Cincinnati Bell Estimates based on FCC Staff Model

Chart D6: Labor Input Price and Growth

RBOC Year	Total Employees A	Total Compensation B	Labor Rate Annual C = B / A	Labor Price Index (Base = 1985)	Labor Growth %Chg in A	Total Employees D	Total Compensation E	Total Op. Exp (000) F	Nonreg Op. Exp. (000) G
1985	#N/A	#N/A	#N/A	#N/A					
1986	#N/A	#N/A	#N/A	#N/A	#N/A				
1987	#N/A	#N/A	#N/A	#N/A	#N/A				
1988	3,226	116,778,051	36,204	1.000000	#N/A	**4,127**	**149,412,000**	**392,412**	**85,709**
1989	3,340	124,427,688	37,258	1.029120	3.47%	**4,271**	**159,128,000**	**417,173**	**90,971**
1990	3,419	128,767,896	37,666	1.040386	2.34%	**4,250**	**160,079,000**	**429,197**	**83,950**
1991	3,127	139,342,120	44,558	1.230752	-8.91%	**3,813**	**169,898,000**	**452,976**	**81,467**
1992	3,131	118,616,259	37,885	1.046451	0.12%	**3,703**	**140,289,000**	**433,734**	**67,006**
1993	2,981	106,108,142	35,599	0.983294	-4.92%	**3,419**	**121,712,000**	**420,266**	**53,878**
1994	2,969	119,253,561	40,171	1.109577	-0.40%	**3,347**	**134,451,000**	**451,398**	**51,023**
1995	2,435	116,895,157	48,001	1.325857	-19.84%	**2,762**	**132,578,000**	**507,002**	**59,974**
				Average [1986-94]	#N/A				
				Average [1986-95]	#N/A				

*Sources:

Column A: Columns D * [(F-G)/F]
Column B: Columns E * [(F-G)/F]
Column D: SOCC
Column E: SOCC
Column F: CBT 43-01 ARMIS Report, account 1190 (b)
Column G: CBT 43-01 ARMIS Report, account 1190 (c)

Cincinnati Bell Estimates based on FCC Staff Model

Chart D7: Summary of Capital Adjustments and Average Depreciation

Year	TPIS.BOY A	Unadj. Additions B	TPIS.EOY C	Retires D=A+B-C	Adjustment Factor E	Adjusted Additions F = B * E	Adjusted EOY TPIS G = A+F-D	Depreciation Accruals H	Adjusted Depreciation Rate I=H/((A+G)/2)
1985	#N/A	#N/A	#N/A	#N/A	0.8880	#N/A	#N/A	#N/A	#N/A
1986	#N/A	#N/A	#N/A	#N/A	0.8880	#N/A	#N/A	#N/A	#N/A
1987	#N/A	#N/A	#N/A	#N/A	0.8880	#N/A	#N/A	#N/A	#N/A
1988	#N/A	95,960	1,119,892	#N/A	1.0000	95,960	#N/A	85,600	#N/A
1989	1,119,892	107,340	1,102,055	125,177	1.0000	107,340	1,102,055	78,777	7.091%
1990	1,102,055	147,379	1,203,861	45,573	1.0000	147,379	1,203,861	74,918	6.498%
1991	1,203,861	97,654	1,266,631	34,884	1.0000	97,654	1,266,631	82,894	6.711%
1992	1,266,631	91,493	1,327,179	30,945	1.0000	91,493	1,327,179	83,970	6.475%
1993	1,327,179	119,761	1,389,401	57,539	1.0000	119,761	1,389,401	87,863	6.469%
1994	1,389,401	109,385	1,407,614	91,172	1.0000	109,385	1,407,614	107,755	7.705%
1995	1,407,614	93,391	1,463,079	37,926	1.0000	93,391	1,463,079	101,795	7.092%
								Average [1989-95]	6.863%

	Total Plant-Reg (000) J = (K-L)	Total Plant (000) K	Total Plant-Nonreg. (000) L	Total TPIS-Additions (000) M	Depr.-TPIS (000) N	Depr- Plant held for future telecom use (000) O	Total Operating Expense (000) P	Total Operating Expense-nonreg (000) Q
1988	1,119,892	1,194,063	74,171	102,316	94,181	0	392,412	85,709
1989	1,102,055	1,180,974	78,919	115,027	86,378	0	417,173	90,971
1990	1,203,861	1,283,964	80,103	157,185	80,372	0	429,197	83,950
1991	1,266,631	1,341,239	74,608	103,406	88,264	0	452,976	81,467
1992	1,327,179	1,390,121	62,942	95,832	88,866	0	433,734	67,006
1993	1,389,401	1,421,555	32,154	122,533	91,309	0	420,255	53,878
1994	1,407,614	1,437,911	30,297	111,739	110,225	0	451,398	51,023
1995	1,463,079	1,500,228	37,149	95,762	104,435	0	507,002	59,974

