

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

In the Matter of

Stale or Moot Docketed Proceedings

1993 Annual Access Tariff Filings  
Phase I

CC Docket No. 93-193

1994 Annual Access Tariff Filings

CC Docket No. 94-65

AT&T Communications Tariff F.C.C.  
Nos. 1 and 2, Transmittal Nos. 5460, 5461,  
5462, and 5464 Phase II

CC Docket No. 93-193

Bell Atlantic Telephone Companies Tariff  
FCC No. 1, Transmittal No. 690

CC Docket No. 94-157

NYNEX Telephone Companies Tariff  
FCC No. 1, Transmittal No. 328

**Direct Case of Verizon  
April 11, 2003**

**EXHIBIT B**

**NYNEX Direct Case  
filed August 14, 1995**

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Tariff F.C.C. No. 1, Transmittal No. 328 )

CC Docket No. 93-193,  
Phase I

CC Docket No. 94-65

CC Docket No. 94-157

**NYNEX DIRECT CASE**

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Telegraph Company

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Dated: August 14, 1995

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**SUMMARY**

This Direct Case by NYNEX responds to the Designation Order released by the Chief, FCC Common Carrier Bureau. The Designation Order sets forth issues for investigation of various carriers' tariff filings requesting exogenous treatment under price cap regulation of additional costs incurred as a result of implementing Statement of Financial Accounting Standards No. 106 (SFAS-106). SFAS-106 essentially requires accrual instead of cash basis accounting for other post-employment benefits (OPEBs), chiefly health care benefits to retirees.

As demonstrated in this Direct Case, the NYNEX OPEB tariffs under investigation are fully justified, satisfy the applicable standard for exogenous cost treatment as expressed in the D.C. Circuit's OPEB Decision,\* and should be made permanent.

Regarding that applicable standard, first, NYNEX's OPEB costs underlying those tariffs have been incurred as a result of the mandated SFAS-106 accounting change, over which NYNEX lacked control. Second, as demonstrated by the Godwins Study, those costs have not been double-counted in the GNP-PI element of the price cap formula and, as a further conservative step, have been shown not to have been recovered through a suppression of wages.

Furthermore, concerning the issues designated by the Bureau, we show that we correctly, reasonably and justifiably calculated the SFAS-106 costs for exogenous treatment under price cap regulation (Issue A). On Issue B, NYNEX has not made any

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\* Southwestern Bell Tel. Co. v. FCC, 28 F.3d 165 (1994).

(ii)

exogenous claims for SFAS-106 costs incurred prior to January 1, 1993, as NYNEX implemented SFAS-106 starting January 1, 1993. Further, NYNEX correctly and reasonably allocated and separated amounts associated with implementation of SFAS-106 in accordance with the Commission's rules and Responsible Accounting Officer letters (Issue C). Concerning Issues D and E, exogenous treatment of additional OPEB costs arising from implementation of SFAS-106 should be granted independent of the use of Voluntary Employee Benefit Association trusts or other funding mechanisms, and independent of any "vesting" of employee interests in OPEBs. Finally, we explain how deferred tax applicable to OPEBs should be reflected in exogenous cost calculations.

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Tariff F.C.C. No. 1, Transmittal No. 328	)	

### NYNEX DIRECT CASE

The NYNEX Telephone Companies<sup>1</sup> (NYNEX) submit this Direct Case in response to the Order Designating Issues For Investigation (Designation Order) released June 30, 1995 by the Chief, FCC Common Carrier Bureau in the above-captioned matter.

#### **I. BACKGROUND AND NYNEX POSITION**

The Designation Order sets forth issues for investigation of various carriers' tariff filings requesting exogenous treatment under price cap regulation of additional costs incurred as a result of implementing Statement of Financial Accounting Standards No. 106 (SFAS-106). SFAS-106 essentially requires accrual instead of cash basis accounting for other postretirement employee benefits (OPEBs), chiefly health care benefits to retirees.<sup>2</sup>

<sup>1</sup> The NYNEX Telephone Companies (NTCs) are New England Telephone and Telegraph Company and New York Telephone Company.

<sup>2</sup> In December 1990, the Financial Accounting Standards Board (FASB) adopted SFAS-106. The FASB directed that SFAS-106 be implemented for fiscal years beginning after December 15, 1992, with earlier implementation encouraged. In December 1991, the FCC Common Carrier Bureau issued an Order requiring carriers to adopt SFAS-106 on or before January 1, 1993, for regulatory accounting purposes. Southwestern Bell, 6 FCC Rcd. 7560.

Five NYNEX OPEB tariffs are under investigation in this matter. First, in April 1993, NYNEX submitted its 1993 Annual Access Tariff Filing which contained a \$12.1 million upward exogenous cost adjustment limited to the portion of the Transition Benefit Obligation (TBO)<sup>3</sup> relating to retirees as of January 1, 1993 only. That filing was made in response to the Commission's OPEB Order<sup>4</sup> denying price cap LECs exogenous treatment of OPEB costs.<sup>5</sup> In the OPEB Order the Commission indicated it would entertain further consideration of exogenous treatment of TBO amounts in the 1993 Annual Access Tariff Filings.<sup>6</sup> The Bureau initiated an investigation of the 1993 Annual Access/OPEB tariff filings in 1993, and permitted NYNEX's tariff to go into effect subject to accounting order and possible refund.<sup>7</sup>

The second NYNEX OPEB tariff under investigation here is our 1994 Annual Access Tariff Filing submitted in April 1994. That filing adjusted price cap indices (PCIs) to remove \$4 million of the OPEB exogenous cost increase contained in the 1993 Annual Filing (i.e., the amount that related to January - June 1993). In June 1994, the Bureau released an Order permitting NYNEX's 1994 Annual Filing to go into effect

<sup>3</sup> The TBO reflects the unrecognized liability for benefits earned in the past as of the date SFAS-106 is implemented (January 1, 1993 for NYNEX). The Commission directed carriers to amortize the TBO. Southwestern Bell, 6 FCC Rcd. 7560.

<sup>4</sup> Treatment Of LEC Tariffs Implementing SFAS-106, CC Docket No. 92-101, 8 FCC Rcd. 1024 (1993). As discussed *infra*, the U.S. Court of Appeals for the D.C. Circuit reversed and remanded the OPEB Order. Southwestern Bell Tel. Co. v. FCC, 28 F.3d 165 (D.C. Cir. 1994) (OPEB Decision). The Commission recently released an Order vacating its OPEB Order and terminating the Docket 92-101 proceeding. CC Docket No. 92-101, FCC 95-219, Memorandum Opinion and Order released July 3, 1995.

<sup>5</sup> In its filing (D&J, p. 48) NYNEX reserved the right to file tariffs seeking full recognition of OPEB costs as exogenous depending upon the outcome of the appeal.

<sup>6</sup> OPEB Order at ¶¶ 1, 76.

<sup>7</sup> 1993 Annual Access Tariff Filings, CC Docket No. 93-193. 8 FCC Rcd. 4960.

subject to investigation, accounting order and possible refund. The Bureau incorporated the OPEB issues into the pending investigation of the 1993 Annual Filings.<sup>8</sup>

In July 1994, the D.C. Circuit issued its OPEB Decision. The Court held that the price cap carriers had met the lack-of-control test for exogenous treatment of OPEB cost increases arising from the mandated accounting change. The Court also addressed the second prong of the test for exogenous treatment: whether the costs are not double-counted in the GNP-PI element of the price cap formula.<sup>9</sup> The Court held that the Commission had imposed “impossible burdens” as to Gross National Product Price Index (GNP-PI) double-counting, and the Court rejected the Commission’s criticisms of the Godwins Study.<sup>10</sup> The Court also rejected the Commission’s invocation of several new criteria on the double-counting issue relating to intertemporal double-counting, rate of return and productivity factors.<sup>11</sup> The Court went further to suggest that the price cap LECs’ evidence (including the Godwins Study) was reasonable.<sup>12</sup> In fact, as discussed infra, the Godwins Study was very conservative. While it found only a 0.7% double-count in GNP-PI, it also reflected longer term effects from wage suppression.

The third NYNEX OPEB tariff under investigation in the present matter is Transmittal No. 328, filed in September 1994 (and amended in December 1994). That filing was intended to effectuate the D.C. Circuit’s OPEB Decision. The filing presented an exogenous cost adjustment to PCIs to reflect OPEB incremental costs not covered in

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<sup>8</sup> 1994 Annual Access Tariff Filings, 9 FCC Rcd. 3705

<sup>9</sup> 28 F.3d at 168-70. The Commission recently began using GDP-PI instead of GNP-PI for calculating the PCI. See Designation Order at n. 35.

<sup>10</sup> 28 F.3d at 171-72. The Godwins Study, cited in the Designation Order at n. 28, was relied upon by NYNEX and others to show that about 84.8% of the additional costs from the SFAS-106 accounting change would not be captured in GNP-PI or recovered through a reduction in the national wage rate.

<sup>11</sup> 28 F.3d at 172-73.

<sup>12</sup> Id. at 171-73.

previous filings, so as to capture the full cost increase from implementing SFAS-106 (i.e., TBO for retirees and active employees, and OPEB ongoing expenses) from January 1, 1993 forward. The filing contained a make-whole adjustment of \$42 million (covering January 1, 1993 to December 30, 1994), to be spread over a 24 month period (i.e., \$21 million annually for December 30, 1994 to December 31, 1996), and an annual prospective adjustment of \$21 million. The filing contained a rate increase of \$2.2 million. On December 29, 1994, the Bureau released an Order permitting NYNEX's Transmittal 328 to go into effect subject to investigation, accounting order and possible refund.<sup>13</sup>

The fifth NYNEX OPEB tariff subject to investigation herein is Transmittal No. 374, submitted in April 1995. That filing increased certain interconnection charge rate elements by \$2.3 million based upon PCI "headroom" created by previously filed OPEB exogenous cost adjustments. On April 27, 1995, the Bureau released an Order permitting the tariff to go into effect subject to investigation, accounting order and possible refund.<sup>14</sup>

The present Designation Order is the Bureau's response to the Court's remand in the OPEB Decision, and one set of issues is designated for the combined investigation:<sup>15</sup>

In general, this combined investigation seeks to determine whether the assumptions the individual LECs and AT&T made in calculating the costs of postretirement benefits are

<sup>13</sup> CC Docket No. 94-157, 10 FCC Rcd. 1594. In its Price Cap Review Order, the Commission directed carriers to reduce PCIs to eliminate the effect of ongoing OPEB costs. Price Cap Performance Review For Local Exchange Carriers, CC Docket No. 94-1, FCC 95-132, First Report and Order released April 7, 1995. In its May 1995 Annual Access Tariff Filing, NYNEX complied with that Order by reducing PCIs by \$29 million. NYNEX did not remove \$21 million of the OPEB make-whole adjustment to PCIs referred to above, as that adjustment related to OPEB costs incurred in 1993-94. By Order released July 27, 1995, the Bureau permitted that OPEB tariff to go into effect subject to the Docket 94-157 investigation, accounting order and possible refund (1995 Annual Access Tariff Filings, CC Docket No. 94-157, DA 95-1665). Thus, that tariff represents the fourth NYNEX tariff subject to investigation in this docket.

<sup>14</sup> NYNEX Telephone Companies, Transmittal No. 374, CC Docket No. 94-157 (DA 95-966).

<sup>15</sup> Designation Order at ¶¶ 8, 14-15.

just and reasonable, in accordance with the Commission's rules and in the public interest.<sup>16</sup>

In this Direct Case, NYNEX responds to the various issues in the order of their designation by the Bureau. We show that our OPEB tariffs under investigation are fully justified, satisfy the applicable standard for exogenous cost treatment as expressed in the OPEB Decision, and should be made permanent.

Regarding that applicable standard, first, NYNEX's OPEB costs underlying those tariffs have been incurred as a result of the mandated SFAS-106 accounting change, over which NYNEX lacked control. Second, as demonstrated by the Godwins Study, those costs have not been double-counted in the GNP-PI element of the price cap formula and, as a further conservative step, have been shown not to have been recovered through a suppression of wages.

Furthermore, concerning the issues designated by the Bureau, we show that we correctly, reasonably and justifiably calculated the SFAS-106 costs for exogenous treatment under price cap regulation (Issue A). On Issue B, NYNEX has not made any exogenous claims for SFAS-106 costs incurred prior to January 1, 1993, as NYNEX implemented SFAS-106 starting January 1, 1993. Further, NYNEX correctly and reasonably allocated and separated amounts associated with implementation of SFAS-106 in accordance with the Commission's rules and Responsible Accounting Officer letters (Issue C). Concerning Issues D and E, exogenous treatment of additional OPEB costs arising from implementation of SFAS-106 should be granted independent of the use of Voluntary Employee Benefit Association trusts or other funding mechanisms, and

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<sup>16</sup> Id. at ¶ 15.

independent of any “vesting” of employee interests in OPEBs. Finally, we explain how deferred tax applicable to OPEBs should be reflected in exogenous cost calculations.

