) and book values per share (BVPS), as well as the sustained growth rate. I also reviewed the projected growth rates for the comparables. Schedules 4-1 through 4-5 lists annual compound growth rates and geometric growth rates calculated for DPS, EPS and BVPS for the periods of 1989 through 1999 and 1994 through 1999. Schedule 7 presents the average of the five and ten-year historical DPS, EPS and

BVPS growth rates. Also presented are the sustainable growth rates and the projected growth rates for the comparables. The average of the historical growth rates is 7.53 percent. The average of the sustainable growth rates is 11.27 percent. The projected growth rates were obtained from three outside sources. I/B/E/S Inc.'s Institutional Brokers Estimate System, September 14, 2000, projects a five-year average growth forecast of 13.32 percent for the comparables. Standard & Poor's Corporation's Earnings Guide, September 2000, projects a five-year EPS average growth rate of 13.80 percent for the comparables. Value Line Investment Survey: Ratings and Reports, July 7, 2000, projects the average compound annual rate of growth for EPS during the next three to five years will be 14.80 percent for the comparables. Combining the historical growth rates, the sustainable growth rates and the projected growth rates produces a reasonable growth rate of 12.14 percent. This rate of growth (g) is the rate that I used in the DCF model to calculate a cost of common equity for the comparables.

Q. Please explain how you determined the yield term of the DCF formula for the comparables.

A. The expected yield term (D_1/P_0) of the DCF model is calculated by dividing the amount of common dividends per share expected to be paid over the next twelve months (D_1) by the current market price per share of the firm's common stock (P_0). Even though the model requires the use of a current spot market price, I have chosen to use a monthly high / low average market price of the comparables' common stock for the period from June 1, 2000 through September 29, 2000. This averaging technique is an attempt to minimize the effects on the dividend yield that can occur due to daily volatility in the stock market.

Schedule 8 presents the monthly high / low average stock market prices from June 1, 2000 through September 29, 2000, for the comparables.

I referred to the Value Line Investment Survey: Ratings & Reports, July 7, 2000, to estimate the comparables' common dividend declared per share for the next twelve months by averaging the projected dividend for 2000 and the projected dividend for 2001. Column (1) of Schedule 9 illustrates these results.

Dividing the expected dividend in column (1) of Schedule 9 by the average high/low stock price in column (2) results in the projected dividend yield in column (3). I calculated the average dividend yield of the comparables to arrive at my projected dividend yield of 1.97 percent.

Q. Please summarize the results of your expected dividend yield and growth rate analysis for the DCF return on equity for the comparables.

A. The summarized DCF cost of equity estimate for the comparables is presented as follows:

Yield (D_1/P_0)	+	Growth Rate (g)	=	Cost of Equity (k)
1.97%	+	12.14%	=	14.11%

This cost of equity estimate was used in the weighted cost of equity calculation to determine the comparables' cost of equity.

The Risk Premium Model

Q. What is the Risk Premium model?

A. The risk premium concept implies that the required return on equity is found by adding an explicit premium for risk to a current interest rate. Schedules 10-1 through 10-5 show the average risk premium above the yield of the appropriately rated Mergent's

Public Utility Bond for each of the comparables' expected return on common equity. My analysis shows, on average, that the expected return on equity for the comparables is 17.80 percent (see Schedule 11). This cost of equity approach was not given the same weight as the DCF approach because the DCF approach is predominately used by the Financial Analysis Department to determine the cost of equity in rate cases involving publicly traded companies. Additionally, the risk premium approach resulted in an estimated cost of equity that is 369 basis points higher than the DCF results, and 521 basis points higher than the CAPM results, causing some concern as to the validity of the risk premium results for this case.

The Capital Asset Pricing Model

Q. What is the Capital Asset Pricing Model (CAPM)?

A. The CAPM describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the rate of return which investors expect a security to earn so that its market return is comparable with the market returns earned by other securities that have similar risk. The general form of the CAPM is as follows:

$$k = R_f + \beta\,(R_m - R_f)$$

where:

k = the expected return on equity for a specific security;

R_f = the risk-free rate;

β = beta; and

$R_m - R_f$ = the market risk premium.

The first term of the CAPM is the risk-free rate (R_f). The risk-free rate reflects the level of return that can be achieved without accepting any risk. In reality, there is no such risk-free asset, but it is generally represented by U.S. Treasury securities. For purposes of this analysis, the risk-free rate was represented by the yield on the 30-Year U.S. Treasury Bond of 5.81 percent quoted in the October 17, 2000 issue of The Wall Street Journal.

The second term of the CAPM is beta (β). Beta is an indicator of a security's investment risk. It represents the relative movement and relative risk between a particular security and the market as a whole (where beta for the market equals 1.00). Securities with betas greater than 1.00 exhibit greater volatility than do securities with betas less than 1.00. This causes a higher beta security to be less desirable and therefore requires a higher return in order to attract investor capital away from a lower beta security. Schedule 12 contains the appropriate betas for the comparables.

The final term of the CAPM is the market risk premium (R_m - R_f). The market risk premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk-free investment. For purposes of this analysis, the appropriate market risk premium was determined to be 7.80 percent as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2000 Yearbook.

Schedule 12 presents the CAPM analysis with regard to the comparables. The CAPM analysis produces an estimated cost of equity of 12.59 percent for the comparables. It should be noted that recent debate has somewhat diminished the reliability of CAPM as a cost of equity evaluation tool. As a result, I do not believe that CAPM analysis should be given equal weight compared to the DCF cost of equity analysis.

Q. Based on your analysis of the DCF, risk premium and CAPM cost of equity results, what is your return on equity estimate for the comparables?

A. Based on my DCF, risk premium and CAPM analyses, I believe that the cost of equity should be 14.25 percent based on the following weighted average calculation of each of the cost of equity estimates (Schedule 13):

	Weighting	Cost of Equity
DCF	75.00%	14.11%
Risk Premium	10.00%	17.80%
CAPM	15.00%	12.59%
Total		14.25%

Q. Do you believe that it is appropriate to apply the comparables' cost of equity to Oregon Farmers?

A. Not on its own. Because I have seen a reduction in the number of comparables used in the generic telephone studies over the past several years from eleven in 1997 to five in 2000, I have some concern that this reduction may allow specific company characteristics to have a greater impact on the average cost of equity result. In order to calculate a more accurate average, it is better to have a larger number of comparables. Furthermore, in light of the recent trend for telecommunications companies to branch out into higher growth segments such as wireless services, the comparables used tend to have more nonregulated, high-growth operations that may cause the return on equity for these operations to be higher than the return on equity for slow-growth, regulated operations. Additionally, the stock prices of the technology sector in general and the telephone sector in specific have been much lower than previous prices, and because the comparables tend to be branching out into higher growth, nonregulated aspects of the telecommunications industry, the comparables' stock prices may be more depressed than the stock price of a telecommunications company that tends to do more business in conservative, regulated operations.

Q. How do you propose to address some of the concerns you noted in your previous answer?

A. Because of the above concerns, I decided to use the 1997 Staff study, "An Analysis of Generic Cost of Equity for Small Telephone Companies in Missouri" by David Broadwater, CRRA and Robert B. Weinman III, and the 1999 Staff study, "An Analysis of Generic Cost of Equity for Small Telephone Companies in Missouri" by David Broadwater, CRRA and Eric S. Webster, as well as the 2000 study "An Analysis of Generic Cost of Equity for Small Telephone Companies in Missouri" by David Murray, to calculate averages of all three generic telephone studies to arrive at a range of cost of equity estimates for small telephone companies with various capital structures. The use of the average will help alleviate the concerns about the reduction of the number of comparables. It will also help alleviate the concern about the comparables becoming more heavily invested in nonregulated aspects of the telecommunications industry. Finally, it will smooth out any uniqueness in the market situation that may have occurred this past year.

Q. Did you estimate a specific point cost of equity for the cost of equity for small telephone companies or did you use a range for the various small telephone companies?

A. Realizing that as of the end of December 31, 1998, small telephone companies in Missouri with fewer than 10,000 access lines had capital structures ranging from 26.02 percent equity to 100 percent equity with an average of 76.31 percent equity, I felt that a financially sound methodology was needed to take into account the concept that the return on equity should be lower for a firm financed with 100 percent equity versus a company that is much more heavily weighted in debt. From a conceptual perspective, financial theory indicates that a company with debt has financial leverage and therefore, a certain level of financial risk. If a company is financed with 100 percent equity, it doesn't have any financial leverage and hence, it doesn't have any financial risk. Financial theory claims that if financial risk exists, investors will expect a greater return on equity for them to incur that risk. Conversely, if a company does not have debt, it does not have financial leverage or resulting financial risk and therefore, investors will expect a lesser return on their investment.

Q. How do you propose to make adjustments to ROE to take into consideration capital structure?

A. I used a methodology that modifies the beta used in the CAPM equation to remove the risk associated with financial leverage from the beta used in the model. This is commonly referred to as unlevering the beta as explained in Roger A. Morin's book, "Regulatory Finance; Utilities Cost of Capital," on pages 348-352. The equation is as follows:

$$\beta_L = \beta_U\,[1+(1-T)D/E]$$

where β_L is the observed levered beta, β_U is the unlevered beta of the company with no debt in the capital structure, D/E is the ratio of debt to equity, and T is the corporate income tax rate. This can be algebraically solved to determine unlevered beta:

$$\beta_U = \beta_L\,/\,[1+(1-T)D/E]$$

The objective in determining the unlevered beta is to determine what the beta would be for a company when financial leverage and resulting financial risk is removed. This unlevered beta would then be used in the CAPM to determine the estimated cost of equity for a firm that is financed without debt. If a firm does not have any debt, then there isn't any financial risk to the shareholders because all earnings can accrue to the shareholders instead of having to pay debt service to the debtholders. Therefore, a firm with debt inherently has more financial risk, and will require a higher return on equity versus a lower return on equity for a firm without debt. Additionally, a firm with fixed interest rate debt in its financial structure will have a fixed interest expense. If revenues decrease for that company, it will have a more dramatic impact on the return on equity for its shareholders because the company still has to pay the fixed debt service expense to the debtholders. Alternatively, a company that doesn't have debt will not have to pay this expense. Therefore, the return on equity for a firm with debt in its financial structure will have greater volatility, causing its beta to be higher than a comparable company with less debt in its financial structure. As a result, when one unlevers the beta of a company with a higher degree of financial leverage, it will result in a larger decrease in the beta than if the company had less financial leverage.