Sources:
Column A: Column C from prior year
Column B: Column M * (J/K)
Column C: Column J
Column E: is derived from Christensen's USTA Revised Study of 1995.
Column H: Columns (N + O) * (Chart 8: (I-J)/I)
Column K: CBT 43-01 ARMIS Report, account 1690(b)
Column L: CBT 43-01 ARMIS Report, account 1690(c)
Column M: CBT 43-02 ARMIS Report, account 260(ac)
Column N: SOCC account 6561
Column O: SOCC account 6562
Column P: CBT 43-01 ARMIS Report, account 1190(b)
Column Q: CBT 43-01 ARMIS Report, account 1190(c)

Cincinnati Bell Estimates based on FCC Staff Model

Chart D8: Construction of Materials Quantity Index

Year	Materials Price Index (1985=1.00) A	Operating Expense B	Depreciation & Amortization Expense C	Employee Compensation D	Materials Expense E = B - C - D	Materials Quantity Index F = E / A	Materials Quantity Index (1985 = 1.0) G	Materials Quantity Index Growth H	Total Depr.& Amort. (000) I	Nonreg Depr.& Amort. (000) J
1985	1.0000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
1986	1.0208	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
1987	1.0354	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
1988	1.0590	306,703,000	87,058,000	116,778,051	102,866,949	97,138,895	1.000000	#N/A	**95,785**	**8,727**
1989	1.0985	326,202,000	80,533,000	124,427,688	121,241,312	110,365,237	1.136159	12.77%	**88,303**	**7,770**
1990	1.1434	345,247,000	77,762,000	128,767,896	138,717,104	121,321,839	1.248952	9.47%	**83,423**	**5,661**
1991	1.1693	371,509,000	86,382,000	139,342,120	145,784,880	124,676,488	1.283487	2.73%	**91,978**	**5,596**
1992	1.1938	366,728,000	87,118,000	118,616,259	160,993,741	134,861,772	1.388340	7.85%	**92,197**	**5,079**
1993	1.2057	366,377,000	91,078,000	106,108,142	169,190,858	140,324,146	1.444572	3.97%	**94,650**	**3,572**
1994	1.2342	400,375,000	111,388,000	119,253,561	169,733,439	137,520,476	1.415710	-2.02%	**113,941**	**2,553**
1995	1.2639	447,028,000	105,357,000	116,895,157	224,775,843	177,845,143	1.830833	25.78%	**108,089**	**2,732**
						Average		#N/A		

Sources: Column A: Derived from BLS data as described in text. 1994 and 1995 values are extrapolated.

Column B: SOCC. Chart 7: Columns (P-Q)*1000

Column C: Columns (I-J)*1000

Column D: Chart 6: Column B

Column I: CBT ARMIS Report 43-01, account 1180(b)

Column J: CBT ARMIS Report 43-01, account 1180(c)

Cincinnati Bell Estimates based on FCC Staff Model

Chart D9: Capital Quantity and Price Index Calculations

Year	Benchmark A	Adjusted Capital Additions B	BEA Composite Asset Price C	Capital Stock Quantity D	Capital Input Quantity E	Capital Input Quantity Growth F	Property Income /w Depreciation G	Capital ental Price* H	Capital Rental Price Index I (Base = 1985)	Capital Rental Price Index Growth J	Net. Op. Rev.+ Other Op Inc./Exp. - Operating taxes (000) K	Interest and Related Items (000) L
1984		#N/A		#N/A								
1985	#N/A	#N/A	1.000000	#N/A	#N/A		#N/A	#N/A	#N/A			
1986		#N/A	1.013181	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
1987		#N/A	1.030871	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
1988		95,960	1.035999	786,157	#N/A	#N/A	196,225,765	#N/A	#N/A	#N/A	96,468	19,930
1989		107,340	1.075241	832,034	1.000000	#N/A	178,069,348	0.22651	1.00000	#N/A	86,670	17,851
1990		147,379	1.092233	909,866	1.058355	5.67%	181,566,044	0.21822	0.96342	-3.73%	87,314	23,397
1991		97,654	1.106013	935,717	1.157359	8.95%	181,734,480	0.19974	0.88182	-8.85%	75,194	25,775
1992		91,493	1.111942	953,782	1.190241	2.80%	180,930,886	0.19336	0.85367	-3.24%	74,390	23,872
1993		119,761	1.123482	994,924	1.213221	1.91%	183,479,610	0.19237	0.84930	-0.51%	71,399	23,141
1994		109,385	1.140461	1,022,557	1.265554	4.22%	205,010,893	0.20606	0.90972	6.87%	70,327	25,311
1995		93,391	1.150848	1,033,530	1.300702	2.74%	177,793,760	0.17387	0.76763	-17.00%	47,380	26,896
					Average [1986-94]	#N/A			Average [1986-94]	#N/A		
					Average [1986-95]	#N/A			Average [1986-95]	#N/A		

Notes:

Column D equals prior year Capital Stock less depreciation (6.863%) plus Column B deflated by Column C.