**II. NYNEX’S OPEB TARIFFS UNDER INVESTIGATION SATISFY THE STANDARD FOR EXOGENOUS COST TREATMENT, ARE WELL-SUPPORTED AND SHOULD BE MADE PERMANENT**

**1. General Information On OPEB Costs Claimed**

**Issue A:** Have AT&T and the individual LECs correctly, reasonably and justifiably calculated the gross amount of SFAS-106 costs that may be subject to exogenous treatment under price cap regulation?<sup>17</sup>

**Designation Order ¶ 17** (*regarding derivation of gross amount of incremental costs that is the basis of the exogenous claim*):

**17.1:** NYNEX implemented SFAS-106 effective January 1, 1993.

**17.2:** Regarding “the cost basis of the pay-as-you-go amounts that supported the rates in effect on the initial date that the carrier became subject to price cap regulation,” it should be noted that the NYNEX Telephone Companies became subject to FCC price cap regulation effective January 1, 1991. The initial price cap rates were based on projected cash payments, reflected as operating expense, for retirees’ medical, dental and group life insurance for the period July 1, 1990 to June 30, 1991 (*i.e.*, the rate year for the 1990 Annual Filing). The amounts underlying the tariffs of New England Telephone (NET) and New York Telephone (NYT) were \$53.2 million and \$114.8 million, respectively.

**17.3:** The Bureau asks for an explanation of the effect of the price cap formula on the pay-as-you-go amounts that supported the rates in effect on the initial date of price caps, up to the date of conversion to SFAS-106. The exact intent of the Bureau’s question is somewhat unclear. However, the price cap formula does impact PCIs through

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<sup>17</sup> Designation Order at ¶16.

the inflation factor.<sup>18</sup> The impact of inflation in the formula is determined by the amount of the inflation factor less the productivity offset (X factor).<sup>19</sup> For NYNEX, the pay-as-you-go amount that supported rates in effect at the beginning of price caps was \$168.0 million, and those rates were used to set PCIs at 100. These PCIs have changed over time due to the application of the inflation factor less productivity offset in the price cap formula. The inflation factors for the 1991 and 1992 Annual Filings were 4.80% and 3.3972% respectively, and the productivity offset for NYNEX for both years was 3.3%. Growing \$168.0 million by 1.5% (i.e., 4.80% - 3.3%) and .0972% (i.e., 3.3972% - 3.3%) equates to \$170.7 million for the July 1992 - June 1993 time period.

Since NYNEX adopted SFAS-106 on January 1, 1993, the amount of pay-as-you-go expense that theoretically was in rates at that time was approximately \$170.7 million. However, when NYNEX developed the exogenous adjustment for SFAS-106, the amount of pay-as-you-go expense subtracted to arrive at the incremental expense as of January 1, 1993 was \$209.2 million. This amount was the actual pay-as-you-go expense in 1993, as opposed to the forecasted amount included in rates for the 1990-1991 tariff year. Therefore, NYNEX subtracted out more pay-as-you-go expense than that which underlied rates impacted by the price cap model.

**17.4:** The Bureau requests the “actual cash expenditures related to SFAS-106 for each year since the implementation of price caps, but prior to the implementation of SFAS-106 accounting methods.” Prior to January 1, 1993 (when NYNEX implemented SFAS-106), NYNEX accounted for OPEBs on a pay-as-you-go basis. On this basis, for

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<sup>18</sup> The GDP-PI will be used to calculate the inflation factor beginning with the 1995 Annual Filing. As noted, the GNP-PI has been used previously to calculate the inflation factor used in annual price cap filings.

<sup>19</sup> The measure has been included in the formula as [GNP-PI]-X prior to the Price Cap Review Order.

1991, NET recorded \$50.8 million and NYT recorded \$101.1 million for OPEB expenses. For 1992, NET recorded \$63.7 million and NYT recorded \$131.6 million for OPEB expenses. See Appendix A.1.

**17.5:** For "the treatment of these costs in reports to the Securities and Exchange Commission (SEC) and to shareholders, including specific citations to or excerpted materials from such reports to indicate the amount of liability each party has projected for OPEBs," see Appendix A.2 for relevant excerpts from the 1991 and 1992 10-K Reports for NET and NYT, and from the 1991 Annual Report for NYNEX.

**Designation Order ¶ 18:**

**18.1:** Regarding a description of "each type of benefit being provided that is covered by the SFAS-106 accounting rules," NYNEX Corporation maintains the following OPEB benefits for management and nonmanagement employees:

- Retiree Health Plans: medical and dental
- Retiree Life Insurance Plans
- Retiree Discounts: concession service

Appendix A.3 describes these types of benefits in detail.

**18.2:** The pay-as-you-go amounts incurred in 1993 were \$67.2 million for NET and \$142 million for NYT; and for 1994, those amounts were \$75.4 million for NET and \$167.1 million for NYT. These pay-as-you-go amounts were independent of adoption of SFAS-106. (See Appendix A.1.)

**18.3:** NYNEX did not utilize accrual accounting for postretirement benefits before the effective date of price cap regulation.

**18.4:** For NYNEX, there were no SFAS-106-type (accrual) expenses reflected in rates before they were adjusted for exogenous treatment related to SFAS-106. See responses to 17.2 and 17.3 relative to pay-as-you-go amounts.

**18.5:** Regarding “the level of SFAS-106 expenses that was reflected in the rates in effect on the initial date that the carrier became subject to price cap regulation,” as noted earlier, NYNEX implemented SFAS-106 on January 1, 1993, i.e. after the January 1, 1991 inception of price cap regulation. NYNEX’s rates in effect on January 1, 1991 reflected pay-as-you-go OPEB expenses, as indicated in the response to 17.2.

**Issue B:** Should exogenous claims be permitted for SFAS-106 costs incurred prior to January 1, 1993, the Commission’s date for mandatory compliance?<sup>20</sup>

**Designation Order ¶ 19:**

The Bureau’s question contains an internal contradiction. At one point, the Bureau states that its December 1991 Order<sup>21</sup> authorized adoption of SFAS-106 “on or before January 1, 1993.” Yet in the next sentence, the Bureau states that “before January 1, 1993 ... is prior to the date that the Bureau authorized adoption of SFAS-106 accounting methods.”<sup>22</sup>

Although NYNEX did not adopt SFAS-106 prior to January 1, 1993, nor have we sought exogenous treatment for any costs incurred prior to that date, we are somewhat concerned that the Bureau’s above language implies that if the Commission sets a time frame for implementation of a rule change, carriers are not “authorized” to implement the change prior to the latest possible date. That would be an unwarranted position. The Bureau clearly stated that carriers were authorized to adopt SFAS-106 accounting on or before January 1, 1993.

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<sup>20</sup> Designation Order at ¶ 18.

<sup>21</sup> Southwestern Bell, 6 FCC Rcd. 7560.

<sup>22</sup> Designation Order at ¶ 19.

## 2. Regulatory Separations And Allocations

**Issue C:** Have AT&T and the individual LECs correctly and reasonably allocated and separated amounts associated with implementation of SFAS-106 in accordance with the Commission's rules and Responsible Accounting Officer (RAO) letters?<sup>23</sup>

### Designation Order ¶ 20:

**20.1:** For 1993, the first year of SFAS-106 adoption by NYNEX, on a total company basis NYNEX Corp. incurred \$473.6 million, NET incurred \$143.0 million and NYT incurred \$277.4 million in costs determined pursuant to SFAS-106.

**20.2:** The total company SFAS-106 amounts for the NYNEX Telephone Companies were arrived at through calculations by NYNEX's enrolled Actuary, Hewitt Associates, in accordance with Generally Accepted Accounting and Actuarial Principles. The costs reflect SFAS-106 implementation effective January 1, 1993 with twenty year amortization of the TBO. All key actuarial assumptions and plan provisions utilized in these calculations are disclosed in the attached copies of the Actuarial Reports (Appendix C.1).

**20.3:** Concerning "the amounts allocated to the telephone operating companies, including the specific Part 32 accounts used and the amounts allocated to each of those accounts," it should be noted that NYNEX allocated the SFAS-106 costs to all of its telephone and non-telephone subsidiaries on the basis of the companies' relative shares of the total number of active and retired employees at the time of SFAS-106 adoption. NYT's shares were 63.1% of the total non-management cost and 49.6% of the total management cost; and NET's shares represented 32.9% of non-management and 24.8% of management costs.

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<sup>23</sup> Designation Order at ¶ 19.

The NYNEX Telephone Companies initially recorded their allocated costs in clearing Account 8701.2. Benefits and Payroll Taxes-Provision for Postretirement Benefits Other Than Pensions.

The allocation of the SFAS-106 costs to final accounts of NYT and NET, both expense and capital, was based upon factors developed using 1992 benefits cost data. The factors were calculated by dividing 1992 benefits costs charged to final accounts -- obtained from the accounting data underlying the 1992 ARMIS reports (the most recent annual data available prior to SFAS-106 implementation) -- by total benefits costs incurred. The factors, thus developed, were applied to the total SFAS-106 costs to calculate the impact on each account; see the chart below. The details of the Part 32 Account allocation are shown on pages 3, 6, 9, 12, 15, 18, and 21 of attached Workpaper OPEB, which was originally filed in the NTCs' Amended Transmittal No. 328 (Appendix C.2).

Part 32 Account	Description	1993 NYT SFAS-106 Cost	1993 NET SFAS-106 Cost	1993 NTCs SFAS-106 Cost
6110	Network Support	\$ 41,193	\$ 366,296	
6120	General Support	\$ 7,414,717	\$ 2,151,709	
6210 & 6220	CO Switching & Operator Systems	\$ 24,691,007	\$ 8,765,355	
6230	CO Transmission	\$ 10,020,166	\$ 6,184,776	
6310	Info Orig/Term	\$ 20,404,889	\$ 7,400,348	
6410	Cable & Wire Facilities	\$ 45,770,429	\$ 23,249,205	
6510	Other Prop Plant & Equip Exp	\$ 50,461	(\$ 38,318)	
6530	Network Operations	\$ 53,963,691	\$ 21,704,250	
6610	Marketing	\$ 12,335,205	\$ 8,565,008	
6621 & 6622	Operator Services	\$ 18,077,491	\$ 11,258,773	
6623.1	Customer Accounting	\$ 4,015,275	\$ 1,534,513	
6623.2	Business Office	\$ 38,655,390	\$ 17,107,568	
6623.3 - .8	Customer Services - Other	\$ 0	\$ 778,534	
6710	Exec & Planning	\$ 1,111,178	\$ 1,185,783	
6720	Gen'l & Admin	\$ 10,972,751	\$ 8,833,965	
	Total Operating Expense	\$247,523,841	\$119,047,765	\$366,571,606
	TPIS	\$ 29,876,159	\$ 23,966,235	\$ 53,842,394
	Total SFAS-106	\$277,400,000	\$143,014,000	\$420,414,000

**20.4:** For "the method of allocating amounts to the telephone operating companies (head counts, actuarial studies, etc.)." see response to 20.3.

**20.5:** Provided below are "the amounts allocated between regulated and non-regulated activities of the telephone company, with a description and justification of the methodology for the allocations."

	Total Operating Expenses	Net Rate Base
1993 NYT Regulated Incremental SFAS-106	\$ 99,335,205	(\$29,076,018)
1993 NYT Non-regulated Incremental SFAS-106	\$ 7,410,621	(\$ 1,276,855)
1993 NET Regulated Incremental SFAS-106	\$ 49,018,379	(\$15,540,541)
1993 NET Non-regulated Incremental SFAS-106	\$ 3,696,619	(\$ 756,318)
1993 NTCs Regulated Incremental SFAS-106	\$148,353,584	(\$44,616,559)
1993 NTCs Non-regulated Incremental SFAS-106	\$ 11,107,240	(\$ 2,033,173)

The full pay-as-you-go amounts were subtracted from the SFAS-106 costs to determine the incremental cost for SFAS-106. A portion of the incremental cost for SFAS-106 was allocated to nonregulated activities based on factors developed using the separations data underlying the 1992 ARMIS Reports. The details of the regulated/nonregulated allocations are shown on pages 3, 6, 9, 12, 15, 18, and 21 of attached Workpaper OPEB (Appendix C.2).

**20.6:** The allocation of costs to baskets, by year, is provided below:

	NTCs Interstate Access 1993 Incremental SFAS-106	NTCs Common Line Basket 1993 Incremental SFAS-106	NTCs Traffic Sensitive Basket 1993 Incremental SFAS-106	NTCs Special Access Basket 1993 Incremental SFAS-106	NTCs Interexchange Basket 1993 Incremental SFAS-106
Total Operating Expenses	\$ 35,877,545	\$17,797,227	\$12,938,759	\$4,846,395	\$295,114
Net Rate Base	(\$ 10,886,071)	(\$4,379,845)	(\$4,891,624)	(\$1,582,485)	(\$32,488)
Revenue Effect (Adjusted for Godwins)	\$ 29,045,345	\$14,559,404	\$10,330,162	\$3,907,979	\$247,800

The allocation of costs to the interstate jurisdiction and to the price cap baskets was made based on the separations data underlying the 1992 ARMIS reports. The

interstate access factors represent interstate access and interexchange costs as a percentage of subject-to-separations costs and exclude Billing and Collection costs. This ensures that the allocation of OPEB costs to the price cap baskets is for access services and interexchange service only.