Q. Using the unlevered beta approach, what was the return on equity for a company without any debt in its financial structure?

A. I subtracted the CAPM results using the unlevered betas from the CAPM results using levered betas to arrive at an average unlevered adjustment (see Schedules 14, 15 and 16). In Schedule 17, I subtracted each respective unlevered adjustment from the corresponding levered cost of equity recommended in each of the three studies used. I then averaged these unlevered return on equity results to arrive at my recommended unlevered 11.30 percent return on equity, which can be used for a firm that is capitalized with 100 percent equity.

Q. Did you estimate a return on equity for a company that is highly levered? If so, how did you estimate this return on equity?

A. Yes I did. I reviewed the 2000, 1999 and 1997 telephone studies to determine the highest cost of equity for each study. Because the overall recommended returns on equity for the three studies were based on a weighted average of the discounted cash flow method, the risk premium method and the CAPM method, I calculated the weighted average costs of equity for each company in all three studies to determine the highest cost of equity in each study. As shown in Schedule 18, the average of the highest cost of equity from each study is 15.29%. This was determined to be the highest cost of equity that may be allowed for a highly levered firm.

Q. Did you develop a range based on the unlevered cost of equity of 11.30 percent and the average of the high costs of equity of 15.29 percent?

A. Yes. I used the 11.30 percent cost of equity as the low end of the range for the recommended cost of equity for a company financed with 100 percent equity. I used the 15.29 percent cost of equity as the high end of the range for the recommended cost of equity for a company financed with 100 percent debt. Companies with capital structures that fall in between 100 percent equity and 100 percent debt would have an estimated cost of equity somewhere within this range.

Q. The methodology used in this study appears to be different than what has been used in cases involving electric, water and gas utilities. Is this technique appropriate for other types of utilities?

A. I don't believe it is. Rate cases that involve electric, water and gas utilities tend to involve larger companies that are publicly traded. The Financial Analysis

Department has consistently applied the DCF model in these cases because information is available to compute the cost of equity for that specific company. The telephone companies involved in these cases are not publicly traded, so the cost of equity for these companies is not directly observable through the use of the DCF model. The comparable company approach is the customary approach to use when one has a company that is not publicly traded. In this case, using this approach without modification was not appropriate because of capital structure issues and because of the possible differences between regulated, potentially low-growth business ventures and nonregulated, potentially high-growth business ventures.

Rate of Return for Oregon Farmers

Q. Please explain how the returns developed for each capital component are used in the ratemaking approach you have adopted to be applied to Oregon Farmers' telephone operations.

A. The cost of service ratemaking method was adopted in this case. This approach develops the public utility's revenue requirement. The cost of service (revenue requirement) is based on the following components: operation costs, rate base and a return allowed on the rate base.

It is my responsibility to calculate and recommend a rate of return that should be authorized on the telephone utility rate base for Oregon Farmers. Under the cost of service ratemaking approach, a weighted cost of capital of 10.60 percent was developed for Oregon Farmers' telephone operations (see Schedule 20). This rate was calculated by applying an embedded cost of long-term debt of 7.11 percent and a return on common equity of 12.86 percent selected from the previously mentioned range to a capital structure consisting of **__________** long-term debt and **__________** common equity. Therefore, as I

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stated earlier, I am recommending that Oregon Farmers' telephone operations be allowed to earn a return on its original cost rate base of 10.60 percent.

Through my analysis, I believe that I have developed a fair and reasonable return that, when applied to Oregon Farmers' utility rate base, will allow Oregon Farmers the opportunity to earn the revenue requirement developed in this case.

Q. Does this conclude your prepared rebuttal testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Tariff Filing of	)	
Oregon Farmers Mutual Telephone Company	)	Case No. TT-2001-328

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

David Murray, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of 17 pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

David Murray

DAVID MURRAY

Subscribed and sworn to before me this 27th day of February, 2001.

D Suzie Mankin

Notary Public

My Commission Expires: 6-21-04

D SUZIE MANKIN
NOTARY PUBLIC STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. JUNE 21,2004

OREGON FARMERS MUTUAL TELEPHONE COMPANY
CASE NO. TT-2001-328

AN ANALYSIS OF THE COST OF CAPITAL

FOR OREGON FARMERS MUTUAL TELEPHONE COMPANY

CASE NO. TT-2001-328

BY

DAVID MURRAY

UTILITY SERVICES DIVISION

MISSOURI PUBLIC SERVICE COMMISSION

FEBRUARY 2001

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Criteria for Selecting Local Exchange Industry Companies

		(1)	(2)	(3)	(4)	(5)
	Telecommunication Companies	Stock Publicly Traded	Information Printed In Value Line	11 Years of DPS & EPS Information	Debt to Total Capital < 62%	Comparable Company Met All Criteria
1	**ALLTEL Corporation**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
2	**AT&T Corporation**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
3	**Bell Atlantic Corporation**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
4	**BellSouth Corporation**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
5	**COMSAT Corporation**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
6	**Century Tel Inc.**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
7	Citizens Utilities Company	Yes	Yes	No		
8	Commonwealth Telephone Enterprises, Inc.	Yes	Yes	No		
9	Conestoga Enterprises, Inc.	Yes	No			
10	Dycom Industries, Inc.	Yes	Yes	No		
11	**GTE Corp.**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
12	Gen'l Communication 'A'	Yes	Yes	No		
13	I-Link Corp.	Yes	No			
14	MCI WorldCom, Inc.	Yes	Yes	No		
15	**SBC Communications, Inc.**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
16	Sprint Corporation	Yes	Yes	No		
17	Total-Tel USA Communications, Inc.	Yes	No			
18	United States Cellular Corporation	Yes	Yes	No		
19	eGlobe	Yes	Yes	No		
20	eLot Inc.	Yes	Yes	No		

Sources: The Value Line Investment Survey: Summary & Index and Ratings & Reports, July 7, 2000.
EDGAR Online, Inc.: InvestorGuide

Schedule 1

Five Telecommunications Companies

Number	Ticker Symbol	Company Name
1	AT	ALLTEL Corporation
2	T	AT&T Corporation
3	BLS	BellSouth Corporation
4	CTL	Century Tel Inc.
5	SBC	SBC Communications, Inc.

Note: Bell Atlantic and GTE have been removed due to their merger on June 30, 2000, to form Verizon.
COMSAT was removed because of negative historical growth.

Source: Value Line Investment Survey: Ratings & Reports, July 7, 2000

Interest Coverage, Common Equity Ratio, and Return on Common Equity for the Five Telecommunications Companies

Number	Company Name	Times Interest Earned (3/31/00)		Common Equity Ratio (1999)	Return on Common Equity (1999)
1	ALLTEL Corporation	5.70	x	52.87%	18.00%
2	AT&T Corporation	5.40	x	79.79%	6.40%
3	BellSouth Corporation	6.90	x	60.90%	25.60%
4	Century Tel Inc.	3.09	* x	46.40%	12.60%
5	SBC Communications	8.64	* x	59.10%	27.80%
	Average	**5.95**	**x**	**59.81%**	**18.08%**

Source: The Value Line Investment Survey: Ratings & Reports, July 7, 2000
*3/31/00 SEC 10Q Reports (Edgar Online, Inc.)

ALLTEL Corporation

Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates

Year	Dividends Per Share	Earnings Per Share	Book Value Per Share
1989	0.59	1.13	6.67
1990	0.66	1.17	6.35
1991	0.71	1.15	6.77
1992	0.76	1.25	7.01
1993	0.82	1.29	8.24
1994	0.90	1.60	8.60
1995	0.98	1.76	10.18
1996	1.06	1.92	11.15
1997	1.10	2.12	11.97
1998	1.18	2.09	11.86
1999	1.24	2.39	13.34

Annual Compound Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**7.71%**	**7.78%**	**7.18%**
1994 - 1999	**6.62%**	**8.36%**	**9.18%**

Geometric Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**7.40%**	**7.78%**	**7.18%**
1994 - 1999	**6.33%**	**8.36%**	**9.18%**

	DPS	EPS	BVPS
Average of Historical Growth Rates:	**7.01%**	**8.07%**	**8.18%**
Standard Deviation:	**0.56%**	**0.29%**	**1.00%**

Source: The Value Line Investment Survey: Ratings & Reports, July 7, 2000 and January 7, 2000.

AT&T Corporation

Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates

Year	Dividends Per Share	Earnings Per Share	Book Value Per Share
1989	0.80	1.67	7.89
1990	0.88	1.67	8.60
1991	0.88	0.27	8.26
1992	0.88	1.91	9.41
1993	0.88	2.10	6.83
1994	0.88	2.09	7.61
1995	0.88	0.79	7.22
1996	0.88	2.31	8.33
1997	0.88	1.83	9.30
1998	0.88	1.94	9.70
1999	0.88	1.74	24.69

Annual Compound Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**0.96%**	**0.41%**	**12.08%**
1994 - 1999	**0.00%**	**-3.60%**	**26.54%**

Geometric Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**0.96%**	**0.41%**	**12.08%**
1994 - 1999	**0.00%**	**-3.60%**	**26.54%**

	DPS	EPS	BVPS
Average of Historical Growth Rates:	**0.48%**	**-1.59%**	**19.31%**
Standard Deviation:	**0.48%**	**2.01%**	**7.23%**

Source: The Value Line Investment Survey: Ratings & Reports, July 7, 2000 and January 7, 2000.