1988 value equals CBT TPIS * RBOC ratio of capital stock quantity to TPIS.

Column G: Chart 8: Column C+ (Chart 9:(K+L)*1000)]*Chart 7: Columns J/K.

Column H equals Column G divided by 1000 times prior year Column D.

Column K: SOCC, accounts 730+7100-7200.

Column L: SOCC, account 7500.

Cincinnati Bell Estimates based on FCC Staff Model

Chart D10: Factor Shares of Total Payments

Year	Labor Compensation	Materials Payment	Property Income /w Depreciation	Total Factor Payment	Labor Compensation Share	Materials Payment Share	Property Income /w Depreciation Share
1985	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1986	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1987	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1988	116,778,051	102,866,949	196,225,765	415,870,765	28.08%	24.74%	47.18%
1989	124,427,688	121,241,312	178,069,348	423,738,348	29.36%	28.61%	42.02%
1990	128,767,896	138,717,104	181,566,044	449,051,044	28.68%	30.89%	40.43%
1991	139,342,120	145,784,880	181,734,480	466,861,480	29.85%	31.23%	38.93%
1992	118,616,259	160,993,741	180,930,886	460,540,886	25.76%	34.96%	39.29%
1993	106,108,142	169,190,858	183,479,610	458,778,610	23.13%	36.88%	39.99%
1994	119,253,561	169,733,439	205,010,893	493,997,893	24.14%	34.36%	41.50%
1995	116,895,157	224,775,843	177,793,760	519,464,760	22.50%	43.27%	34.23%

Cincinnati Bell Estimates based on FCC Staff Model

Chart D11: Input Quantity Index

	Shares			Quantities			Quantity Indices				
Year	Labor Compensation	Materials Payment	Property Income /w Depreciation	Labor	Materials	Capital	Laspeyers A	Paasche B	Fisher Relative C=(A*B)^0.5	Fisher Chain	Growth
1985	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
1986	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1987	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1988	28.08%	24.74%	47.18%	3,226	97,138,895	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1989	29.36%	28.61%	42.02%	3,340	110,365,237	1.00000	#N/A	#N/A	#N/A	1.000000	#N/A
1990	28.68%	30.89%	40.43%	3,419	121,321,839	1.05836	1.059880	1.060247	1.060064	1.060064	5.83%
1991	29.85%	31.23%	38.93%	3,127	124,676,488	1.15736	1.021917	1.014078	1.017990	1.079134	1.78%
1992	25.76%	34.96%	39.29%	3,131	134,861,772	1.19024	1.036923	1.039025	1.037973	1.120113	3.73%
1993	23.13%	36.88%	39.99%	2,981	140,324,146	1.21322	1.009383	1.010378	1.009880	1.131179	0.98%
1994	24.14%	34.36%	41.50%	2,969	137,520,476	1.26555	1.008952	1.009266	1.009109	1.141483	0.91%
1995	22.50%	43.27%	34.23%	2,435	177,845,143	1.30070	1.068902	1.061653	1.065271	1.215989	6.32%
										Average [1986-94]	#N/A
										Average [1986-95]	#N/A

Chart D12: Input Price Index

	Shares			Factor Price Indices			Input Price Indices				
Year	Labor Compensation	Materials Payment	Property Income /w Depreciation	Labor	Materials	Capital	Laspeyers A	Paasche B	Fisher Relative C=(A*B)^0.5	Fisher Chain	Growth
1984											
1985	#N/A	#N/A	#N/A	#N/A	1.00000	#N/A	#N/A	#N/A	#N/A	#N/A	
1986	#N/A	#N/A	#N/A	#N/A	1.02080	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1987	#N/A	#N/A	#N/A	#N/A	1.03537	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1988	28.08%	24.74%	47.18%	1.00000	1.05897	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
1989	29.36%	28.61%	42.02%	1.02912	1.09855	1.00000	#N/A	#N/A	#N/A	1.000000	#N/A
1990	28.68%	30.89%	40.43%	1.04039	1.14338	0.96342	0.999518	0.999865	0.999692	0.999692	-0.03%
1991	29.85%	31.23%	38.93%	1.23075	1.16931	0.88182	1.025229	1.017365	1.021289	1.020974	2.11%
1992	25.76%	34.96%	39.29%	1.04645	1.19377	0.85367	0.949411	0.951335	0.950373	0.970306	-5.09%
1993	23.13%	36.88%	39.99%	0.98329	1.20571	0.84930	0.985942	0.986913	0.986427	0.957137	-1.37%
1994	24.14%	34.36%	41.50%	1.10958	1.23424	0.90972	1.066882	1.067214	1.067048	1.021310	6.49%
1995	22.50%	43.27%	34.23%	1.32586	1.26389	0.76763	0.990486	0.983769	0.987122	1.008158	-1.30%
										Average [1986-94]	#N/A
										Average [1986-95]	#N/A