The allocation of costs to price cap baskets was based on each basket's proportion of the costs in accounts that are used to record OPEB costs, as a percentage of total interstate access and interexchange cost. The ARMIS cost categories of Common Line, Traffic Sensitive, Special Access and Interexchange were used for the allocations. Since the price cap baskets were changed to include a Traffic Sensitive and Trunking Basket comprised of different service categories from those included in the 1993 Annual Filing and ARMIS reports, recasted factors were developed to allocate the OPEB adjustment in the 1994 Annual Filing. The OPEB exogenous adjustment was recast to the existing baskets in the NTCs' Transmittal No. 328 as per the allocation shown below:

	NTCs Interstate Access 1993	NTCs Common Line Basket 1993	NTCs Recasted Traffic Sensitive Basket 1993	NTCs Recasted Trunking Basket 1993	NTCs Interexchange Basket 1993
Revenue Effect (Adjusted for Godwins)	\$ 29,045,345	\$14,559,404	\$4,554,943	\$9,683,198	\$247,800

The OPEB exogenous adjustment is equal to the total revenue requirement, reduced by 15.2% to adjust for the effect that may be reflected in the GNP-PI (.7%) or otherwise recovered in a wage reduction (14.5%), as determined by the Godwins study. The revenue requirement includes depreciation expense, which was computed by applying the FCC-prescribed rate on a composite basis to the average balance of SFAS-106 costs cleared to Telephone Plant In Service. The revenue requirement also includes the impact of rate base items. The depreciation expense and rate base items were

allocated to nonregulated activities and price cap baskets based on the methods described above. The details of the allocation of the incremental SFAS-106 costs to the price cap baskets and the development of the revenue requirement impacts are shown on pages 4, 7, 10, 13, 16, 19, and 22 of attached Workpaper OPEB (Appendix C.2).

### 3. **VEBA Trust Information**

**Issue D:** How should Voluntary Employee Benefit Association trusts or other funding mechanisms for these expenses be treated: 1) if implemented before price caps; (2) if implemented after price caps, but before the change required by SFAS-106; and (3) if implemented after the change in accounting required by SFAS-106?<sup>24</sup>

Exogenous treatment of the incremental costs associated with SFAS-106 should be granted independent of whether VEBA trusts or other funding mechanisms were used, and independent of the time frames associated with the creation of such funding mechanisms. As indicated in our Direct Case in Docket 93-193 filed June 1, 1992 and our other previous filings in this matter, and consistent with the OPEB Decision, NYNEX has satisfied the two prong test required to qualify for exogenous treatment of incremental OPEB costs: lack of control over the accounting change; and lack of double-counting in the GNP-PI element of the price cap formula.

With respect to the timing of the creation of such funding mechanisms, NYNEX VEBA trusts were not created prior to the implementation of price caps. As discussed in our response to Designation Order ¶ 21 below, the NYNEX VEBA trusts were initially funded in 1991, i.e. after the inception of price caps but before the change required by SFAS-106. These trusts were funded through excess pension funds in a manner which did not affect operating expenses. The creation of these VEBA trusts represented no

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<sup>24</sup> Designation Order at ¶ 20.

incremental expense and did not represent additional costs that would have affected our rates. As such, the amount in our rates for the period prior to the implementation of SFAS-106 (January 1, 1993) for VEBA trusts is zero.

In the case of VEBA trusts established subsequent to the adoption of SFAS-106, it should be noted that in accordance with the principles espoused in that standard the issue of funding is totally separate and distinct from the amount of cost a company recognizes in a period. The amount that a company chooses to fund is completely unrelated to the benefit currently being earned by the employee or the obligation currently incurred by the company. From a cost recovery viewpoint, one could assume that a company's cash payments (pre-SFAS-106) are being fully recovered in rates. SFAS-106 requires that these costs be recognized when earned, rather than when paid, resulting in an acceleration in the timing of recognition of the cost. With the change in accounting being granted exogenous cost treatment, the incremental costs are properly measured by the difference between the accrued cost under the new accounting method and the cash cost under the old accounting method. VEBA funding subsequent to SFAS-106 adoption does not impact either the cost amount prior to SFAS-106 adoption or the cost amount resulting from SFAS-106 adoption. VEBA funding does play a role, however, in the determination of the rate base impact of the exogenous cost change and in subsequent calculations of earned return. To the extent that accrued SFAS-106 costs are not paid or funded, the unfunded liability properly reduces the rate base as ratepayer supplied capital, in accordance with RAO 20.

**Issue E:** Should exogenous treatment for SFAS-106 amounts be limited to costs that are funded?<sup>25</sup>

**Designation Order ¶ 21** (*regarding information to be provided by companies that have VEBA trusts or other funding mechanisms for SFAS-106 expenses that were established prior to the adoption of SFAS-106*):

Exogenous treatment for SFAS-106 amounts should not be limited to costs that are funded.<sup>26</sup> Exogenous treatment of the additional costs from implementing SFAS-106 should be afforded under the applicable standard discussed herein. That standard includes no requirement that the expense be funded.

Any limitation of SFAS-106 exogenous costs to funded amounts would negate the fact that SFAS-106 results in costs being accrued as the employees earn the benefits, and not when these costs are paid. It is the mandated accounting change which triggers the need for an exogenous cost adjustment. Limiting recovery to funded costs essentially would place recovery back on the same cash basis as it was prior to SFAS-106 adoption.

**21.1:** The following is a description of “any VEBA trust or other funding mechanisms for the expenses that were established prior to the adoption of SFAS-106”:

The Omnibus Budget Reconciliation Act of 1990 (“OBRA 1990”) added Section 420 of the Internal Revenue Code to permit transfers of certain excess assets from pension plans to a 401(h) account within the pension plan to fund retiree health care benefits. In September 1991 and December 1991, under the provisions of OBRA 1990, portions of excess pension assets were transferred from the two NYNEX pension plans (management and nonmanagement) to health care benefit accounts within the respective pension plans for reimbursement of retiree health care benefits paid by NYNEX during

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<sup>25</sup> Designation Order at ¶ 20.

<sup>26</sup> See also response to Issue D, supra.

the 1990 and 1991 tax years. The September 1991 transfer covered 1990 payments and the December 1991 transfer covered 1991 payments.

NYNEX then established and made contributions to two separate VEBA trusts, one for management and the other for nonmanagement, in amounts equal to the excess pension assets transferred. The VEBA trusts were established to begin funding postretirement health care benefits. An additional OBRA 1990 transfer reimbursement was made and an additional contribution was made to the VEBA trusts in 1992.

In addition to those VEBA trusts, postretirement group life insurance benefits -- a very small part of OPEBs -- have been funded since 1980 on an actuarial basis. Some of these funds are currently held by insurance carriers. In 1994, we transferred some of the life insurance funds to separate VEBAs established for postretirement life insurance benefits.

**21.2:** Provided below are the amounts placed in the VEBA trusts for each year since they were implemented.<sup>27</sup>

	<u>NYNEX</u>	<u>NYT</u>	<u>NET</u>
1990 Payment	\$133 Million	\$68.6 Million	\$38.0 Million
1991 Payment	\$148 Million	\$75.5 Million	\$42.1 Million
1992 Payment	\$205 Million	\$108.1 Million	\$58.1 Million

**21.3:** The amounts in the VEBA trusts were not differentiated between ongoing OPEBs and TBO. The concepts of TBO and service cost pertain to the accounting for OPEBs, not the funding. As discussed earlier, under SFAS-106 the accounting for these costs is independent of the funding.

<sup>27</sup> See NYT and NET SEC 10-K Forms, p. 38, Postretirement Benefits Other Than Pensions (Appendix A.2 herein); NYNEX OPEB Direct Case in Docket 93-193, filed June 1, 1992, Attachment D. The differences between the NYNEX amounts and the sum of the NYT and NET amounts represent VEBA funding for the NTCs' affiliates.

**21.4:** There were no such economic assumptions associated with the company's decision to create VEBA trusts, or to determine the levels of funding. The economic assumptions described in this question relate to the accounting for OPEBs, not the funding of these costs.<sup>28</sup> The VEBA trusts were established to fund postretirement health care benefits. The VEBA trusts were funded with excess pension funds in amounts allowed under OBRA 1990; the funding reflected actual pay-as-you-go expense amounts for part of the year, and conservative estimates of such expenses for the remainder of the year.

**21.5:** The purpose of the VEBA trusts has been to fund postretirement health care benefits. Regarding such SFAS-106 benefits packages covered by VEBA trusts, see Appendix A.3.

**21.6:** The assets of the VEBA trusts shall not be used for purposes other than the payment of welfare benefits or the expenses incident thereto or expenses of the trust. That is, the funds shall provide for the payment of life, sickness, accident, or "other benefits" to the employees eligible for coverage under the welfare benefit plans covered by the VEBA trusts, or their beneficiaries. To the extent required by Section 501(c)(9) of the Internal Revenue Code of 1986, as amended, "other benefits" shall not, however, include any benefit which is due solely to attainment of age or service and are considered retirement benefits.

#### **4. Vesting Of OPEB Interests**

**Issue F:** Should exogenous treatment be given only for amounts associated with employee interests that have vested?<sup>29</sup>

<sup>28</sup> See also response to Designation Order ¶¶ 26 and 27 concerning actuarial assumptions associated with OPEB costs accounted for under SFAS-106.

<sup>29</sup> Designation Order at ¶ 21.

**Designation Order ¶ 22:**

The Bureau asks for “documentation showing when the employees’ interests in the OPEBs vest. Also, companies must explain how they determine when an employee’s interest vests in the OPEBs.” Exogenous treatment of SFAS-106 additional costs should not depend upon any such vesting, but rather should depend upon the standard described in the OPEB Decision being met, as discussed herein. That standard does not include any “vesting” condition; rather, we are entitled to exogenous treatment of additional OPEB costs accounted for consistent with SFAS-106, which costs are not double-counted in GNP-PI.

From a legal perspective, an employee’s interest in OPEB benefits does not “vest” as does an employee’s interest in a service pension. Unlike the pension plan, NYNEX reserves the right to amend or terminate OPEB benefits, subject to collective bargaining agreements and to practical considerations. The employee qualifies for OPEB benefits when the employee becomes eligible to collect a service pension.

**5. Treatment Of Deferred Tax Benefits**

**Issue G:** How should the deferred tax benefit applicable to OPEBs be treated for purposes of exogenous adjustments?<sup>30</sup>

**Designation Order ¶ 23:**

The Bureau requests LECs “to describe on a year-by-year basis any exogenous adjustments made to reflect any deferred tax benefit associated with their OPEB accrual amounts. Companies are also directed to provide an explanation if there are no such adjustments.”

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<sup>30</sup> Designation Order at ¶ 22.

To the extent that SFAS-106 additional costs for OPEBs are given exogenous treatment, the deferred tax arising from those amounts should similarly be included in the calculation of the exogenous adjustment. In other words, the adjustment<sup>31</sup> is first computed in revenue requirement terms, prior to being translated into a PCI. The incremental earnings impact is computed net of taxes. The incremental OPEB expense is reduced by the deferred tax benefit. The effect on accumulated deferred taxes is included in the computing the rate base impact, as is the incremental OPEB liability which is a reduction of the rate base. These procedures are in accordance with Parts 32 and 65 of the Commission's rules and in conformance with RAO 20.

#### **6. Supporting Studies And Models**

##### **Designation Order ¶ 24:**

NYNEX continues to rely upon the Godwins Study, *supra*, and Godwins Supplemental Submissions as demonstrating that approximately 84.8% of the NTCs' additional costs from the SFAS-106 accounting change would not be captured in the GNP-PI or recovered through a reduction in the national wage rate. Appendix H.1 provides copies of the Godwins Study (filed in our June 1, 1992 Direct Case in Docket 93-193) and Godwins Supplemental Report (filed in our July 31, 1992 Reply Comments in Docket 93-193) and Godwins Further Supplemental Report (filed in our 1993 Annual Access Tariff Filing).

Also included in Appendix H. 1 is a new affidavit from Mr. Peter Neuwirth, one of the original coauthors of the Godwins Study, summarizing and placing into perspective

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<sup>31</sup> Accumulated Deferred Taxes were calculated by multiplying the incremental cost, which also represents the difference between the amount of expense currently recognized for tax purposes and amount of expense recognized for book purposes, by the tax rate. The resulting amount was then adjusted to reflect a 1993 average balance. See NYNEX Transmittal 328, Description and Justification, p. 16, item 7.

Godwins' demonstrations. Specifically, the original Godwins Study, which used conservative assumptions throughout, found that the increase in GNP-PI caused by SFAS-106 would provide for recovery of only 0.7% of the additional costs incurred by price cap LECs. Over time, price cap LECs could finance up to 14.5% of those additional costs through a reduction in wages, leaving 84.8% (i.e., 100% - 0.7% - 14.5%) of the additional SFAS-106 costs unrecovered. Subsequent to the original study, in response to FCC staff, Godwins produced a "best estimate," and a sensitivity analysis incorporating all combinations of actuarial and macroeconomic parameters including implausible values. On a best estimate basis, Godwins determined that 12.7% of the price cap LECs' additional costs under SFAS-106 would be recovered through a combination of GNP-PI increase (0.3%) and wage rate reduction (12.4%). This underscored the very conservative nature of the original Godwins Study.

**Designation Order ¶ 25:**

See Appendix H.1 for the requested information on the Godwins Study macroeconomic model concerning description and documentation of the model, including method of estimation, parameter estimates, and summary statistics; and the same data for alternate functional forms that were modeled, including the data used to estimate the model, the data used in making forecasts from the model, and the results of any sensitivity analyses performed to determine the effect of using different assumptions.