BellSouth Corporation

Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates

Year	Dividends Per Share	Eamings Per Share	Book Value Per Share
1989	0.63	0.87	6.80
1990	0.67	0.85	6.63
1991	0.69	0.78	6.75
1992	0.69	0.85	6.99
1993	0.69	0.90	6.80
1994	0.69	1.05	7.24
1995	0.71	1.12	5.95
1996	0.72	1.27	6.68
1997	0.72	1.41	7.64
1998	0.73	1.65	8.26
1999	0.76	1.98	7.87

Annual Compound Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**1.89%**	**8.57%**	**1.47%**
1994 - 1999	**1.95%**	**13.53%**	**1.68%**

Geometric Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**1.89%**	**8.57%**	**1.47%**
1994 - 1999	**1.95%**	**12.74%**	**1.68%**

	DPS	EPS	BVPS
Average of Historical Growth Rates:	**1.92%**	**10.85%**	**1.58%**
Standard Deviation:	**0.03%**	**2.30%**	**0.11%**

Source: The Value Line Investment Survey: Ratings & Reports, July 7, 2000 and January 7, 2000.

Century Tel Inc.

Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates

Year	Dividends Per Share	Earnings Per Share	Book Value Per Share
1989	0.12	0.22	2.49
1990	0.12	0.28	2.70
1991	0.13	0.36	3.02
1992	0.13	0.53	3.50
1993	0.14	0.58	4.45
1994	0.14	0.73	5.38
1995	0.15	0.85	6.64
1996	0.16	0.95	7.56
1997	0.17	1.09	9.46
1998	0.17	1.42	11.03
1999	0.18	1.65	13.15

Annual Compound Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**4.14%**	**22.32%**	**18.11%**
1994 - 1999	**5.15%**	**17.72%**	**19.57%**

Geometric Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**4.14%**	**20.41%**	**17.26%**
1994 - 1999	**5.15%**	**16.95%**	**19.19%**

	DPS	EPS	BVPS
Average of Historical Growth Rates:	**4.65%**	**19.35%**	**18.53%**
Standard Deviation:	**0.51%**	**2.15%**	**0.91%**

Source: The Value Line Investment Survey: Ratings & Reports, July 7, 2000 and January 7, 2000.

SBC Communications, Inc.

Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates

Year	Dividends Per Share	Earnings Per Share	Book Value Per Share
1989	0.65	0.91	6.96
1990	0.69	0.92	7.15
1991	0.71	0.96	7.38
1992	0.73	1.09	7.76
1993	0.76	1.20	6.34
1994	0.79	1.37	6.86
1995	0.83	1.55	5.13
1996	0.86	1.73	5.70
1997	0.90	1.84	5.38
1998	0.94	2.08	6.52
1999	0.97	2.15	7.87

Annual Compound Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**4.08%**	**8.98%**	**1.24%**
1994 - 1999	**4.19%**	**9.43%**	**2.79%**

Geometric Growth Rates

	DPS	EPS	BVPS
1989 - 1999	**3.97%**	**7.24%**	**1.24%**
1994 - 1999	**4.13%**	**8.43%**	**2.79%**

	DPS	EPS	BVPS
Average of Historical Growth Rates:	**4.10%**	**8.52%**	**2.01%**
Standard Deviation:	**0.08%**	**0.82%**	**0.77%**

Source: The Value Line Investment Survey: Ratings & Reports, July 7, 2000 and January 7, 2000.

Expected Dividends Per Share, Earnings Per Share, & Return On Common Equity for the Five Telecommunications Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	**2000 Projected DPS**	**2001 Projected DPS**	**Expected DPS**	**2000 Projected EPS**	**2001 Projected EPS**	**Expected EPS**	**2000 Projected ROE**	**2001 Projected ROE**	**Expected ROE**
ALLTEL Corporation	$1.28	$1.34	**$1.31**	$2.70	$3.20	**$2.95**	18.50%	19.50%	**19.00%**
AT&T Corporation	$0.88	$0.88	**$0.88**	$1.75	$2.05	**$1.90**	6.50%	7.50%	**7.00%**
BellSouth Corporation	$0.76	$0.80	**$0.78**	$2.20	$2.50	**$2.35**	23.00%	23.50%	**23.25%**
Century Tel Inc.	$0.19	$0.22	**$0.21**	$1.65	$2.20	**$1.93**	12.50%	14.00%	**13.25%**
SBC Communications, Inc.	$1.01	$1.02	**$1.02**	$2.30	$2.60	**$2.45**	25.50%	24.50%	**25.00%**

Notes: Column 3 = [(Column 1 + Column 2) / 2]
Column 6 = [(Column 4 + Column 5) / 2]
Column 9 = [(Column 7 + Column 8) / 2]

Sources: The Value Line Investment Survey: Ratings and Reports, July 7, 2000.

Sustainable Growth Rates
for the Five Telecommunications Companies

	(1)	(2)	(3)	(4)	(5)
Company Name	**Expected DPS**	**Expected EPS**	**Expected ROE**	**Retention Rate**	**Sustainable Growth**
ALLTEL Corporation	$1.31	$2.95	19.00%	55.59%	**10.56%**
AT&T Corporation	$0.88	$1.90	7.00%	53.68%	**3.76%**
BellSouth Corporation	$0.78	$2.35	23.25%	66.81%	**15.53%**
Century Tel Inc.	$0.21	$1.93	13.25%	89.35%	**11.84%**
SBC Communications, Inc.	$1.02	$2.45	25.00%	58.57%	**14.64%**
Average					**11.27%**

Notes: *Column* 4 = [1-(Column 1 / Column2)]
Column 5 = [Column 3 * Column 4]

Sources: Reilly, Frank K. and Brown, Keith C., Investment Analysis and Portfolio Management: Fifth Edition, The Drayden Press, Fort Worth, 1997, pp. 406-408.
Column 1 = Schedule 5.
Column 2 = Schedule 5.
Column 3 = Schedule 5.

Historical, Sustainable, & Projected Growth Rates for the Five Telecommunications Companies

Company Name	(1) Historical Growth Rate (DPS, EPS, & BVPS)	(2) Sustainable Growth	(3) Projected 5 Year Growth IBES (mean)	(4) Projected 5 Year EPS Growth (S&P)	(5) Projected 3-5 Year EPS Growth (Value Line)	(6) Average Historical, Expected, & Projected Growth
ALLTEL Corporation	7.75%	10.56%	15.00%	15.00%	15.50%	**12.76%**
AT&T Corporation	6.07%	3.76%	12.00%	14.00%	11.50%	**9.46%**
BellSouth Corporation	4.78%	15.53%	11.10%	11.00%	13.00%	**11.08%**
Century Tel Inc.	14.18%	11.84%	15.00%	16.00%	24.00%	**16.20%**
SBC Communications, Inc.	4.88%	14.64%	13.50%	13.00%	10.00%	**11.20%**
Average	7.53%	11.27%	13.32%	13.80%	14.80%	**12.14%**

Notes: Column 6 = [(Sum of Columns 1 through 5) / 5]

Sources: Column 1 = Average Historical DPS, EPS, & BVPS Growth Rates from Schedule 4.
Column 2 = Schedule 6.
Column 3 = I/B/E/S Inc.'s Institutional Brokers Estimate System (Utility Sector Five Year Growth Rate-Company Data by Industry), September 14, 2000.
Column 4 = Standard & Poor's Corporation's Earnings Guide, September, 2000.
Column 5 = The Value Line Investment Survey: Ratings and Reports, July 7, 2000.

Average High/Low Stock Price for June, 2000 through September, 2000 for the Five Telecommunications Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	June 2000		July 2000		August 2000		September 2000		
Company Name	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	Average High/Low Stock Price
ALLTEL Corporation	$68.812	$61.562	$65.000	$59.000	$64.750	$49.312	$54.937	$47.750	**$58.890**
AT&T Corporation	$37.750	$31.250	$35.500	$30.500	$32.937	$29.625	$32.875	$27.250	**$32.211**
BellSouth Corporation	$48.500	$41.625	$44.250	$38.750	$40.375	$35.500	$41.000	$35.562	**$40.695**
Century Tel Inc.	$32.500	$26.500	$30.687	$27.937	$32.375	$27.875	$29.875	$25.250	**$29.125**
SBC Communications, Inc.	$50.312	$43.218	$46.812	$42.187	$44.750	$38.437	$50.187	$41.750	**$44.707**

Notes: Column 9 = [(Sum of Columns 1 through 8) / 8]

Sources: Wall Street City - http://www.tscn.com/wsc/

Discounted Cash Flow (DCF) Cost of Equity Estimates for the Five Telecommunications Companies

	(1)	(2)	(3)	(4)	(5)
Company Name	**Expected Dividend**	**Average High/Low Stock Price**	**Projected Dividend Yield**	**Average Growth Rate**	**Cost of Common Equity**
ALLTEL Corporation	$1.31	$58.890	2.22%	12.76%	14.98%
AT&T Corporation	$0.88	$32.211	2.73%	9.46%	12.19%
BellSouth Corporation	$0.78	$40.695	1.92%	11.08%	13.00%
Century Tel Inc.	$0.21	$29.125	0.70%	16.20%	16.90%
SBC Communications	$1.02	$44.707	2.27%	11.20%	13.47%
			1.97%	12.14%	14.11%

Notes: Column 3 = [Column 1 / Column 2]
Column 5 = [Column 3 + Column 4]

Sources: Column 1 = The Value Line Investment Survey: Ratings and Reports, July 7, 2000.
Average of 2000 estimated DPS and 2001 estimated DPS
Column 2 = Schedule 8.
Column 4 = Schedule 7.