**Designation Order ¶ 26 And ¶ 27:**

Appendix C.1 contains the Actuarial Reports, prepared by Hewitt Associates, for the SFAS-106 valuation for both the Management Plans and the Non-Management Plans. These reports, which were used to determine SFAS-106 amounts, provide descriptions

and justifications of the actuarial assumptions, and the assumptions unique to postretirement health care benefits.<sup>32</sup>

SFAS-106 requires the use of explicit assumptions, each of which individually represents the best estimate regarding a particular future event. The probability of payment is taken into account in assumptions about turnover, dependency status and mortality. Generally, assumptions are made that are expected to hold true over a long period of time. The possibility of a future downsizing, as a one-time or short term event, is not an assumption that should impact the calculation of the expected benefit obligation. General attrition is taken into account in assumptions about turnover. The NTCs have generally implemented their downsizing efforts via retirement incentives, not having material impact on the probability that employees will leave the business prior to becoming eligible to receive their postemployment benefits.

In December 1993, NYT accrued SFAS-106 curtailment charges pertaining to restructuring and planned downsizing of \$53.2 million for management employees and \$217.3 million for nonmanagement employees. For NET, these figures were \$43.1 million and \$150.8 million, respectively. For FCC reporting purposes, these charges were reflected in Account 7370, Special Charges for NYT and Account 7360.99, Other Nonoperating Income for NET, in accordance with RAO 24. As employees left the payroll during 1994 (and will continue in 1995 and 1996), a portion of the amount recorded in Accounts 7370 and 7360.99 is reversed, and the actual SFAS-106 amount is recorded as operating expense in Account 6728, Other General and Administrative Expense. Total SFAS-106 charges recognized as operating expense in 1994 for NYT

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<sup>32</sup> Meaningful comparisons cannot be drawn between SFAS-112 costs and SFAS-106 costs because of the very different types of benefits involved. However, see Appendix H.2 for SFAS-112 costs and the associated valuation methods.

were \$63.9 million for management employees and \$166.7 million for nonmanagement employees. For NET, these figures were \$41.8 million and \$43.0 million, respectively. Amounts reversed from Account 7370 during 1994 for NYT were \$38.2 million for management employees and \$36.2 million for nonmanagement employees. Amounts reversed from Account 7360.99 during 1994 for NET were \$25.9 million for management employees and \$11.3 million for nonmanagement employees. The difference between the amounts actually incurred and the related amounts previously accrued (and now reversed) is primarily due to the offering of a special retirement incentive which added six years to age and six years to service for determining benefit eligibility, enabling greater number of employees to retire and leave the business with full postemployment benefits.

**Designation Order ¶ 28:**

Regarding the issue of any double-counting see response to Designation Order ¶ 24, including Appendix H.1.

**Designation Order ¶ 29:**

For NYT, average total compensation per employee is \$75,373 for management employees and \$60,454 for nonmanagement employees. For NET, these figures are \$62,592 and \$53,188, respectively. Of these amounts for NYT, OPEBs represent 19.2% of total compensation costs for management employees and 11.7% for nonmanagement employees. The respective figures for NET are 15.3% and 12.9%. Total compensation includes wages, salaries, special payments (overtime, team awards, etc.), and benefits (including medical, dental, company savings plan contributions, disability, pensions and OPEBs). These amounts were derived by dividing 1994 annual costs by the average monthly force during 1994.

**Designation Order ¶ 30:**

The basic premise in Designation Order ¶ 30 that OPEB accruals may never be paid is not applicable on a going-concern basis. That is, as long as a LEC continues to exist, accrued OPEB benefits will be paid. The only time such benefits will not be paid is if the benefit plan is terminated (settled) or curtailed. For LECs this seems highly unlikely, as such action would have to be negotiated with the unions and would be otherwise disruptive and problematical. Furthermore, depending on the terms of the settlement or curtailment, the transaction could result in a possible loss as well as a possible gain. Over time, recovery of retiree benefit costs has been less than amounts paid to or on behalf of retirees (see responses under Issue A herein). Also, on a going forward basis, the Commission has promulgated a stricter test generally denying exogenous treatment of OPEB costs absent a demonstrated impact on cash flow (see Price Cap Review Order). Given these developments, it seems likely that LECs will not recover more than their cash payments to retirees, and over time will recover less than that amount.

**III. CONCLUSION**

NYNEX has fully justified its exogenous adjustments for additional OPEB costs arising from implementation of SFAS-106, and has met the legal standard for exogenous cost treatment as set forth in the D.C. Circuit's OPEB Decision. The Bureau should

promptly conclude this investigation by upholding and making permanent the NYNEX  
OPEB tariffs under investigation herein.

Respectfully submitted,

New England Telephone and  
Telegraph Company

New York Telephone Company

By: /s/Campbell L. Ayling  
Campbell L. Ayling

1111 Westchester Avenue  
White Plains, NY 10604  
914/644-6306

Their Attorney

Dated: August 14, 1995  
93-193.doc

## **Appendix A.1**

Appendix A.1

PAY-AS-YOU-GO POSTRETIREMENT EXPENSES

MILLIONS OF DOLLARS

	1990/1991 ACCESS FILING	1991 ACTUAL	1992 ACTUAL	1993 ACTUAL	1994 ACTUAL
NEW ENGLAND	53.2	50.8	63.7	67.2	75.4
NEW YORK	114.8	101.1	131.6	142.0	167.1
NYNEX TELEPHONE COMPANIE	168.0	151.9	195.3	209.2	242.5

## **Appendix A.2**

# FORM 10-K

## SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

(Mark one)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 1991

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-1150

## New England Telephone and Telegraph Company

A New York Corporation

I.R.S. Employer

Identification Number 04-1664340

125 High Street, Boston, Massachusetts 02110

Telephone Number (617) 743-9800

Securities registered pursuant to Section 12(b) of the Act: None.

Securities registered pursuant to Section 12(g) of the Act: None.

THE REGISTRANT, A WHOLLY-OWNED SUBSIDIARY OF NYNEX CORPORATION, MEETS THE CONDITIONS SET FORTH IN GENERAL INSTRUCTION J(1)(a) AND (b) OF FORM 10-K AND IS THEREFORE FILING THIS FORM WITH REDUCED DISCLOSURE FORMAT PURSUANT TO GENERAL INSTRUCTION J(2).

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. \*

\*Not applicable

DOCUMENTS INCORPORATED BY REFERENCE:

None.

NOTES TO FINANCIAL STATEMENTS (continued)

(see Organizational Restructuring included in Management's Discussion and Analysis of Results of Operations). Based on historical precedent, management anticipates future recovery of these deferred costs through the rate-making process.

In January 1992, the Company announced that management employees who leave the Company under the Force Management Plan during 1992 and are at least 21 years old with at least one year of service as of December 26, 1991 may elect to receive their NYNEX Management Pension Plan benefit in a lump sum distribution, or as a monthly annuity beginning when they leave the Company. In addition, management employees who are not eligible for a service pension retain the existing option of waiting until retirement age before receiving their pension benefit.

During 1990, the projected benefit obligation increased by \$8.3 million for the 1989 early retirement plans for management and nonmanagement employees, of which \$1.7 million was expensed and \$6.6 million was deferred. Based on historical precedent, management anticipates future recovery of these deferred costs through the rate-making process.

Postretirement Benefits Other Than Pensions

The Company provides certain health care and life insurance benefits for retired employees and their families. Substantially all of the Company's employees may become eligible for these benefits if they reach pension eligibility while working for the Company. Most of these benefits are provided through an insurance company whose premiums are funded as benefits are paid. Total costs of providing benefits for retired employees and their families were \$45.7, \$39.6 and \$33.2 million in 1991, 1990 and 1989, respectively.

In September 1991, under the provisions of the Omnibus Budget Reconciliation Act of 1990, a portion of excess pension assets totalling \$133 million was transferred from the two NYNEX pension plans to health care benefit accounts established within the pension plans for reimbursement of retiree health care benefits paid by NYNEX during the 1990 tax year, of which \$38 million represent benefits paid by the Company. NYNEX then established and made contributions to two separate Voluntary Employees' Beneficiary Association Trusts ("VEBA Trusts"), one for management and the other for nonmanagement, in amounts equal to the excess pension assets transferred. The VEBA Trusts were established to begin prefunding postretirement health care benefits. In December 1991, additional excess pension assets totalling \$148 million were transferred from the NYNEX pension plans to health care benefit accounts within the pension plans for reimbursement of retiree health care benefits paid by NYNEX during the 1991 tax year, of which \$42 million represent benefits paid by the Company. NYNEX also made contributions to the VEBA Trusts in amounts equal to the excess pension assets transferred in December. The transfer of the excess pension assets and the establishment of the VEBA Trusts had an insignificant impact on the Company's results of operations and financial position.

NOTES TO FINANCIAL STATEMENTS (continued)

In December 1990, the FASB issued Statement of Financial Accounting Standards No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" ("Statement No. 106"). Adoption of this standard is required by the Company no later than January 1, 1993. Statement No. 106 will change the current practice of accounting for nonpension retirement benefits from recognizing costs as benefits are paid to accruing the expected costs of providing these benefits during an employee's working life. Upon adoption of Statement No. 106, companies will be required to recognize the liability to current and retired employees either immediately or over a period not to exceed 20 years.

Management is currently evaluating the financial impact of this accounting standard. Initial estimates indicate that the related annual expense, assuming 20 year amortization, will increase by approximately two to three times above the projected 1993 expense levels, and the initial unfunded accumulated postretirement benefit obligation will be in the range of approximately \$0.9 billion to \$1.3 billion at adoption. Management is unable to predict with any certainty what effects the future regulatory environment may have on the ultimate financial impact of the new standard.

(D) Common Stock

In 1991, the equity capital of the Company increased \$75 million through an equity investment made by NYNEX. In 1990, the equity capital of the Company increased \$98.8 million due to a \$75 million equity investment made by NYNEX and \$23.8 million from the transfer of ownership of NYNEX Material Enterprises Company and NYNEX Systems Marketing (New England) Company.

(E) Long-term Debt

Interest rates and maturities on long-term debt outstanding at December 31, 1991 and 1990 are as follows:

Dollars in Millions	Interest Rates	Maturities	December 31,	
			1991	1990
Debentures: . . . . .	4% - 8 1/5%	1993-2005	\$ 920.0	\$ 920.0
	6 1/8% - 9 1/2%	2006-2010	655.0	655.0
	9%	2026-2031	450.0	350.0
Notes: . . . . .	9 1/2%	1992	-	200.0
	8 5/8%	2001	100.0	-
Capital Leases . . . . .			5.0	7.5
Unamortized discount - net . . . . .			(17.2)	(15.1)
Total Long-term debt . . . . .			<u>\$2,112.8</u>	<u>\$2,117.4</u>

# FORM 10-K

## SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

(Mark one)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 1991

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-3435

### New York Telephone Company

A New York Corporation

I.R.S. Employer  
Identification Number 13-5275510

1095 Avenue of the Americas, New York, New York 10036  
Telephone Number (212) 395-2121

Securities registered pursuant to Section 12(b) of the Act: None.

Securities registered pursuant to Section 12(g) of the Act: None.

THE REGISTRANT, A WHOLLY-OWNED SUBSIDIARY OF NYNEX CORPORATION, MEETS THE CONDITIONS SET FORTH IN GENERAL INSTRUCTION J(1)(a) AND (b) OF FORM 10-K AND IS THEREFORE FILING THIS FORM WITH REDUCED DISCLOSURE FORMAT PURSUANT TO GENERAL INSTRUCTION J(2).

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]\*

\*Not applicable

#### DOCUMENTS INCORPORATED BY REFERENCE:

None.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Postretirement Benefits Other Than Pensions

The Company provides certain health care and life insurance benefits for retired employees and their families. Substantially all of the Company's employees may become eligible for these benefits if they reach pension eligibility while working for the Company. Most of these benefits are provided through an insurance company whose premiums are funded as benefits are paid. Total costs of providing benefits for approximately 39,000 retired employees and their families were \$91.6, \$68.1 and \$80.9 million in 1991, 1990 and 1989, respectively.

In September 1991, under the provisions of the Omnibus Budget Reconciliation Act of 1990, a portion of excess pension assets totaling \$133 million were transferred from the two NYNEX pension plans to health care benefit accounts established within the respective pension plans. The funds were used for reimbursement of retiree health care benefits paid by NYNEX during the 1990 tax year, of which \$69 million represented benefits paid by the Company. NYNEX then established and made contributions to two separate Voluntary Employees' Beneficiary Association Trusts ("VEBA Trusts"), one for management and the other for nonmanagement, in amounts equal to the excess pension assets transferred. The VEBA Trusts were established to begin prefunding postretirement health care benefits. In December 1991, additional excess pension assets totaling \$148 million were transferred from the NYNEX pension plans to health care benefit accounts within the pension plans. The funds were used for reimbursement of retiree health care benefits paid by NYNEX during the 1991 tax year, of which \$76 million represented benefits paid by the Company. NYNEX made contributions to the VEBA Trusts in amounts equal to the excess pension assets transferred in December. The transfer of excess pension assets and the establishment of the VEBA Trusts had an insignificant impact on the Company's results of operations and financial position.

In December 1990, the FASB issued Statement of Financial Accounting Standards No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" ("Statement No. 106"). The Company must adopt this standard no later than January 1, 1993. Statement No. 106 will change the current practice of accounting for nonpension retirement benefits from recognizing costs as benefits are paid to accruing the expected cost of providing these benefits during an employee's working life. Upon adoption of Statement No. 106, companies will be required to recognize the liability to current and retired employees either immediately or over a period not to exceed 20 years.

Management is currently evaluating the financial accounting impact of this accounting standard. Initial estimates indicate that the related annual expense, assuming 20 year amortization, will increase by approximately two to three times above the projected 1993 expense levels, and the initial unfunded accumulated postretirement benefit obligation will be in the range of approximately \$1.8 billion to \$2.7 billion at adoption. Management is unable to predict with any certainty what effects the future regulatory environment may have on the ultimate financial impact of the new standard.