Average Risk Premium Above the Yields of "A" Rated Moody's Public Utility Bonds for ALLTEL Corporation's Expected Returns on Common Equity

Mo/Year	ALLTEL's Expected ROE	"A" Rated Bonds Yields	ALLTEL's Risk Premium
Jan 1989	16.00%	10.08%	5.92%
Feb	16.00%	10.07%	5.93%
Mar	16.00%	10.23%	5.77%
Apr	14.50%	10.18%	4.32%
May	14.50%	9.99%	4.51%
Jun	14.50%	9.64%	4.86%
Jul	15.00%	9.50%	5.50%
Aug	15.00%	9.52%	5.48%
Sep	15.00%	9.58%	5.42%
Oct	15.00%	9.54%	5.46%
Nov	15.00%	9.51%	5.49%
Dec	15.00%	9.44%	5.56%
Jan 1990	15.50%	9.56%	5.94%
Feb	15.50%	9.76%	5.74%
Mar	15.50%	9.85%	5.65%
Apr	12.00%	9.92%	2.08%
May	12.00%	10.00%	2.00%
Jun	12.00%	9.80%	2.20%
Jul	19.00%	9.75%	9.25%
Aug	19.00%	9.92%	9.08%
Sep	19.00%	10.12%	8.88%
Oct	17.50%	10.05%	7.45%
Nov	17.50%	9.90%	7.60%
Dec	17.50%	9.73%	7.77%
Jan 1991	18.00%	9.71%	8.29%
Feb	18.00%	9.47%	8.53%
Mar	18.00%	9.55%	8.45%
Apr	18.50%	9.46%	9.04%
May	18.50%	9.44%	9.06%
Jun	18.50%	9.59%	8.91%
Jul	18.00%	9.55%	8.45%
Aug	18.00%	9.29%	8.71%
Sep	18.00%	9.19%	8.81%
Oct	18.00%	9.12%	8.88%
Nov	18.00%	9.05%	8.95%
Dec	18.00%	8.88%	9.12%
Jan 1992	17.50%	8.84%	8.66%
Feb	17.50%	8.93%	8.57%
Mar	17.50%	8.97%	8.53%
Apr	14.50%	8.93%	5.57%
May	14.50%	8.87%	5.63%
Jun	14.50%	8.78%	5.72%
Jul	17.50%	8.57%	8.93%
Aug	17.50%	8.44%	9.06%
Sep	17.50%	8.40%	9.10%
Oct	18.00%	8.54%	9.46%
Nov	18.00%	8.63%	9.37%
Dec	18.00%	8.43%	9.57%
Jan 1993	18.50%	8.27%	10.23%
Feb	18.50%	8.04%	10.46%
Mar	18.50%	7.90%	10.60%
Apr	18.50%	7.81%	10.69%
May	18.50%	7.86%	10.64%
Jun	18.50%	7.75%	10.75%
Jul	18.50%	7.54%	10.96%
Aug	18.50%	7.25%	11.25%
Sep	18.50%	7.04%	11.46%
Oct	18.00%	7.03%	10.97%
Nov	18.00%	7.30%	10.70%
Dec	18.00%	7.34%	10.66%
Jan 1994	19.50%	7.33%	12.17%
Feb	19.50%	7.42%	12.08%
Mar	19.50%	7.85%	11.65%
Apr	18.00%	8.22%	9.78%
May	18.00%	8.33%	9.67%
Jun	18.00%	8.31%	9.69%
Jul	18.00%	8.47%	9.53%
Aug	18.00%	8.41%	9.59%
Sep	18.00%	8.64%	9.36%
Oct	17.50%	8.86%	8.64%
Nov	17.50%	8.98%	8.52%
Dec	17.50%	8.76%	8.74%

Mo/Year	ALLTEL's Expected ROE	"A" Rated Bonds Yields	ALLTEL's Risk Premium
Jan 1995	18.50%	8.73%	9.77%
Feb	18.50%	8.52%	9.98%
Mar	18.50%	8.37%	10.13%
Apr	19.00%	8.27%	10.73%
May	19.00%	7.91%	11.09%
Jun	19.00%	7.60%	11.40%
Jul	18.50%	7.70%	10.80%
Aug	18.50%	7.83%	10.67%
Sep	18.50%	7.62%	10.88%
Oct	18.50%	7.46%	11.04%
Nov	18.50%	7.43%	11.07%
Dec	18.50%	7.23%	11.27%
Jan 1996	18.00%	7.22%	10.78%
Feb	18.00%	7.37%	10.63%
Mar	18.00%	7.73%	10.27%
Apr	17.50%	7.89%	9.61%
May	17.50%	7.98%	9.52%
Jun	17.50%	8.06%	9.44%
Jul	17.50%	8.02%	9.48%
Aug	17.50%	7.84%	9.66%
Sep	17.50%	8.01%	9.49%
Oct	17.50%	7.77%	9.73%
Nov	17.50%	7.49%	10.01%
Dec	17.50%	7.59%	9.91%
Jan 1997	18.00%	7.77%	10.23%
Feb	18.00%	7.64%	10.36%
Mar	18.00%	7.87%	10.13%
Apr	18.00%	8.03%	9.97%
May	18.00%	7.89%	10.11%
Jun	18.00%	7.72%	10.28%
Jul	17.50%	7.48%	10.02%
Aug	17.50%	7.51%	9.99%
Sep	17.50%	7.47%	10.03%
Oct	17.00%	7.35%	9.65%
Nov	17.00%	7.25%	9.75%
Dec	17.00%	7.16%	9.84%
Jan 1998	16.50%	7.04%	9.46%
Feb	16.50%	7.12%	9.38%
Mar	16.50%	7.16%	9.34%
Apr	17.50%	7.16%	10.34%
May	17.50%	7.16%	10.34%
Jun	17.50%	7.03%	10.47%
Jul	18.00%	7.03%	10.97%
Aug	18.00%	7.00%	11.00%
Sep	18.00%	6.93%	11.07%
Oct	18.00%	6.96%	11.04%
Nov	18.00%	7.03%	10.97%
Dec	18.00%	6.91%	11.09%
Jan 1999	20.50%	6.97%	13.53%
Feb	20.50%	7.09%	13.41%
Mar	20.50%	7.26%	13.24%
Apr	19.50%	7.22%	12.28%
May	19.50%	7.47%	12.03%
June	19.50%	7.74%	11.76%
July	19.00%	7.71%	11.29%
Aug	19.00%	7.91%	11.09%
Sept	19.00%	7.93%	11.07%
Oct	18.50%	8.06%	10.44%
Nov	18.50%	7.94%	10.56%
Dec	18.50%	8.14%	10.36%
Jan 2000	20.50%	8.35%	12.15%
Feb	20.50%	8.25%	12.25%
March	20.50%	8.28%	12.22%
Apr	18.50%	8.29%	10.21%
May	18.50%	8.70%	9.80%
June	18.50%	8.36%	10.14%
July	18.50%	8.25%	10.25%
Aug	18.50%	8.13%	10.37%

Summary Information (January 1989 - August 2000)

Average Risk Premium: 9.39%

High Risk Premium: 13.53%

Low Risk Premium: 2.00%

Sources: The Value Line Investment Survey: Ratings & Reports for each quarter.
Moody's Bond Record: January 1991 and January 1996;
Mergent Bond Record September 2000.

Small Telephone Company Earnings Investigation

Average Risk Premium Above the Yields of "Aa" Rated Moody's Public Utility Bonds for AT&T Corporation's Expected Returns on Common Equity

Mo/Year	AT&T's Expected ROE	"Aa" Rated Bonds Yields	AT&T's Risk Premium
Jan 1989	21.00%	9.89%	11.11%
Feb	21.00%	9.93%	11.07%
Mar	21.00%	10.05%	10.95%
Apr	21.00%	10.02%	10.98%
May	21.00%	9.79%	11.21%
Jun	21.00%	9.37%	11.63%
Jul	21.50%	9.23%	12.27%
Aug	21.50%	9.27%	12.23%
Sep	21.50%	9.35%	12.15%
Oct	21.50%	9.28%	12.22%
Nov	21.50%	9.25%	12.25%
Dec	21.50%	9.26%	12.24%
Jan 1990	21.50%	9.39%	12.11%
Feb	21.50%	9.57%	11.93%
Mar	21.50%	9.60%	11.90%
Apr	21.50%	9.81%	11.69%
May	21.50%	9.83%	11.67%
Jun	21.50%	9.60%	11.90%
Jul	19.00%	9.61%	9.39%
Aug	18.00%	9.78%	8.22%
Sep	18.00%	9.87%	8.13%
Oct	18.50%	9.77%	8.73%
Nov	18.50%	9.59%	8.91%
Dec	18.50%	9.42%	9.08%
Jan 1991	18.50%	9.39%	9.11%
Feb	18.50%	9.16%	9.34%
Mar	18.50%	9.23%	9.27%
Apr	18.00%	9.14%	8.86%
May	18.00%	9.16%	8.84%
Jun	18.00%	9.28%	8.72%
Jul	17.50%	9.26%	8.24%
Aug	17.50%	9.06%	8.44%
Sep	17.50%	8.93%	8.57%
Oct	18.50%	8.92%	9.58%
Nov	18.50%	8.87%	9.63%
Dec	18.50%	8.71%	9.79%
Jan 1992	20.00%	8.63%	11.37%
Feb	20.00%	8.76%	11.24%
Mar	20.00%	8.82%	11.18%
Apr	24.00%	8.76%	15.24%
May	24.00%	8.69%	15.31%
Jun	24.00%	8.63%	15.37%
Jul	24.00%	8.45%	15.55%
Aug	24.00%	8.30%	15.70%
Sep	24.00%	8.28%	15.72%
Oct	21.00%	8.42%	12.58%
Nov	21.00%	8.51%	12.49%
Dec	21.00%	8.32%	12.68%
Jan 1993	20.50%	8.14%	12.36%
Feb	20.50%	7.92%	12.58%
Mar	20.50%	7.76%	12.74%
Apr	20.50%	7.64%	12.86%
May	20.50%	7.64%	12.86%
Jun	20.50%	7.54%	12.96%
Jul	29.50%	7.38%	22.12%
Aug	29.50%	7.07%	22.43%
Sep	29.50%	6.89%	22.61%
Oct	28.50%	6.89%	21.61%
Nov	28.50%	7.17%	21.33%
Dec	28.50%	7.18%	21.32%
Jan 1994	26.00%	7.18%	18.82%
Feb	26.00%	7.34%	18.66%
Mar	26.00%	7.74%	18.26%
Apr	28.00%	8.12%	19.88%
May	28.00%	8.24%	19.76%
Jun	28.00%	8.21%	19.79%
Jul	28.00%	8.38%	19.62%
Aug	28.00%	8.32%	19.68%
Sep	28.00%	8.56%	19.44%
Oct	30.00%	8.78%	21.22%
Nov	30.00%	8.90%	21.10%
Dec	30.00%	8.69%	21.31%

Mo/Year	AT&T's Expected ROE	"Aa" Rated Bonds Yields	AT&T's Risk Premium
Jan 1995	28.50%	8.66%	19.84%
Feb	28.50%	8.45%	20.05%
Mar	28.50%	8.29%	20.21%
Apr	25.50%	8.17%	17.33%
May	25.50%	7.80%	17.70%
Jun	25.50%	7.49%	18.01%
Jul	25.50%	7.60%	17.90%
Aug	25.50%	7.71%	17.79%
Sep	25.50%	7.48%	18.02%
Oct	31.00%	7.30%	23.70%
Nov	31.00%	7.22%	23.78%
Dec	31.00%	7.03%	23.97%
Jan 1996	30.50%	7.02%	23.48%
Feb	30.50%	7.20%	23.30%
Mar	30.50%	7.55%	22.95%
Apr	29.50%	7.70%	21.80%
May	29.50%	7.79%	21.71%
Jun	29.50%	7.87%	21.63%
Jul	28.00%	7.83%	20.17%
Aug	28.00%	7.66%	20.34%
Sep	28.00%	7.84%	20.16%
Oct	23.50%	7.60%	15.90%
Nov	23.50%	7.32%	16.18%
Dec	23.50%	7.44%	16.06%
Jan 1997	26.50%	7.68%	18.82%
Feb	26.50%	7.60%	18.90%
Mar	26.50%	7.84%	18.66%
Apr	19.50%	8.00%	11.50%
May	19.50%	7.85%	11.65%
Jun	19.50%	7.68%	11.82%
Jul	19.50%	7.43%	12.07%
Aug	19.50%	7.46%	12.04%
Sep	19.50%	7.43%	12.07%
Oct	19.00%	7.28%	11.72%
Nov	19.00%	7.15%	11.85%
Dec	19.00%	7.07%	11.93%
Jan 1998	20.00%	6.94%	13.06%
Feb	20.00%	6.99%	13.01%
Mar	20.00%	7.04%	12.96%
Apr	16.00%	7.02%	8.98%
May	16.00%	7.02%	8.98%
Jun	16.00%	6.91%	9.09%
Jul	16.50%	6.91%	9.59%
Aug	16.50%	6.87%	9.63%
Sep	16.50%	6.78%	9.72%
Oct	14.00%	6.79%	7.21%
Nov	14.00%	6.89%	7.11%
Dec	14.00%	6.78%	7.22%
Jan 1999	23.50%	6.82%	16.68%
Feb	23.50%	6.94%	16.56%
Mar	23.50%	7.11%	16.39%
Apr	22.00%	7.11%	14.89%
May	22.00%	7.38%	14.62%
June	22.00%	7.67%	14.33%
July	8.50%	7.62%	0.88%
Aug	8.50%	7.82%	0.68%
Sept	8.50%	7.82%	0.68%
Oct	8.50%	7.96%	0.54%
Nov	8.50%	7.82%	0.68%
Dec	8.50%	8.00%	0.50%
Jan 2000	8.00%	8.17%	-0.17%
Feb	8.00%	7.99%	0.01%
March	8.00%	7.99%	0.01%
Apr	8.00%	8.00%	0.00%
May	8.00%	8.44%	-0.44%
June	8.00%	8.10%	-0.10%
July	6.50%	8.10%	-1.60%
Aug	6.50%	7.95%	-1.45%

Sources: The Value Line Investment Survey: Ratings & Reports for each quarter.
Moody's Bond Record: January 1991 and January 1996;
Mergent Bond Record September 2000.

<u>Summary Information (January 1989 - August 2000)</u>

Average Risk Premium:	13.14%
High Risk Premium:	23.97%
Low Risk Premium:	-1.60%

Average Risk Premium Above the Yields of "Aa" Rated Moody's Public Utility Bonds for BellSouth Corporation's Expected Returns on Common Equity

Mo/Year	BellSouth's Expected ROE	"Aa" Rated Bonds Yields	BellSouth's Risk Premium
Jan 1989	13.50%	9.89%	3.61%
Feb	13.50%	9.93%	3.57%
Mar	13.50%	10.05%	3.45%
Apr	13.50%	10.02%	3.48%
May	13.50%	9.79%	3.71%
Jun	13.50%	9.37%	4.13%
Jul	13.50%	9.23%	4.27%
Aug	13.50%	9.27%	4.23%
Sep	13.50%	9.35%	4.15%
Oct	13.00%	9.28%	3.72%
Nov	13.00%	9.25%	3.75%
Dec	13.00%	9.26%	3.74%
Jan 1990	13.00%	9.39%	3.61%
Feb	13.00%	9.57%	3.43%
Mar	13.00%	9.60%	3.40%
Apr	13.50%	9.81%	3.69%
May	13.50%	9.83%	3.67%
Jun	13.50%	9.60%	3.90%
Jul	14.00%	9.61%	4.39%
Aug	14.00%	9.78%	4.22%
Sep	14.00%	9.87%	4.13%
Oct	13.50%	9.77%	3.73%
Nov	13.50%	9.59%	3.91%
Dec	13.50%	9.42%	4.08%
Jan 1991	14.00%	9.39%	4.61%
Feb	14.00%	9.16%	4.84%
Mar	14.00%	9.23%	4.77%
Apr	13.50%	9.14%	4.36%
May	13.50%	9.16%	4.34%
Jun	13.50%	9.28%	4.22%
Jul	13.50%	9.26%	4.24%
Aug	13.00%	9.06%	3.94%
Sep	13.50%	8.93%	4.57%
Oct	12.00%	8.92%	3.08%
Nov	12.00%	8.87%	3.13%
Dec	12.00%	8.71%	3.29%
Jan 1992	12.50%	8.63%	3.87%
Feb	12.50%	8.76%	3.74%
Mar	12.50%	8.82%	3.68%
Apr	12.50%	8.76%	3.74%
May	12.50%	8.69%	3.81%
Jun	12.50%	8.63%	3.87%
Jul	12.50%	8.45%	4.05%
Aug	12.50%	8.30%	4.20%
Sep	12.50%	8.28%	4.22%
Oct	12.00%	8.42%	3.58%
Nov	12.00%	8.51%	3.49%
Dec	12.00%	8.32%	3.68%
Jan 1993	12.50%	8.14%	4.36%
Feb	12.50%	7.92%	4.58%
Mar	12.50%	7.76%	4.74%
Apr	12.50%	7.64%	4.86%
May	12.50%	7.64%	4.86%
Jun	12.50%	7.54%	4.96%
Jul	12.00%	7.38%	4.62%
Aug	12.00%	7.07%	4.93%
Sep	12.00%	6.89%	5.11%
Oct	12.00%	6.89%	5.11%
Nov	12.00%	7.17%	4.83%
Dec	12.00%	7.18%	4.82%
Jan 1994	13.50%	7.18%	6.32%
Feb	13.50%	7.34%	6.16%
Mar	13.50%	7.74%	5.76%
Apr	15.00%	8.12%	6.88%
May	15.00%	8.24%	6.76%
Jun	15.00%	8.21%	6.79%
Jul	15.00%	8.38%	6.62%
Aug	15.00%	8.32%	6.68%
Sep	15.00%	8.56%	6.44%
Oct	14.50%	8.78%	5.72%
Nov	14.50%	8.90%	5.60%
Dec	14.50%	8.69%	5.81%