WE HELP PEOPLE COMMUNICATE

•  
NYNEX  
Corporation

1991  
Annual Report

LINE

*Financial/Real Estate*

Financial/Real Estate operating income decreased \$48.7 million, or 64.3%, in 1991, and increased \$24.8 million, or 48.7%, in 1990. The 1991 decrease is due to the phase out of real estate development work and related restructuring charges (see Organizational Restructuring), partially offset by the increase in revenues from leveraged leases. NYNEX Properties Company is being phased out pursuant to a 1991 reorganization plan. In 1990, the increase was principally due to growth in revenues.

*Other Diversified Operations*

The operating loss from Other Diversified Operations decreased \$204.7 million, or 54.7%, in 1991, and increased \$253.1 million, or 209.3%, in 1990. The 1991 decrease is due to the sale of the NYNEX Business Centers and the reorganization of NBISC's Office Systems Division, partially offset by restructuring charges recorded in 1991. In 1990, approximately \$288 million of pretax charges were recorded. (See Organizational Restructuring.) Operating results from professional services, systems and software sales were negatively affected by market weakness in the financial and consulting services sectors. In addition, increased expenses were incurred for expansion in international markets and for various start-up businesses. Computer hardware and office automation operations reduced operating losses by lowering expenses.

**Other income (expense)-net**

(in millions)	1991	1990	1989
		\$ 2.4	\$ 8.2

The decrease in 1991 was principally due to \$71 million of restructuring charges, primarily at NYNEX's subsidiaries other than the telecommunications group to establish reserves against certain investments (see Organizational Restructuring). The allowance for funds used during construction decreased \$14 million at the telephone subsidiaries resulting from a lower average balance in plant under construction. In 1990, interest income decreased \$17 million and minority interest expenses increased \$13 million, partially offset by a decrease in other expenses resulting from one-time charges recorded by the telephone subsidiaries in 1989 (see Organizational Restructuring).

**Interest expense**

(in millions)	1991	1990	1989
		\$ 700.0	\$ 691.4

Average debt levels increased from \$8.2 billion in 1990 to \$8.8 billion in 1991, due to new issuances of \$400 million at the telephone subsidiaries, \$94 million in medium-term notes at NYNEX Credit Company and \$31 million at NYNEX Capital Funding Company (see Capital Resources and Liquidity), partially offset by a decrease in average interest rates from 8.2% in 1990 to 8.0% in 1991. In 1990,

interest expense increased due to interest on the \$450 million in debentures issued in connection with the leveraged employee stock ownership plan ("LESOP") (see Note G to the Consolidated Financial Statements) and an increase in average debt levels from \$7.9 billion in 1989 to \$8.2 billion in 1990, partially offset by a decrease in average interest rates from 8.4% in 1989 to 8.2% in 1990.

**Income taxes**

(in millions)	1991	1990	1989
		\$ 368.3	\$ 265.9

Pretax income decreased \$524.8 million in 1991, and there was an increase in the reversal of excess accumulated deferred taxes from previous years that had been deferred at a tax rate higher than the 1991 statutory rate. In 1990, income taxes increased principally due to higher pretax income and a decrease in amortization of investment tax credits, partially offset by an increase in the reversal of excess accumulated deferred income taxes from previous years that had been deferred at a tax rate higher than the 1990 statutory rate and the tax effect of the dividends on LESOP shares. A reconciliation of the effective tax rate with the federal statutory rate is contained in Note B to the Consolidated Financial Statements.

**Effects of a Change in Intercompany Billing Policy**

In January 1991, Telesector Resources changed its method of billing for procurement services provided to the NYNEX subsidiaries and began billing them for materials and supplies at vendor invoice prices. All other costs related to procurement services, including a return on investment, are separately identified and billed to the NYNEX subsidiaries at prices for products and services that are intended to recover Telesector Resources' fully allocated costs, including a return on investment. In 1991, as a result of this change, the telephone subsidiaries experienced a \$47 million increase in operating expenses for procurement services that previously would have been capitalized.

For New York Telephone, the billing policy change is subject to NYSPSC approval. As an interim step, New York Telephone has petitioned the NYSPSC for permission to impute revenues for future intrastate recovery equal to the incremental revenue requirement impact of expensing the portion of procurement costs that were formerly capitalized.

**Anticipated Effects of Statement of Financial Accounting Standards No. 106 "Employers' Accounting for Postretirement Benefits Other Than Pensions"**

In December 1990, the Financial Accounting Standards Board (the "FASB") issued Statement of Financial Accounting Standards No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" ("Statement No. 106"). Adoption of this standard is required by NYNEX no later than January 1, 1993. Statement No. 106 will change the current

practice of accounting for nonpension retirement benefits from recognizing costs as benefits are paid to accruing the expected cost of providing these benefits during an employee's working life. Upon adoption of Statement No. 106, companies will be required to recognize the liability to current and retired employees either immediately or over a period not to exceed 20 years.

Management is currently evaluating the financial accounting impact of this accounting standard. Initial estimates indicate that the related annual expense, assuming 20-year amortization, will increase by approximately two to three times above the projected 1993 expense levels, and the initial unfunded accumulated postretirement benefit obligation will be in the range of approximately \$3.5 billion to \$5.0 billion at adoption. A substantial portion of the increase would be related to the telephone subsidiaries, which are subject to rate regulation. Management is unable to predict with any certainty what effects the future regulatory environment may have on the ultimate financial impact of the new standard.

#### **Anticipated Effects of Statement of Financial Accounting Standards No. 109 "Accounting for Income Taxes"**

In February 1992, the FASB issued Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" ("Statement No. 109"), requiring implementation by NYNEX no later than January 1, 1993. Statement No. 109 supersedes Statement of Financial Accounting Standards No. 96, which was adopted by NYNEX effective January 1, 1988. The effect of Statement No. 109 on NYNEX's results of operations and financial position has not yet been determined.

#### **Capital Resources and Liquidity**

Cash provided by operations was \$3.2, \$2.9 and \$3.5 billion in 1991, 1990 and 1989, respectively. The reduction in cash provided by operations in 1990 was partially due to payments related to the work stoppage. Management anticipates cash provided by operations in 1992 to continue in the range attained in recent years.

NYNEX continued its capital expenditure program in 1991 designed to meet the expanding needs for telecommunications services by upgrading and extending the existing telecommunications network. Capital expenditures were \$2.5 billion in 1991 and are projected to remain at a comparable level in 1992. NYNEX funded capital expenditures primarily through cash generated from operations.

NYNEX's commercial paper borrowings are supported by \$1.6 billion of lines of credit with domestic and international banks. During 1991, the level of commercial paper outstanding decreased \$314 million. This was primarily due to \$400 million in long-term debt issuances at the telephone subsidiaries. In 1990, NYNEX entered into interest rate swaps to protect against exposure to interest rate volatility associated with

certain of its commercial paper borrowings through 1997. NYNEX has also utilized interest rate instruments designed to take advantage of decreasing short-term rates.

During 1991, New York Telephone issued \$200 million of its Forty Year 9 $\frac{3}{4}$ % Debentures due July 15, 2031. New England Telephone issued \$100 million of its Ten Year 8 $\frac{3}{4}$ % Notes due August 1, 2001 and \$100 million of its Forty Year 9% Debentures due August 1, 2031. Net proceeds of these offerings were used to repay short-term debt and for general corporate purposes. In October 1992, \$300 million of New York Telephone's Five Year 9 $\frac{3}{4}$ % Notes and \$200 million of New England Telephone's Five Year 9 $\frac{1}{2}$ % Notes will mature. The telephone subsidiaries may refinance this debt with short-term borrowings or long-term debt. New York Telephone and New England Telephone each have an additional \$300 million of unissued debt securities registered with the Securities and Exchange Commission (the "SEC").

NYNEX Capital Funding Company issued \$31 million of medium-term debt in 1991 used to finance real-estate projects. NYNEX Capital Funding Company has an additional \$209 million in unissued medium-term debt securities registered with the SEC. Additionally in 1991, NYNEX Credit Company issued \$94 million of medium-term notes to finance investments in certain assets.

Beginning in 1990 and throughout 1991, NYNEX issued new shares of common stock associated with employee savings plans and the Dividend Reinvestment and Stock Purchase Plan. This increased the equity component of NYNEX's capital structure by approximately \$260 million in 1991 and \$130 million in 1990. At December 31, 1991, NYNEX's capital structure consisted of 47.3% debt and 52.7% equity, compared with 47.2% debt and 52.8% equity at December 31, 1990.

In 1991, certain independent bond rating agencies lowered their rating on the debentures of New England Telephone. The rating of NYNEX and New York Telephone debentures were reaffirmed at current levels. Although Management cannot predict that the bond ratings will remain at current levels, Management believes that the bond ratings of NYNEX, New York Telephone and New England Telephone will remain at a level that is indicative of strong credit support for timely principal and interest payments in the foreseeable future.

The following table sets forth the Plans' funded status and amounts recognized in the consolidated balance sheets:

In millions	December 31,	
	1991	1990
Actuarial present value of accumulated benefit obligation, including vested benefits of \$9,514 and \$8,821, respectively	\$10,277	\$ 9,450
Plan assets at fair value, primarily listed stock, corporate and governmental debt and real estate	\$14,087	\$12,510
Less: Actuarial present value of projected benefit obligation	11,882	10,818
Excess of plan assets over projected benefit obligation	2,205	1,692
Unrecognized prior service cost		(33)
Unrecognized net gain	(2,000)	(1,426)
Unrecognized transition asset	(600)	(729)
Accrued pension cost	\$ (7,277)	\$ (496)

The assumptions used to determine the projected benefit obligation as of December 31, 1991 and 1990 include a discount rate of 8.5% and an increase of 4.0% to 5.5% in future compensation levels, in each year. The expected long-term rate of return on pension fund assets used to calculate pension expense was 8.5% in 1991 and 1990 and 8% in 1989. From time to time, the Plans have been amended to increase the level of plan benefits. The actuarial projections included herein anticipate similar action in the future.

In April 1991, NYNEX offered a voluntary management early retirement program. The impact on the projected benefit obligation was not significant. In September 1991, as part of agreements reached between NYNEX and its unions extending collective bargaining agreements through August 5, 1995, NYNEX amended its nonmanagement pension plan to provide an early retirement incentive, which increased the projected benefit obligation by \$491.8 million, of which \$150.0 million was expensed and \$341.8 million was deferred. The expense associated with the nonmanagement early retirement incentive was included in the charges for force reduction programs in the fourth quarter of 1991 (see Organizational Restructuring included in Management's Discussion and Analysis of Financial Condition and Results of Operations). Management anticipates future recovery of these deferred costs through the rate-making process.

In January 1992, NYNEX announced that management employees who leave NYNEX under the Force Management Plan during 1992 and are at least 21 years old with at least one year of service as of December 26, 1991 may elect to receive their NYNEX Management Pension Plan benefit in a lump sum distribution, or as a monthly annu-

ity beginning when they leave NYNEX. In addition, employees who are not yet eligible for a service pension retain the existing option of waiting until retirement age before receiving their pension benefit.

During 1990, the projected benefit obligation increased by \$128.5 million for the 1989 early retirement plans for management and nonmanagement employees, of which \$73.2 million was expensed and \$55.3 million was deferred. Management anticipates future recovery of these deferred costs through the rate-making process.

#### Postretirement Benefits Other Than Pensions

NYNEX provides certain health care and life insurance benefits for retired employees and their families. Substantially all of NYNEX's employees may become eligible for these benefits if they reach pension eligibility while working for NYNEX. Most of the benefits are provided through an insurance company whose premiums are funded as benefits are paid. Total costs of providing benefits for retired employees and their families were \$153.9, \$133.8 and \$117.5 million in 1991, 1990 and 1989, respectively.

In September 1991, under the provisions of the Omnibus Budget Reconciliation Act of 1990, a portion of excess pension assets totalling \$133 million were transferred from the two NYNEX pension plans to health care benefit accounts established within the respective pension plans for reimbursement of retiree health care benefits paid by NYNEX during the 1990 tax year. NYNEX then established and made contributions to two separate Voluntary Employees' Beneficiary Association Trusts ("VEBA Trusts"), one for management and the other for nonmanagement, in amounts equal to the excess pension assets transferred. The VEBA Trusts were established to begin prefunding postretirement health care benefits. In December 1991, additional excess pension assets totalling \$148 million were transferred from the NYNEX pension plans to health care benefit accounts within the pension plans for reimbursement of 1991 retiree health care benefits. NYNEX also made contributions to the VEBA Trusts in amounts equal to the excess pension assets transferred in December 1991. The transfer of the excess pension assets and the establishment of the VEBA Trusts had an insignificant impact on NYNEX's results of operations and financial position.

In December 1990, the FASB issued Statement of Financial Accounting Standards No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" ("Statement No. 106"). Adoption of this standard is required by NYNEX no later than January 1, 1993. Statement No. 106 will change the current practice of accounting for

nonpension retirement benefits from recognizing costs as benefits are paid to accruing the expected cost of providing these benefits during an employee's working life. Upon adoption of Statement No. 106, companies will be required to recognize the liability to current and retired employees either immediately or over a period not to exceed 20 years.