Mo/Year	BellSouth's Expected ROE	"Aa" Rated Bonds Yields	BellSouth's Risk Premium
Jan 1995	15.00%	8.66%	6.34%
Feb	15.00%	8.45%	6.55%
Mar	15.00%	8.29%	6.71%
Apr	14.50%	8.17%	6.33%
May	14.50%	7.80%	6.70%
Jun	14.50%	7.49%	7.01%
Jul	17.50%	7.60%	9.90%
Aug	17.50%	7.71%	9.79%
Sep	17.50%	7.48%	10.02%
Oct	18.00%	7.30%	10.70%
Nov	18.00%	7.22%	10.78%
Dec	18.00%	7.03%	10.97%
Jan 1996	19.00%	7.02%	11.98%
Feb	19.00%	7.20%	11.80%
Mar	19.00%	7.55%	11.45%
Apr	18.50%	7.70%	10.80%
May	18.50%	7.79%	10.71%
Jun	18.50%	7.87%	10.63%
Jul	19.00%	7.83%	11.17%
Aug	19.00%	7.66%	11.34%
Sep	19.00%	7.84%	11.16%
Oct	19.00%	7.60%	11.40%
Nov	19.00%	7.32%	11.68%
Dec	19.00%	7.44%	11.56%
Jan 1997	19.00%	7.68%	11.32%
Feb	19.00%	7.60%	11.40%
Mar	19.00%	7.84%	11.16%
Apr	19.00%	8.00%	11.00%
May	19.00%	7.85%	11.15%
Jun	19.00%	7.68%	11.32%
Jul	19.00%	7.43%	11.57%
Aug	19.00%	7.46%	11.54%
Sep	19.00%	7.43%	11.57%
Oct	19.00%	7.28%	11.72%
Nov	19.00%	7.15%	11.85%
Dec	19.00%	7.07%	11.93%
Jan 1998	19.00%	6.94%	12.06%
Feb	19.00%	6.99%	12.01%
Mar	19.00%	7.04%	11.96%
Apr	19.50%	7.02%	12.48%
May	19.50%	7.02%	12.48%
Jun	19.50%	6.91%	12.59%
Jul	19.00%	6.91%	12.09%
Aug	19.00%	6.87%	12.13%
Sep	19.00%	6.78%	12.22%
Oct	20.00%	6.79%	13.21%
Nov	20.00%	6.89%	13.11%
Dec	20.00%	6.78%	13.22%
Jan 1999	22.50%	6.82%	15.68%
Feb	22.50%	6.94%	15.56%
Mar	22.50%	7.11%	15.39%
Apr	23.50%	7.11%	16.39%
May	23.50%	7.38%	16.12%
June	23.50%	7.67%	15.83%
July	23.50%	7.62%	15.88%
Aug	23.50%	7.82%	15.68%
Sept	23.50%	7.82%	15.68%
Oct	24.50%	7.96%	16.54%
Nov	24.50%	7.82%	16.68%
Dec	24.50%	8.00%	16.50%
Jan 2000	26.00%	8.17%	17.83%
Feb	26.00%	7.99%	18.01%
March	26.00%	7.99%	18.01%
Apr	26.00%	8.00%	18.00%
May	26.00%	8.44%	17.56%
June	26.00%	8.10%	17.90%
July	23.00%	8.10%	14.90%
Aug	23.00%	7.95%	15.05%

Summary Information (January 1989 - August 2000)

Average Risk Premium: 8.39%

High Risk Premium: 18.01%

Low Risk Premium: 3.08%

Sources: The Value Line Investment Survey: Ratings & Reports for each quarter.
Moody's Bond Record: January 1991 and January 1996;
Mergent Bond Record September 2000.

Average Risk Premium Above the Yields of "Baa" Rated Moody's Public Utility Bonds for Century Tel Inc. Corporation's Expected Returns on Common Equity

Mo/Year	Century Tel's Expected ROE	"Baa" Rated Bonds Yields	Century Tel's Risk Premium
Jan 1989	12.50%	10.38%	2.12%
Feb	12.50%	10.38%	2.12%
Mar	12.50%	10.50%	2.00%
Apr	12.50%	10.49%	2.01%
May	15.50%	10.29%	5.21%
Jun	15.50%	9.80%	5.70%
Jul	9.50%	9.64%	-0.14%
Aug	9.50%	9.64%	-0.14%
Sep	9.50%	9.70%	-0.20%
Oct	9.50%	9.64%	-0.14%
Nov	9.50%	9.64%	-0.14%
Dec	9.50%	9.60%	-0.10%
Jan 1990	9.00%	9.74%	-0.74%
Feb	9.00%	9.96%	-0.96%
Mar	9.00%	10.06%	-1.06%
Apr	8.00%	10.13%	-2.13%
May	8.00%	10.16%	-2.16%
Jun	8.00%	9.96%	-1.96%
Jul	10.00%	9.92%	0.08%
Aug	10.00%	10.12%	-0.12%
Sep	10.00%	10.32%	-0.32%
Oct	10.00%	10.28%	-0.28%
Nov	10.00%	10.12%	-0.12%
Dec	10.00%	9.96%	0.04%
Jan 1991	10.00%	9.96%	0.04%
Feb	10.00%	9.68%	0.32%
Mar	10.00%	9.74%	0.26%
Apr	11.00%	9.64%	1.36%
May	11.00%	9.64%	1.36%
Jun	11.00%	9.79%	1.21%
Jul	10.50%	9.69%	0.81%
Aug	10.50%	9.47%	1.03%
Sep	10.50%	9.34%	1.16%
Oct	10.50%	9.32%	1.18%
Nov	10.50%	9.28%	1.22%
Dec	10.50%	9.07%	1.43%
Jan 1992	12.50%	8.98%	3.52%
Feb	12.50%	9.09%	3.41%
Mar	12.50%	9.16%	3.34%
Apr	13.00%	9.11%	3.89%
May	13.00%	9.01%	3.99%
Jun	13.00%	8.90%	4.10%
Jul	13.50%	8.69%	4.81%
Aug	13.50%	8.58%	4.92%
Sep	13.50%	8.54%	4.96%
Oct	14.50%	8.46%	6.04%
Nov	14.50%	8.66%	5.84%
Dec	14.50%	8.69%	5.81%
Jan 1993	15.50%	8.57%	6.93%
Feb	15.50%	8.31%	7.19%
Mar	15.50%	8.10%	7.40%
Apr	16.00%	8.11%	7.89%
May	16.00%	8.18%	7.82%
Jun	16.00%	8.05%	7.95%
Jul	16.50%	7.94%	8.56%
Aug	16.50%	7.59%	8.91%
Sep	16.50%	7.35%	9.15%
Oct	14.50%	7.27%	7.23%
Nov	14.50%	7.69%	6.81%
Dec	14.50%	7.73%	6.77%
Jan 1994	15.00%	7.66%	7.34%
Feb	15.00%	7.76%	7.24%
Mar	15.00%	8.11%	6.89%
Apr	12.50%	8.47%	4.03%
May	12.50%	8.61%	3.89%
Jun	12.50%	8.64%	3.86%
Jul	14.00%	8.80%	5.20%
Aug	14.00%	8.74%	5.26%
Sep	14.00%	8.98%	5.02%
Oct	13.50%	9.24%	4.26%
Nov	13.50%	9.35%	4.15%
Dec	13.50%	9.16%	4.34%

Mo/Year	Century Tel's Expected ROE	"Baa" Rated Bonds Yields	Century Tel's Risk Premium
Jan 1995	15.50%	9.15%	6.35%
Feb	15.50%	8.93%	6.57%
Mar	15.50%	8.78%	6.72%
Apr	14.50%	8.67%	5.83%
May	14.50%	8.30%	6.20%
Jun	14.50%	8.01%	6.49%
Jul	15.00%	8.11%	6.89%
Aug	15.00%	8.24%	6.76%
Sep	15.00%	7.98%	7.02%
Oct	14.50%	7.82%	6.68%
Nov	14.50%	7.81%	6.69%
Dec	14.50%	7.63%	6.87%
Jan 1996	15.50%	7.64%	7.86%
Feb	15.50%	7.78%	7.72%
Mar	15.50%	8.15%	7.35%
Apr	13.00%	8.32%	4.68%
May	13.00%	8.45%	4.55%
Jun	13.00%	8.51%	4.49%
Jul	13.50%	8.44%	5.06%
Aug	13.50%	8.25%	5.25%
Sep	13.50%	8.41%	5.09%
Oct	13.50%	8.15%	5.35%
Nov	13.50%	7.87%	5.63%
Dec	13.50%	7.98%	5.52%
Jan 1997	13.50%	8.18%	5.32%
Feb	13.50%	8.02%	5.48%
Mar	13.50%	8.26%	5.24%
Apr	13.00%	8.42%	4.58%
May	13.00%	8.28%	4.72%
Jun	13.00%	8.12%	4.88%
Jul	13.00%	7.87%	5.13%
Aug	13.00%	7.92%	5.08%
Sep	13.00%	7.79%	5.21%
Oct	13.00%	7.67%	5.33%
Nov	13.00%	7.49%	5.51%
Dec	13.00%	7.41%	5.59%
Jan 1998	13.50%	7.28%	6.22%
Feb	13.50%	7.36%	6.14%
Mar	13.50%	7.37%	6.13%
Apr	13.00%	7.37%	5.63%
May	13.00%	7.34%	5.66%
Jun	13.00%	7.21%	5.79%
Jul	13.00%	7.23%	5.77%
Aug	13.00%	7.20%	5.80%
Sep	13.00%	7.13%	5.87%
Oct	12.50%	7.13%	5.37%
Nov	12.50%	7.31%	5.19%
Dec	12.50%	7.24%	5.26%
Jan 1999	13.50%	7.30%	6.20%
Feb	13.50%	7.41%	6.09%
Mar	13.50%	7.55%	5.95%
Apr	13.50%	7.51%	5.99%
May	13.50%	7.74%	5.76%
June	13.50%	8.03%	5.47%
July	14.00%	7.97%	6.03%
Aug	14.00%	8.16%	5.84%
Sept	14.00%	8.19%	5.81%
Oct	13.50%	8.32%	5.18%
Nov	13.50%	8.12%	5.38%
Dec	13.50%	8.28%	5.22%
Jan 2000	13.50%	8.40%	5.10%
Feb	13.50%	8.33%	5.17%
March	13.50%	8.40%	5.10%
Apr	12.50%	8.40%	4.10%
May	12.50%	8.86%	3.64%
June	12.50%	8.47%	4.03%
July	12.50%	8.33%	4.17%
Aug	12.50%	8.25%	4.25%

<u>Summary Information (January 1989 - August 2000)</u>

Average Risk Premium: 4.37%

High Risk Premium: 9.15%

Low Risk Premium: -2.16%

Sources: The Value Line Investment Survey: Ratings & Reports for each quarter.
Moody's Bond Record: January 1991 and January 1996;
Mergent Bond Record September 2000.

Average Risk Premium Above the Yields of "Aa" Rated Moody's Public Utility Bonds for SBC Communications, Inc.'s Expected Returns on Common Equity

Mo/Year	SBC's Expected ROE	"Aa" Rated Bonds Yields	SBC's Risk Premium
Jan 1989	12.50%	9.89%	2.61%
Feb	12.50%	9.93%	2.57%
Mar	12.50%	10.05%	2.45%
Apr	12.50%	10.02%	2.48%
May	12.50%	9.79%	2.71%
Jun	12.50%	9.37%	3.13%
Jul	13.00%	9.23%	3.77%
Aug	13.00%	9.27%	3.73%
Sep	13.00%	9.35%	3.65%
Oct	13.00%	9.28%	3.72%
Nov	13.00%	9.25%	3.75%
Dec	13.00%	9.26%	3.74%
Jan 1990	13.50%	9.39%	4.11%
Feb	13.50%	9.57%	3.93%
Mar	13.50%	9.60%	3.90%
Apr	13.54%	9.81%	3.73%
May	13.50%	9.83%	3.67%
Jun	13.50%	9.60%	3.90%
Jul	14.50%	9.61%	4.89%
Aug	14.50%	9.78%	4.72%
Sep	14.50%	9.87%	4.63%
Oct	12.50%	9.77%	2.73%
Nov	12.50%	9.59%	2.91%
Dec	12.50%	9.42%	3.08%
Jan 1991	13.00%	9.39%	3.61%
Feb	13.00%	9.16%	3.84%
Mar	13.00%	9.23%	3.77%
Apr	13.50%	9.14%	4.36%
May	13.50%	9.16%	4.34%
Jun	13.50%	9.28%	4.22%
Jul	13.00%	9.26%	3.74%
Aug	13.00%	9.06%	3.94%
Sep	13.00%	8.93%	4.07%
Oct	13.00%	8.92%	4.08%
Nov	13.00%	8.87%	4.13%
Dec	13.00%	8.71%	4.29%
Jan 1992	13.50%	8.63%	4.87%
Feb	13.50%	8.76%	4.74%
Mar	13.50%	8.82%	4.68%
Apr	13.50%	8.76%	4.74%
May	13.50%	8.69%	4.81%
Jun	13.50%	8.63%	4.87%
Jul	13.50%	8.45%	5.05%
Aug	13.50%	8.30%	5.20%
Sep	13.50%	8.28%	5.22%
Oct	14.00%	8.42%	5.58%
Nov	14.00%	8.51%	5.49%
Dec	14.00%	8.32%	5.68%
Jan 1993	14.50%	8.14%	6.36%
Feb	14.50%	7.92%	6.58%
Mar	14.50%	7.76%	6.74%
Apr	18.50%	7.64%	10.86%
May	18.50%	7.64%	10.86%
Jun	18.50%	7.54%	10.96%
Jul	18.50%	7.38%	11.12%
Aug	18.50%	7.07%	11.43%
Sep	18.50%	6.89%	11.61%
Oct	18.50%	6.89%	11.61%
Nov	18.50%	7.17%	11.33%
Dec	18.50%	7.18%	11.32%
Jan 1994	19.50%	7.18%	12.32%
Feb	19.50%	7.34%	12.16%
Mar	19.50%	7.74%	11.76%
Apr	19.50%	8.12%	11.38%
May	19.50%	8.24%	11.26%
Jun	19.50%	8.21%	11.29%
Jul	19.00%	8.38%	10.62%
Aug	19.00%	8.32%	10.68%
Sep	19.00%	8.56%	10.44%
Oct	20.00%	8.78%	11.22%
Nov	20.00%	8.90%	11.10%
Dec	20.00%	8.69%	11.31%

Mo/Year	SBC's Expected ROE	"Aa" Rated Bonds Yields	SBC's Risk Premium
Jan 1995	20.00%	8.66%	11.34%
Feb	20.00%	8.45%	11.55%
Mar	20.00%	8.29%	11.71%
Apr	20.00%	8.17%	11.83%
May	20.00%	7.80%	12.20%
Jun	20.00%	7.49%	12.51%
Jul	20.00%	7.60%	12.40%
Aug	20.00%	7.71%	12.29%
Sep	20.00%	7.48%	12.52%
Oct	29.50%	7.30%	22.20%
Nov	29.50%	7.22%	22.28%
Dec	29.50%	7.03%	22.47%
Jan 1996	28.00%	7.02%	20.98%
Feb	28.00%	7.20%	20.80%
Mar	28.00%	7.55%	20.45%
Apr	29.00%	7.70%	21.30%
May	29.00%	7.79%	21.21%
Jun	29.00%	7.87%	21.13%
Jul	29.00%	7.83%	21.17%
Aug	29.00%	7.66%	21.34%
Sep	29.00%	7.84%	21.16%
Oct	29.00%	7.60%	21.40%
Nov	29.00%	7.32%	21.68%
Dec	29.00%	7.44%	21.56%
Jan 1997	27.00%	7.68%	19.32%
Feb	27.00%	7.60%	19.40%
Mar	27.00%	7.84%	19.16%
Apr	35.50%	8.00%	27.50%
May	35.50%	7.85%	27.65%
Jun	35.50%	7.68%	27.82%
Jul	30.00%	7.43%	22.57%
Aug	30.00%	7.46%	22.54%
Sep	30.00%	7.43%	22.57%
Oct	36.50%	7.28%	29.22%
Nov	36.50%	7.15%	29.35%
Dec	36.50%	7.07%	29.43%
Jan 1998	34.00%	6.94%	27.06%
Feb	34.00%	6.99%	27.01%
Mar	34.00%	7.04%	26.96%
Apr	31.50%	7.02%	24.48%
May	31.50%	7.02%	24.48%
Jun	31.50%	6.91%	24.59%
Jul	31.50%	6.91%	24.59%
Aug	31.50%	6.87%	24.63%
Sep	31.50%	6.78%	24.72%
Oct	32.00%	6.79%	25.21%
Nov	32.00%	6.89%	25.11%
Dec	32.00%	6.78%	25.22%
Jan 1999	29.50%	6.82%	22.68%
Feb	29.50%	6.94%	22.56%
Mar	29.50%	7.11%	22.39%
Apr	30.00%	7.11%	22.89%
May	30.00%	7.38%	22.62%
June	30.00%	7.67%	22.33%
July	30.00%	7.62%	22.38%
Aug	30.00%	7.82%	22.18%
Sept	30.00%	7.82%	22.18%
Oct	30.00%	7.96%	22.04%
Nov	30.00%	7.82%	22.18%
Dec	30.00%	8.00%	22.00%
Jan 2000	25.00%	8.17%	16.83%
Feb	25.00%	7.99%	17.01%
March	25.00%	7.99%	17.01%
Apr	25.50%	8.00%	17.50%
May	25.50%	8.44%	17.06%
June	25.50%	8.10%	17.40%
July	25.50%	8.10%	17.40%
Aug	25.50%	7.95%	17.55%

Summary Information (January 1989 - August 2000)

Average Risk Premium:	13.47%
High Risk Premium:	29.43%
Low Risk Premium:	2.45%

Sources: The Value Line Investment Survey: Ratings & Reports for each quarter.
Moody's Bond Record: January 1991 and January 1996;
Mergent Bond Record September 2000.

Risk Premium Cost of Equity Estimates
for the Five Telecommunications Companies

Company Name	(1) Bond Rating	(2) Appropriate Yield	(3) Equity Premium	(4) Cost of Common Equity
ALLTEL Corporation	A	8.13%	9.39%	17.52%
AT&T Corporation	AA-	7.95%	13.14%	21.09%
BellSouth Corporation	AA-	7.95%	8.39%	16.34%
Century Tel Inc.	BBB+	8.25%	4.37%	12.62%
SBC Communications, Inc.	AA-	7.95%	13.47%	21.42%
Average				17.80%

NOTES:

Column 1 = The bond rating is as reported in Standard & Poor's Utilities & Perspectives, October 16, 2000 (p. 14).

Column 2 = The appropriate yield is equal to the rate quoted in Mergent Bond Record, September 2000 (p. 49) for newly issued 30-year Public Utility Bonds given the bond rating for the company.

Column 3 = The equity premium represents the average positive difference between the Company's expected return on common equity as reported in The Value Line Investment Survey: Ratings & Report and the average yield on equally rated Moody's Public Utility Bonds and Mergent Bond Record from January 1989 through September 2000. See Schedules 10-1 through 10-5.

Column 4 = Column 2 + Column 3.