Management is currently evaluating the financial accounting impact of this accounting standard. Initial estimates indicate that the related annual expense, assuming 20-year

amortization, will increase by approximately two to three times above the projected 1993 expense levels, and the initial unfunded accumulated postretirement benefit obligation will be in the range of approximately \$3.5 billion to \$5.0 billion at adoption. A substantial portion of the increase would be related to the telephone subsidiaries, which are subject to rate regulation. Management is unable to predict with any certainty what effects the future regulatory environment may have on the ultimate financial impact of the new standard.

#### D. Property, Plant and Equipment—Net

The components of property, plant and equipment—net are as follows:

In millions	December 31,	
	1993	1992
Buildings	\$ 2,574.0	\$ 2,405.8
Outside aerial and underground facilities	11,428.6	10,998.5
Other telephone equipment	14,988.4	14,816.9
Furniture and office equipment	1,288.4	1,108.7
Capital leases	108.9	254.7
Total depreciable property, plant and equipment	30,388.3	29,584.6
Less: accumulated depreciation	11,728.6	10,786.5
	18,659.7	18,798.1
Add: Land		148.1
Plant under construction	981.1	782.7
Total property, plant and equipment—net	\$ 19,640.8	\$ 19,728.9

#### E. Long-term Debt

Interest rates and maturities on long-term debt outstanding are as follows:

In millions	Interest Rates	Maturities	December 31,	
			1993	1992
Refunding Mortgage Bonds:	3 1/2%—7 1/2%	1993—2006		\$ 740.0
	6 1/2%—9%	2007—2014		1,075.0
Debentures:	4%—8 1/2%	1993—2006		670.0
	6 1/2%—8 1/2%	2007—2018		1,805.0
	8 1/2%—9 1/2%	2023—2031		1,250.0
	8 1/2%—9 1/2%	2010		150.0
Notes	7 1/2%	2029		350.0
Other	6 1/2%—10 1/2%	1993—2008		765.4
Unamortized discount—net				(46.3)
Total long-term debt			\$ 6,945.4	\$ 6,945.4

FORM 10-K

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

(Mark one)  
 (X)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 1992

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-1150

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

A New York  
Corporation

I.R.S. Employer  
Identification No. 04-1664340

125 High Street, Boston, Massachusetts 02110

Telephone Number (617) 743-9800

Securities registered pursuant to Section 12(o) of the Act: None.

Securities registered pursuant to Section 12(g) of the Act: None.

THE REGISTRANT, A WHOLLY-OWNED SUBSIDIARY OF NYNEX CORPORATION, MEETS THE CONDITIONS SET FORTH IN GENERAL INSTRUCTION J(1)(a) AND (b) OF FORM 10-K AND IS THEREFORE FILING THIS FORM WITH REDUCED DISCLOSURE FORMAT PURSUANT TO GENERAL INSTRUCTION J(2).

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  
Yes..X..No.....

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Not applicable

DOCUMENTS INCORPORATED BY REFERENCE:

NOTES TO FINANCIAL STATEMENTS (continued)

In April 1991, the Company offered a voluntary management early retirement program. The impact on the projected benefit obligation was not significant. In October 1991, as part of agreements ratified by the Company and its unions extending collective bargaining agreements until August 5, 1995 (the Collective Bargaining Agreement in Management's Discussion and Analysis of Results of Operations), NYNEX amended its nonmanagement pension plan to provide an early retirement incentive, which increased the projected benefit obligation by \$113.4 million, of which \$34.2 million was expensed and \$79.2 million was deferred. The expense associated with the nonmanagement early retirement incentive was included in the charges for force reduction programs in the fourth quarter of 1991 (see Organizational Restructuring included in Management's Discussion and Analysis of Results of Operations).

The Company has discussed with its regulators a plan to recover deferred pension costs through the rate-making process (see Postretirement Benefits Other Than Pensions below).

Postretirement Benefits Other Than Pensions

The Company provides certain health care and life insurance benefits for retired employees and their families. Substantially all of the Company's employees may become eligible for these benefits if they reach pension eligibility while working for the Company. Total costs of providing benefits for retired employees and their families were \$63.7, \$50.8 and \$44.2 million in 1992, 1991 and 1990, respectively.

During 1992 and 1991, under the provisions of the Omnibus Budget Reconciliation Act of 1990, a portion of excess pension assets, totalling \$205 and \$281 million, respectively, was transferred from the two NYNEX pension plans to health care benefit accounts established within the respective pension plans. The funds were used for reimbursement of retiree health care benefits paid by NYNEX during the 1992, 1991 and 1990 tax years, of which \$58, \$42 and \$38 million, respectively, represented benefits paid by the Company. In 1991, NYNEX established two separate Voluntary Employees' Beneficiary Association Trusts ("VEBA Trusts"), one for management and the other for nonmanagement, to begin prefunding postretirement health care benefits. In 1992 and 1991, amounts equal to the excess pension assets transferred were contributed to the VEBA Trusts. The assets in the VEBA Trusts consist primarily of equity securities and fixed income securities. The transfer of excess pension assets and the establishment of the VEBA Trusts had an insignificant impact on the Company's results of operations and financial position.

The Company will adopt Statement of Financial Accounting Standards No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" ("Statement No. 106") effective January 1, 1993. Statement No. 106 will change the current practice of accounting for postretirement benefits from recognizing costs as benefits are paid to accruing the expected cost of providing these benefits during an employee's working life. Upon adoption of Statement No. 106, the Company intends to recognize the transition obligation for retired employees and the earned portion for active employees over a 20-year period. It is estimated that 1993 annual cost under

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## NOTES TO FINANCIAL STATEMENTS (continued)

Statement No. 106 will be \$135 million, an incremental cost increase of approximately \$65 million over the current methodology, and the initial unfunded accumulated postretirement benefit obligation will be \$850 million. Amortization of the initial unfunded transition obligation, together with the ongoing annual expense recognized under Statement No. 106 in excess of costs recognized under the current methodology, will be offset by the effect of actuarial assumption changes made under Statement of Financial Accounting Standards No. 87, "Employers' Accounting for Pensions" ("Statement No. 87").

The Company has discussed an accounting plan with regulatory commissions in each of the states in which it operates for the intrastate regulatory accounting and rate-making treatment of pensions and other postretirement benefits. The accounting plan allows for the immediate adoption of Statement No. 106 and Statement No. 87 on a revenue requirement neutral basis, provides for the amortization of existing deferred pension costs within a ten-year period and eliminates the need for additional deferrals of Statement No. 87 and Statement No. 106 costs. This plan will be implemented for the States of Massachusetts and Vermont, but its status in the States of Maine, New Hampshire and Rhode Island is still pending. With respect to interstate treatment, the FCC released an order in January 1993 stating that costs recognized under Statement No. 106 are not exogenous costs and, therefore, do not warrant an upward rate adjustment under price caps at this time. Management is unable to predict with any certainty what effects the future regulatory environment may have on the ultimate financial impact of the new standard.

## Postemployment Benefits

In November 1992, the FASB issued Statement of Financial Accounting Standards No. 112, "Employers' Accounting for Postemployment Benefits" ("Statement No. 112"). The Company is required to adopt this standard no later than January 1, 1994. Statement No. 112 applies to postemployment benefits provided to former or inactive employees, their beneficiaries, and covered dependents after employment but before retirement. Statement No. 112 will change the Company's current method of accounting for postemployment benefits from a combination of recognizing costs as benefits are paid and accruing them upon termination of employment to accruing the expected costs of providing these benefits if certain conditions are met.

In the year of adoption, the initial effect of Statement No. 112 should be recognized immediately and reported as an accounting change. Management is currently evaluating the financial impact of this accounting standard; the effect of Statement No. 112 on the Company's results of operations and financial position has not yet been determined. It has not yet been determined whether the regulatory authorities will permit amortization of the transition amount and whether the transition amount will be accounted for in operating expenses. Management is unable to predict with any certainty what effects the future regulatory environment may have on the financial impact of this standard.

FORM 10-K

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

(Mark one)  
 ( X )

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 1992

OR

( )

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-3435

NEW YORK TELEPHONE COMPANY

A New York  
Corporation

I.R.S. Employer  
Identification No. 13-5275510

1095 Avenue of the Americas, New York, New York 10036

Telephone Number (212) 395-2121

Securities registered pursuant to Section 12(b) of the Act: None.

Securities registered pursuant to Section 12(g) of the Act: None.

THE REGISTRANT, A WHOLLY-OWNED SUBSIDIARY OF NYNEX CORPORATION, MEETS THE  
CONDITIONS SET FORTH IN GENERAL INSTRUCTION J(1)(a) AND (b) OF FORM 10-K AND  
IS THEREFORE FILING THIS FORM WITH REDUCED DISCLOSURE FORMAT PURSUANT TO  
GENERAL INSTRUCTION J(2).

Indicate by check mark whether the Registrant (1) has filed all reports  
required to be filed by Section 13 or 15(d) of the Securities Exchange Act of  
1934 during the preceding 12 months (or for such shorter period that the  
Registrant was required to file such reports), and (2) has been subject to  
such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to  
Item 405 of Regulation S-K is not contained herein, and will not be  
contained, to the best of Registrant's knowledge, in definitive proxy or  
information statements incorporated by reference in Part III of this  
Form 10-K or any amendment to this Form 10-K.  \*

\*Not applicable

DOCUMENTS INCORPORATED BY REFERENCE:

None.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## Postretirement Benefits Other Than Pensions

The Company provides certain health care and life insurance benefits for retired employees and their families. Substantially all of the Company's employees may become eligible for these benefits if they reach pension eligibility while working for the Company. Total costs of providing benefits for approximately 39,900 retired employees and their families were \$119.6, \$91.6 and \$68.1 million in 1992, 1991 and 1990, respectively.

During 1992 and 1991, under the provisions of the Omnibus Budget Reconciliation Act of 1990, a portion of excess pension assets, totalling \$205 million and \$281 million, respectively, were transferred from the two NYNEX pension plans to health care benefit accounts established within the respective pension plans. The funds were used for reimbursement of retiree health care benefits paid by NYNEX during the 1992, 1991, and 1990 tax years, of which \$108 million, \$76 million and \$69 million, respectively, represented benefits paid by the Company. In 1991, NYNEX established two separate Voluntary Employees' Beneficiary Association Trusts ("VEBA Trusts"), one for management and the other for nonmanagement, and contributed amounts equal to the excess pension assets transferred. The VEBA trusts were established to begin prefunding postretirement health care benefits. The assets in the VEBA trusts consist primarily of equity securities and fixed income securities. The transfer of excess pension assets and the establishment of the VEBA Trusts had an insignificant impact on the Company's results of operations and financial position.

The Company will adopt Statement of Financial Accounting Standards No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions" ("Statement No. 106") effective January 1, 1993. Statement No. 106 will change the current practice of accounting for postretirement benefits from recognizing costs as benefits are paid to accruing the expected cost of providing these benefits during an employee's working life. Upon adoption of Statement No. 106, the Company intends to recognize the transition obligation for retired employees and the earned portion for active employees over a 20-year period. It is estimated that 1993 annual cost under Statement No. 106 will be \$250 million and the initial unfunded accumulated postretirement benefit obligation will be \$1.6 billion. Amortization of the initial unfunded transition obligation, together with the ongoing annual expense recognized under Statement No. 106 in excess of costs recognized under the current methodology, will be offset by actuarial assumption charges made under Statement of Financial Accounting Standards No. 87, "Employers' Accounting for Pensions" ("Statement No. 87").

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## Postretirement benefits other Than Pensions (Continued)

In December 18, 1992, the Company submitted an accounting plan to the NYSPSC for the regulatory accounting and rate making treatment of pensions and other postretirement benefits. The accounting plan allows for the immediate adoption of Statement No. 106 and Statement No. 87 on a revenue requirement neutral basis, provides for the amortization of existing deferred pension costs within a ten-year period and eliminates the need for additional deferrals of Statement No. 106 and Statement No. 87 costs. This matter is pending. With respect to interstate treatment, the FCC released an order in January 1993 stating that costs recognized under Statement No. 106 are not exogenous costs and, therefore, do not warrant an upward rate adjustment under price caps at this time. Management is unable to predict with any certainty what effects the future regulatory environment may have on the ultimate financial impact of the new standard.

## Postemployment Benefits

In November 1992, the FASB issued Statement of Financial Accounting Standards No. 112, "Employers' Accounting for Postemployment Benefits" ("Statement No. 112"). The Company is required to adopt this standard no later than January 1, 1994. Statement No. 112 applies to postemployment benefits provided to former or inactive employees, their beneficiaries, and covered dependents after employment but before retirement. Statement No. 112 will change the Company's current method of accounting for postemployment benefits from a combination of recognizing costs as benefits are paid and accruing them upon termination of employment to accruing the expected costs of providing these benefits if certain conditions are met.

In the year of adoption the initial effect of Statement No. 112 should be recognized immediately and reported as an accounting change. Management is currently evaluating the financial impact of this accounting standard; the effect of Statement 112 on the Company's results of operations and financial position has not yet been determined. It has not yet been determined whether the regulatory authorities will permit amortization of the transition amount and whether the transition amount will be accounted for in operating expenses. Management is unable to predict with any certainty what effects the future regulatory environment may have on the financial impact of this standard.

## **Appendix A.3**

# **RETIREE HEALTH PLANS (PRE-65)**

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<b>Feature</b>	<b>Management Plan *</b>	<b>Non-Management Plan</b>
<ul style="list-style-type: none"> <li>• Type Of Plan</li> <li>– Comprehensive options</li> </ul>	<ul style="list-style-type: none"> <li>• Active comprehensive Options                             <ul style="list-style-type: none"> <li>– \$4,000/\$8,000 deductible, 70% coinsurance,</li> <li>– \$7,000/\$10,000 stop-loss</li> <li>– \$600/\$1,200 deductible, 80% coinsurance,</li> <li>– \$1,800/\$3,000 stop-loss</li> </ul> </li> <li>– \$350/&amp;\$700 deductible, 80% coinsurance,</li> <li>– \$1,400/\$2,800 stop-loss</li> </ul>	<ul style="list-style-type: none"> <li>• Active basic plus major medical</li> </ul>

\* Applies to Management employees with Pension Effective Date on or after 7/2/85; all other Management retirees are covered under the provisions shown for the Non-Management Plan.

# **RETIREE HEALTH PLANS (PRE-65)**

---

<b>Feature</b>	<b>Management Plan *</b>	<b>Non-Management Plan</b>
<ul style="list-style-type: none"> <li>• Type Of Plan (Cont.)               <ul style="list-style-type: none"> <li>- Point-of-Service Plan (Managed Care)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- In-Network: No deductible</li> <li>- Out-of-Network: \$250 deductible per person, 70%, \$1,500 stop-loss per person</li> </ul>	<ul style="list-style-type: none"> <li>- In-Network: No deductible</li> <li>- Out-of-Network: \$250 deductible per person, 70%, \$1,500 stop-loss per person</li> </ul>
<ul style="list-style-type: none"> <li>- Base Plan</li> </ul>		<ul style="list-style-type: none"> <li>- 120 days hospital</li> </ul>
<ul style="list-style-type: none"> <li>• Other Coverage</li> </ul>	<ul style="list-style-type: none"> <li>• Dental</li> </ul>	<ul style="list-style-type: none"> <li>• Dental</li> </ul>

\* Applies to Management employees with Pension Effective Date on or after 7/2/85; all other Management retirees are covered under the provisions shown for the Non-Management Plan.

# **RETIREE HEALTH PLANS (PRE-65)**

---

<b>Feature</b>	<b>Management Plan *</b>	<b>Non-Management Plan</b>
<ul style="list-style-type: none"> <li>• Monthly retiree contributions</li> </ul>	<ul style="list-style-type: none"> <li>• Same as active</li> </ul>	<ul style="list-style-type: none"> <li>• Same as active:                             <ul style="list-style-type: none"> <li>– Contributions may be required for some HMO participants</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Monthly employer contribution</li> </ul>	<ul style="list-style-type: none"> <li>• Capped at annual growth in medical/dental CPI</li> </ul>	<ul style="list-style-type: none"> <li>• Actual experience: with the following caps beginning on 1/1/99 for those retiring on or after 1/1/92:                               Single \$ 6,350                              Family \$ 11,430</li> </ul>

\* Applies to Management employees with Pension Effective Date on or after 7/2/85; all other Management retirees are covered under the provisions shown for the Non-Management Plan.

# **RETIREE HEALTH PLANS (POST-65)**

---

<b>Feature</b>	<b>Management Plan *</b>	<b>Non-Management Plan</b>
<ul style="list-style-type: none"> <li>• Type Of Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Comprehensive with Medicare carve-out</li> <li>• \$350/\$700 deductible, 80% coinsurance, \$1,500/\$3,000 stop-loss</li> </ul>	<ul style="list-style-type: none"> <li>Pre-65 plan with Medicare carve-out</li> </ul>
<ul style="list-style-type: none"> <li>• Other Coverage</li> </ul>	<ul style="list-style-type: none"> <li>• Dental</li> <li>• Medicare Part B reimbursement</li> </ul>	<ul style="list-style-type: none"> <li>• Dental</li> <li>• Medicare Part B reimbursement</li> </ul>
	<ul style="list-style-type: none"> <li>Post 1/1/90 hires</li> <li>– No coverage</li> </ul>	<ul style="list-style-type: none"> <li>Post 1/1/90 hires</li> <li>–No coverage</li> </ul>

\* Applies to Management employees with Pension Effective Date on or after 7/2/85; all other Management retirees are covered under the provisions shown for the Non-Management Plan.

# RETIREE HEALTH PLANS (POST-65)

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Feature	Management Plan *	Non-Management Plan
<ul style="list-style-type: none"> <li>• Other Coverage (continued)</li> </ul>	<ul style="list-style-type: none"> <li>• Medicare Part B reimbursement (Cont.)</li> </ul> <p>Post 7/1/85 retiree</p> <ul style="list-style-type: none"> <li>– \$15.50 (retiree only)</li> </ul> <p>Pre 7/1/85 retirees</p> <ul style="list-style-type: none"> <li>– \$27.90 (retiree and spouse)</li> </ul>	<ul style="list-style-type: none"> <li>• Medicare Part B reimbursement (Cont.)</li> </ul> <p>Post 1/1/90 retirees</p> <ul style="list-style-type: none"> <li>– \$27.90 (retiree only)</li> </ul> <p>Pre 1/2/90 non-management retirees</p> <ul style="list-style-type: none"> <li>– \$46.10 (retiree and spouse) (indexed to prevailing Medicare premium)</li> </ul>

\* Applies to Management employees with Pension Effective Date on or after 7/2/85; all other Management retirees are covered under the provisions shown for the Non-Management Plan.

# **RETIREE HEALTH PLANS (POST-65)**

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<b>Feature</b>	<b>Management Plan *</b>	<b>Non-Management Plan</b>
<ul style="list-style-type: none"> <li>• Monthly retiree contributions</li> </ul>	<ul style="list-style-type: none"> <li>• None. Contributions may be required for some HMO participants</li> </ul>	<ul style="list-style-type: none"> <li>• None. Contributions may be required for some HMO participants</li> </ul>
<ul style="list-style-type: none"> <li>• Monthly employer contributions</li> </ul>	<ul style="list-style-type: none"> <li>• Capped at medical/dental CPI. Employer costs controlled through changes in deductible and stop-loss.</li> </ul>	<ul style="list-style-type: none"> <li>• Based on actual experience: with the following caps beginning on 1/1/99 for those retiring on or after 1/1/92:                       Single \$ 2,180                      Family \$ 4,360</li> </ul>

\* Applies to Management employees with Pension Effective Date on or after 7/2/85; all other Management retirees are covered under the provisions shown for the Non-Management Plan.

# RETIREE LIFE INSURANCE PLANS

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Feature	Management Plan	Non-Management Plan
• Employer-paid amount	• 1 x pay	• 1 x pay
• Reductions in employer-paid amount	• Reductions beginning at age 66 in 5 equal annual steps to 0.5 x pay	• Reductions beginning at age 66 in 5 equal annual steps to 0.5 x pay

# **RETIREE DISCOUNTS-CONCESSION SERVICES**

- 100 % for basic local service
- Service connection charges
- Custom calling (call waiting)
- Touchtone
- \$90/quarter for intralata calls

## **Appendix C.1**

# *Actuarial Report*

*NYNEX Corporation*

*FAS 106 Valuation  
Management Plans*

*1993*



**Hewitt Associates**

PREPARATION OF THIS ACTUARIAL VALUATION

AS OF JANUARY 1, 1993

NYNEX POSTRETIREMENT BENEFIT PLANS  
FOR MANAGEMENT EMPLOYEES

This material has been prepared to present to management the 1993 accounting requirements for postretirement benefits other than pensions as determined under the standards set forth in the Statement of Financial Accounting Standards No. 106 ("FAS 106"), Employers' Accounting for Postretirement Benefits Other Than Pensions.

In conducting the valuation, we have used personnel, asset, claims and plan design information supplied by NYNEX Corporation, and the actuarial assumptions and methods described in the Actuarial Assumptions Section of this report.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices and in accordance with our understanding of FAS 106.

HEWITT ASSOCIATES

*Anthony P. Yezzi*

Anthony P. Yezzi  
Fellow of the Society of Actuaries

July 21, 1993



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# SUMMARY

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This summary is based on the information provided in the report dated January 1, 1971.

SUMMARY

January 1, 1993

Accumulated Postretirement  
Benefit Obligation (APBO)

Active	\$ 387,948,000
Retired	<u>1,031,982,000</u>
Total	\$1,419,930,000

Assets \$ 438,466,000

Net Periodic Postretirement  
Benefit Cost

Service Cost	\$ 16,573,000
Interest Cost	116,354,000
Expected Return on Plan Assets	(34,308,000)
Amortization of Transition Obligation	<u>59,851,000</u>
Total Cost	\$ 158,470,000
Estimated 1993 Annual Base Pay	\$1,327,905,000
Benefit Cost as a Percent of Annual Base Pay	11.9%
Expected Benefit Payments	\$ 102,118,000

Personnel Information

Active	22,545
Retired	<u>23,587</u>
Total	46,132



# **ACCOUNTING REQUIREMENTS**

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## ACCOUNTING REQUIREMENTS

### Reconciliation of Funded Status, January 1, 1993 (\$000's omitted)

The following is the reconciliation of funded status with the amounts reported in the company's financial statement. The postretirement benefit obligations (i.e., plan liabilities) are shown as negative numbers.

	<u>Health Care</u>	<u>Life Insurance</u>	<u>Total</u>
<b>Accumulated Postretirement Benefit Obligation (APBO)</b>			
- Active			
-- Fully Eligible	\$ (99,043)	\$ (19,150)	\$ (118,193)
-- Not Fully Eligible	(228,753)	(41,002)	(269,755)
-- Total Active	\$ (327,796)	\$ (60,152)	\$ (387,948)
- Retired	(850,367)	(181,615)	(1,031,982)
- Total	\$ (1,178,163)	\$ (241,767)	\$ (1,419,930)
<b>Plan Assets at Fair Value</b>	<u>220,678</u>	<u>217,788</u>	<u>438,466</u>
<b>Funded Status</b>	\$ (957,485)	\$ (23,979)	\$ (981,464)
<b>Unrecognized Transition (Asset)/Obligation</b>	1,173,034	23,979	1,197,013
<b>Unrecognized Prior Service Cost</b>	0	0	0
<b>Unrecognized Net (Gain)/Loss</b>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Prepaid/(Accrued) Post-retirement Benefit Cost</b>	\$ 215,549	\$ 0	\$ 215,549
<b>Expected Benefit Payments</b>	\$ 84,345	\$ 17,773	\$ 102,118

**ACCOUNTING REQUIREMENTS (Continued)**

**Net Periodic Postretirement Benefit Cost (\$000's omitted)**

	<u>Health Care</u>	<u>Life Insurance</u>	<u>Total</u>
Service Cost	\$ 13,429	\$ 3,144	\$ 16,573
Interest Cost	96,559	19,795	116,354
Expected Return on Plan Assets	(16,551)	(17,757)	(34,308)
Amortization of:			
- Transition (Asset)/Obligation	58,652	1,199	59,851
- Prior Service Cost	0	0	0
- Actuarial (Gain)/Loss	0	0	0
Net Postretirement Benefit Cost	\$ 152,089	\$ 6,381	\$ 158,470



**ACCOUNTING REQUIREMENTS (Continued)**

**Schedule of Amortization Payments (\$000's omitted)**

	<u>Date Established</u>	<u>Amount 01/01/93</u>	<u>Amortization Period</u>	<u>Amortization Payment</u>
• <b>Health Care</b>				
Transition Obligation	01/01/93	\$1,173,034	20	\$58,652
Prior Service Cost	N/A	N/A	N/A	N/A
(Gain)/Loss Subject to Amortization	N/A	N/A	N/A	N/A
• <b>Life Insurance</b>				
Transition Obligation	01/01/93	\$ 23,979	20	\$ 1,199
Prior Service Cost	N/A	N/A	N/A	N/A
(Gain)/Loss Subject to Amortization	N/A	N/A	N/A	N/A

**PERSONNEL INFORMATION**

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[REDACTED]

## PERSONNEL INFORMATION

The actuarial valuation is based on the 1992 census data provided by NYNEX for the actuarial valuation of the NYNEX Pension Plans. In addition, information was provided on terminations in 1992 to update the active and retiree data. The following identifies the groups covered by the FAS 106 valuation:

- All active employees eligible for participation in the NYNEX Management Pension Plan except for temporary employees who have worked less than 5 years.
- All service and disability pensioners from the NYNEX Management Pension Plan including those retirees who elected a lump sum under the 1992 Force Management Plan or were eligible for disability pensions pre-1976.

PERSONNEL INFORMATION (Continued)

I. Personnel Characteristics of Active Employees as of January 1, 1993

	<u>Number</u>	<u>Average Age</u>	<u>Average Years of Service</u>	<u>Average Entry Age</u>
Male	12,917	43.3	18.6	24.7
Female	9,628	41.6	17.5	24.1
Total	<u>22,545</u>	42.6	18.1	24.5

Estimated average annual base pay per active employee is \$58,900.

II. Service and Disability Pensioners as of January 1, 1992

	<u>Number</u>	<u>Average Age</u>	<u>Average Years in Retirement</u>	<u>Average Age at Retirement</u>
Male	14,017	66.5	7.7	58.8
Female	9,570	67.6	10.1	57.5
Total	<u>23,587</u>	67.0	8.6	58.4





PLAN PROVISIONS

- **Effective Date** January 1, 1993.
- **Eligibility for Participation** Eligible to participate in NYNEX Management Pension Plan.
- **Eligibility for a Benefit** Retirement with either a service or disability pension as follows:

Service Pension

<u>Age</u>	<u>Years of Credited Service</u>
Any Age	30
50	25
55	20
60	15
65	10

Disability Pension

15 years of credited service with total and permanent disability.