Capital Asset Pricing Model (CAPM) Cost of Equity Estimates for the Five Telecommunications Companies

Company Name	(1) Risk Free Rate	(2) Company's Beta	(3) Market Risk Premium	(4) Cost of Common Equity
ALLTEL Corporation	5.81%	0.75	7.80%	11.66%
AT&T Corporation	5.81%	0.95	7.80%	13.22%
BellSouth Corporation	5.81%	0.85	7.80%	12.44%
Century Tel Inc.	5.81%	0.95	7.80%	13.22%
SBC Communications Inc.	5.81%	0.85	7.80%	12.44%
Average		**0.87**		**12.59%**

NOTES:

Column 1 = The Risk Free Rate of Interest which is equal to the 30-year U. S. Treasury Rate as quoted in The Wall Street Journal, October 17, 2000.

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole as reported by The Value Line Investment Survey: Ratings & Reports, July 7, 2000.

Column 3 = The Market Risk Premium is the amount over the Risk Free Rate that is demanded by investors for holding a portfolio of equal risk to the market, and was reported by Ibbotson Associates, Inc. in Stocks, Bonds, Bills, and Inflation: 2000 Yearbook. See Table 2-1, Arithmetic Mean (large company stocks less long-term government bonds).

Column 4 = [Column 1 + (Column 2 * Column 3)].

Cost of Common Equity Summary

Method	Weighting of Method	Cost of Common Equity Estimate
DCF	75.00%	14.11%
Risk Premium	10.00%	17.80%
CAPM	15.00%	12.59%

Estimated Overall Cost of Common Equity for the Five Telecommunications Companies **14.25%**

Notes:

See Schedule 9 for DCF Estimated Cost of Common Equity.

See Schedule 11 for Risk Premium Estimated Cost of Common Equity.

See Schedule 12 for CAPM Estimated Cost of Common Equity.

Capital Asset Pricing Model (CAPM) Unlevered Beta Cost of Equity Estimates for the Five Telecommunications Companies

Company Name	(1) Risk Free Rate	(2) Company's Original Beta	(3) Company's Unlevered Beta	(4) Market Risk Premium	(5) Cost of Common Equity	(6) Unlevered Cost of Common Equity	(7) Adjusment for Leverage
ALLTEL Corporation	5.81%	0.75	0.49	7.80%	11.66%	9.65%	2.01%
AT&T Corporation	5.81%	0.95	0.82	7.80%	13.22%	12.20%	1.01%
BellSouth Corporation	5.81%	0.85	0.60	7.80%	12.44%	10.47%	1.97%
Century Tel Inc.	5.81%	0.95	0.55	7.80%	13.22%	10.08%	3.14%
SBC Communications Inc.	5.81%	0.85	0.59	7.80%	12.44%	10.41%	2.03%
Average		**0.87**	**0.61**		**12.59%**	**10.56%**	**2.03%**

NOTES:

Column 1 = The Risk Free Rate of Interest which is equal to the 30-year U. S. Treasury Rate as quoted in The Wall Street Journal, October 17, 2000.

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole as reported by The Value Line Investment Survey: Ratings & Reports, August 4, 2000.

Column 3 = B_L / [1+(1-T)D/E] Where B_L = levered beta; T = tax rate as reported by Value Line; and D/E = the debt to equity ratio according to Value Line information

Column 4 = The Market Risk Premium is the amount over the Risk Free Rate that is demanded by investors for holding a portfolio of equal risk to the market, and was reported by Ibbotson Associates, Inc. in Stocks, Bonds, Bills, and Inflation: 2000 Yearbook. See Table 2-1, Arithmetic Mean (large company stocks less long-term government bonds).

Column 5 = [Column 1 + (Column 2 * Column 4)].

Column 6 = [Column 1 + (Column 3 * Column 4)]

Column 7 = Column 5 - Column 6

Source: The Value Line Investment Survey: Ratings and Reports, July 7, 2000.

Oregon Farmers Mutual Telephone Company
Case No. TT-2001-328

Capital Asset Pricing Model (CAPM) Unlevered Beta Cost of Equity Estimates for the Eight Telecommunications Companies

Company Name	(1) Risk Free Rate	(2) Company's Original Beta	(3) Company's Unlevered Beta	(4) Market Risk Premium	(5) Cost of Common Equity	(6) Unlevered Cost of Common Equity	(7) Adjusment for Leverage
ALLTEL Corporation	6.16%	0.70	0.43	7.40%	11.34%	9.33%	2.01%
AT&T Corporation	6.16%	0.80	0.70	7.40%	12.08%	11.36%	0.72%
Aliant Communications, Inc.	6.16%	0.85	0.70	7.40%	12.45%	11.35%	1.10%
Ameritech Corporation	6.16%	0.80	0.59	7.40%	12.08%	10.51%	1.57%
Bell Atlantic Corporation	6.16%	0.85	0.59	7.40%	12.45%	10.56%	1.89%
BellSouth Corporation	6.16%	0.85	0.63	7.40%	12.45%	10.82%	1.63%
Frontier Corporation	6.16%	1.15	0.63	7.40%	14.67%	10.82%	3.85%
SBC Communications, Inc.	6.16%	0.80	0.49	7.40%	12.08%	9.79%	2.29%
Average		**0.85**	**0.60**		**12.45%**	**10.57%**	**1.88%**

NOTES:

Column 1 = The Risk Free Rate of Interest which is equal to the 30-year U. S. Treasury Rate as quoted in The Wall Street Journal, June 25, 1999.

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole as reported by The Value Line Investment Survey: Ratings & Reports, April 9, 1999.

Column 3 = B_L / [1+(1-T)D/E] Where B_L = levered beta; T = tax rate as reported by Value Line; and D/E = the debt to equity ratio according to Value Line information

Column 4 = The Market Risk Premium is the amount over the Risk Free Rate that is demanded by investors for holding a portfolio of equal risk to the market, and was reported by Ibbotson Associates, Inc. in Stocks, Bonds, Bills, and Inflation: 2000 Yearbook. See Table 2-1, Arithmetic Mean (large company stocks less long-term government bonds).

Column 5 = [Column 1 + (Column 2 * Column 4)].

Column 6 = [Column 1 + (Column 3 * Column 4)]

Column 7 = Column 5 - Column 6

Source: The Value Line Investment Survey: Ratings & Reports, April 9, 1999

Schedule 15

Capital Asset Pricing Model (CAPM) Unlevered Beta Cost of Equity Estimates for the Eleven Telecommunications Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Company Name	Risk Free Rate	Company's Original Beta	Company's Unlevered Beta	Market Risk Premium	Cost of Common Equity	Unlevered Cost of Common Equity	Adjusment for Leverage
ALLTEL Corporation	6.87%	0.90	0.59	7.30%	13.44%	11.16%	2.28%
Ameritech Corporation	6.87%	0.90	0.66	7.30%	13.44%	11.67%	1.77%
Bell Atlantic Corporation	6.87%	0.90	0.59	7.30%	13.44%	11.20%	2.24%
BellSouth Corporation	6.87%	0.90	0.65	7.30%	13.44%	11.60%	1.84%
Century Telephone Enterprises, Inc.	6.87%	1.00	0.72	7.30%	14.17%	12.10%	2.07%
Cincinnati Bell, Inc.	6.87%	0.90	0.70	7.30%	13.44%	11.96%	1.48%
GTE Corporation	6.87%	0.90	0.38	7.30%	13.44%	9.68%	3.76%
NYNEX Corporation	6.87%	0.85	0.45	7.30%	13.08%	10.16%	2.91%
SBC Communications, Inc.	6.87%	0.95	0.63	7.30%	13.81%	11.44%	2.37%
Sprint Corporation	6.87%	1.10	0.90	7.30%	14.90%	13.46%	1.44%
Telephone and Data Systems, Inc.	6.87%	0.85	0.65	7.30%	13.08%	11.64%	1.44%
Average		**0.92**	**0.63**		**13.61%**	**11.46%**	**2.15%**

NOTES:

Column 1 = The Risk Free Rate of Interest which is equal to the 30-year U. S. Treasury Rate as quoted in Salomon Brothers, Inc.'s Bond Market Roundup:. Abstract, on May 16, 1997.

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole as reported by The Value Line Investment Survey: Ratings & Reports, April 11, 1997.

Column 3 = B_L / [1+(1-T)D/E] Where B_L = levered beta; T = tax rate as reported by Value Line; and D/E = the debt to equity ratio according to Value Line information

Column 4 = The Market Risk Premium is the amount over the Risk Free Rate that is demanded by investors for holding a portfolio of equal risk to the market, and was reported by Ibbotson Associates, Inc. in Stocks, Bonds, Bills, and Inflation: 1997 Yearbook. See Table 2-1, Arithmetic Mean (large company stocks less long-term government bonds).

Column 5 = [Column 1 + (Column 2 * Column 4)].

Column 6 = [Column 1 + (Column 3 * Column 4)]

Column 7 = Column 5 - Column 6

Source: The Value Line Investment Survey: Ratings & Reports; April 11, 1997.

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Unlevered Adjustment to Return on Equity Averages for the 2000, 1999 and 1997 Small Telephone Studies

	(1)	(2)		(3)
Year	**Average Levered ROE**	**Unlevered Adjustment**		**Unlevered ROE**
2000	14.25%	2.03%		12.22%
1999	12.92%	1.88%		11.04%
1997	12.78%	2.15%		10.63%
			Average	**11.30%**

NOTES:

Column 1 = Final estimated cost of common equity from the small telephone studies

Column 2 = Column 7 from schedules 14, 15 and 16

Column 3 = Column 1 - Column 2

Source: 2000, 1999 and 1997 small telephone studies

Average High ROE's for the 2000, 1999, and 1997 Small Telephone Studies

Year		High Levered ROE's
2000		15.92%
1999		14.02%
1997		15.93%
	Average	**15.29%**

Source: 2000, 1999 and 1997 small telephone studies

SCHEDULE 19

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

NP

SCHEDULE 20

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

NP