- **Eligibility for Current Plans**
  - **Medical/Dental Expense Plan** Retired pre-July 2, 1985.
  - **Flexible Benefit Plans (Medical/Dental)** Retired post-July 1, 1985.

PLAN PROVISIONS (Continued)

Flex Medical Plan

- Coverage
  - Pre-Age 65 Flex Plan Options B, A, N, or HMO.
  - Post-Age 65 Option B with out-of-pocket maximum of \$1,500 per person/\$3,000 family or HMO.
- Coordination With Medicare Post-age 65 Medicare carve-out.
- Company Contribution
  - Pre-Age 65 Flex credits adjusted annually which vary by retiree health care region.
  - Post-Age 65 Company paid with deductibles, out-of-pocket maximum, and coinsurance subject to change in order to control company cost.
- Hospital Room and Board and Miscellaneous Comprehensive
- Surgical Comprehensive
- In-House Doctor Visits Comprehensive
- Out-Patient Diagnostic Comprehensive
- Prescription Drugs Comprehensive (100% over \$5 if mail order)
- Deductible
  - Option B:  
\$350 per person/\$700 family
  - Option A:  
\$600 per person/\$1,200 family
  - Option N:  
\$4,000 per person/\$8,000 family

PLAN PROVISIONS (Continued)

Flex Medical Plan (Continued)

- **Coinsurance**  
Option B: 80%  
Option A: 80%  
Option N: 70%
  
- **Out-of-Pocket Maximum (including deductible)**  
Option B: \$1,400 per person/\$2,800 family  
Option A: \$1,800 per person/\$3,000 family  
Option N: \$7,000 per person/\$10,000 family
  
- **Lifetime Maximum**  
\$350,000 per person for charges after eligibility for Medicare. First \$3,500 of benefits each year not applied to maximum.
  
- **Continuation of Dependent Coverage at Death of Retiree**  
Company paid coverage is extended for six months after the death of the retiree.



PLAN PROVISIONS (Continued)

Medical Expense Plan

- Coordination With Medicare Post-age 65 Medicare carve-out.
- Company Contribution Company paid. However, a contribution may be required from HMO participants.
- Hospital Room and Board and Miscellaneous 100% for 120 days (Major Medical on excess).
- Surgical 95% (Major Medical on excess).
- In-Hospital Doctor Visits 90% (Major Medical on excess).
- Out-Patient Diagnostic 100% of R&C
- Prescription Drugs Major Medical (100% over \$5 if mail order).
- Major Medical
  - Deductible 1% of pension benefit (minimum \$25; maximum \$150 per person, family maximum three times individual deductible).
  - Coinsurance 80% of R&C.
  - Out-of-Pocket Maximum (excluding deductible) \$1,000 per person.
  - Lifetime Maximum on Major Medical \$250,000 per person; first \$3,500 of benefits each year not applied to maximum.
- Continuation of Dependent Coverage at Death of Retiree Company paid coverage is extended for six months after death of retiree.

PLAN PROVISIONS (Continued)

Flex Dental Plan

- Coverage
  - Pre-Age 65 Flex Plan Options A, B, or C.
  - Post-Age 65 Option B.
- Company Contribution
  - Pre-Age 65 Flex credits adjusted annually which vary by retiree health care region.
  - Post-Age 65 Company paid.
- Lifetime Deductible
  - Option A: None
  - Option B: \$50 per person/\$150 family
  - Option C: \$50 per person/\$150 family
  
  - Waived for routine preventive and diagnostic care.
- Coinsurance
  - Routine
    - Option A: 100%
    - Option B: 100% of R&C
    - Option C: 100% of R&C
  - Corrective
    - Option A: Not covered
    - Option B: Schedule
    - Option C: 75% of R&C but no less than Schedule
  - Orthodontia
    - Option A: Not covered
    - Option B: Schedule (lifetime maximum \$1,500 per person)
    - Option C: Schedule (lifetime maximum \$1,500 per person)
- Annual Maximums for All Non-Orthodontia
  - Option A: \$250 per person
  - Option B: \$1,250 per person
  - Option C: \$1,250 per person



PLAN PROVISIONS (Continued)

Dental Expense Plan

- **Company Contribution**                      Company paid.
- **Lifetime Deductible**                      \$50 per person for corrective care and orthodontia; waived for routine preventive and diagnostic care.
  
- **Coinsurance**
  - Routine                                      100% of R&C.
  - Corrective                                  Schedule.\*
  - Orthodontia                                Schedule.\*
  
- **Maximum Benefits**
  - Non-Orthodontia (Annual)                      \$1,250 per person (effective January 1, 1994, \$1,500).
  - Orthodontia (Lifetime)                      Lifetime maximum \$1,500 per person (effective January 1, 1994, \$2,000).

\*Schedule increases 5% effective January 1, 1994 and January 1, 1995 except periodontics which increases 10% effective January 1, 1995.



PLAN PROVISIONS (Continued)

Medicare Part B Premium Reimbursement

- Employees Hired Post-01/01/90 No coverage.
- Retired Post-07/01/85 \$15.50 per month (retiree only).
- Retired Pre-07/02/85 \$27.90 per month (retiree and spouse).

Life Insurance Plan

- Initial Benefit 100% of annual base pay at retirement rounded up to the next \$1,000.
- Ultimate Benefit 50% of initial benefit.
- Reduction Pattern
  - Prior to Age 66 No reduction.
  - At Age 66 Reduced beginning at age 66 in five equal annual steps to 1/2 the initial benefit at age 70 or older.
- Annual Base Pay Basic wage rate, annual performance incentives, plus incentive compensation (e.g., sales commissions). If incentive compensation is used, it is based on the average annual incentive compensation paid for the 36-month period prior to retirement.
- Company Contribution Company paid.

# HEALTH CARE CLAIMS DEVELOPMENT

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This section provides information on the development of health care claims from 1993 to present. It includes a table showing the number of claims filed and the amount paid for various types of health care services.

HEALTH CARE CLAIMS DEVELOPMENT

Retiree health care costs for 1993 are based on actual 1993 company contributions to the flexible benefit plans and 1991 paid claims for the other retiree groups. Due to the size of the claim base, no creditability or smoothing adjustments were made in the rating process. This approach assumes that the retiree claim base is representative of current and future (with cost trend) plan costs. The 1991 claims cost was "trended" to 1993 based on the assumptions outlined in this section.

• Flexible Benefit Plans - 1993 Company Contribution

- Pre-Age 65 Coverage

<u>Health Care Region</u>	<u>Medical (Per Month)</u>	<u>Dental (Per Month)</u>
Greater New York City	\$358.36	\$55.95
Greater Boston	\$334.68	\$53.45
Other New England	\$244.92	\$51.03
Other	\$247.24	\$52.29

- Post-Age 65 Coverage

	<u>Medical</u>
Total 1991 Paid Claims	\$1,483,071
Estimated Adjustment to True Age for Dependent Claims Reported Based On Retiree Age	- 524,289
Adjusted 1991 Paid Claims	\$ 958,782
Average 1991 Covered Group	+ 1,194
1991 Average Paid Claim Per Covered Participant	\$ 803
Trend (2 Years at 8.0% Per Year)	x 1.1664
1993 Expected Cost Per Covered Participant	\$ 937

HEALTH CARE CLAIMS DEVELOPMENT (Continued)

• Medical Expense Plan:

	<u>Medical</u>	
	<u>Pre-Age 65</u>	<u>Post-Age 65</u>
Total 1991 Paid Claims	\$14,743,622	\$19,628,113
Estimated Adjustment to True Age for Dependent Claims Reported Based On Retiree Age	<u>+ 2,784,371</u>	<u>- 2,784,371</u>
Adjusted 1991 Paid Claims	\$17,527,993	\$16,843,742
Average 1991 Covered Group	<u>+ 5,666</u>	<u>+ 17,241</u>
1991 Average Paid Claims Per Covered Participant	\$ 3,094	\$ 977
Trend (2 Years at 13% and 18%)	<u>x 1.3334</u>	<u>x 1.3334</u>
1993 Expected Cost Per Covered Participant	\$ 4,126	\$ 1,303

Age Graded Rates

The claims rate for the medical expense plan has been established separately for the under age 65 and over age 65 groups. Actual costs will be influenced by age at retirement and overall aging of the retiree group. To recognize this in the valuation, we used age-graded costs assuming increases as follows:

	<u>Medical Expense Plan</u>
Under Age 65	2.0% per year
Over Age 65	1.0% per year up to age 80

HEALTH CARE CLAIMS DEVELOPMENT (Continued)

• Dental Plans (Flex Dental and Dental Expense Plan)

The following cost per participant was used for participants in the Dental Expense Plan and post-age 65 participants in the Flex Dental Plan.

	<u>Dental</u>
Total 1991 Paid Claims	\$7,279,709*
Average 1991 Covered Group	+ <u>36,539*</u>
1991 Average Paid Claims Per Covered Participant	\$ 199
Trend (2 Years at 5% Per Year)	<u>x 1.1025</u>
1993 Expected Cost Per Participant	\$ 219

\*Claims and covered individuals include experience for the Flex Dental Plan due to the inability to identify pre- and post-age 65 dental claims for the flexible benefits program.

HEALTH CARE CLAIMS DEVELOPMENT (Continued)

• Administrative Cost

	<u>Medical</u>	<u>Dental</u>
Total 1991 Administrative Cost	\$3,431,709	\$564,445
Average Covered Retirees	+ <u>21,435</u>	+ <u>22,555</u>
1991 Average Administrative Cost Per Retiree	\$ 160	\$ 25
Trend (2 Years at 3.5% Per Year)	x <u>1.0712</u>	x <u>1.0712</u>
1993 Administrative Costs Per Retiree	\$ 171	\$ 27

# ACTUARIAL ASSUMPTIONS

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## ACTUARIAL ASSUMPTIONS

### Demographic Assumptions

- Mortality Table
  - Active See Table A.
  - Retiree See Table B.
  - Dependent 1983 Group Annuity Mortality Table.
- Withdrawal See Table C.\*
- Disability See Table D.
- Retirement Age See Table E.\*
- Plan Participation All employees assumed to elect coverage.
- Dependent Coverage
  - New Retirees
    - Male 80%.
    - Female 40%.
  - Current Retirees Based on current coverage elected.
- Spouse Age A wife is assumed to be three years younger than her husband.
- HMO Participation Cost of HMO participation is assumed to be identical to indemnity plans.
- Calculation Date January 1, 1993.

\*These tables represent a sample of the entire set of assumptions.

ACTUARIAL ASSUMPTIONS (Continued)

Demographic Assumptions (Continued)

• **Employee Data**

- **Retirees**

The 1992 census data with 1992 FMP retirees added, was valued as of January 1, 1992 and projected forward to January 1, 1993 assuming no actuarial gain or loss.

- **Actives**

The 1992 census data, reduced for all 1992 FMP separations, was valued at January 1, 1993. Temporary employees who have less than 5 years of service are excluded from the calculation. The annual base pay for the life insurance benefit was based on 1992 pay projected to 1993 at 4.5%.

ACTUARIAL ASSUMPTIONS (Continued)

Economic Assumptions

- Discount Rate 8.5%.
- Expected Rate of Return On Plan Assets (After-Tax)
  - Health Care 7.5%.
  - Life Insurance 8.5%.
- Salary Growth 4.5%.
- Medical Cost Growth
  - Pre-July 2, 1985 Retirees Medical trend rate (see Table F).
  - Post-July 1, 1985 Retirees Medical inflation rate (see Table F).
- Dental Cost Growth See Table F.
- Administrative Cost Growth 3.5%.
- AT&T Reimbursement For all retirees with a Pension Effective Date prior to January 2, 1984, post-retirement medical and dental costs are reimbursed based on a constant factor currently equal to 11.11% of total costs.

**TABLE A**  
**PROBABILITY OF PRERETIREMENT MORTALITY**

<u>Present Age</u>	<u>Male</u>	<u>Female</u>	<u>Present Age</u>	<u>Male</u>	<u>Female</u>
15	.0011	.0003	40	.0015	.0010
16	.0011	.0003	41	.0016	.0011
17	.0011	.0003	42	.0018	.0012
18	.0011	.0003	43	.0021	.0013
19	.0010	.0003	44	.0024	.0015
20	.0010	.0003	45	.0027	.0017
21	.0009	.0003	46	.0030	.0019
22	.0009	.0004	47	.0034	.0021
23	.0008	.0004	48	.0038	.0022
24	.0008	.0004	49	.0041	.0024
25	.0008	.0004	50	.0045	.0025
26	.0008	.0004	51	.0050	.0026
27	.0008	.0004	52	.0055	.0027
28	.0007	.0005	53	.0061	.0030
29	.0007	.0005	54	.0068	.0033
30	.0007	.0006	55	.0075	.0037
31	.0007	.0005	56	.0083	.0040
32	.0007	.0007	57	.0092	.0044
33	.0007	.0007	58	.0102	.0049
34	.0008	.0008	59	.0111	.0053
35	.0008	.0008	60	.0121	.0058
36	.0009	.0008	61	.0132	.0063
37	.0011	.0009	62	.0143	.0068
38	.0012	.0009	63	.0154	.0074
39	.0013	.0010	64	.0165	.0080
			65	.0177	.0086
			66	.0190	.0093
			67	.0202	.0101
			68	.0215	.0110
			69	.0228	.0119

**TABLE C**  
**PROBABILITY OF WITHDRAWAL**  
**MALE PARTICIPANTS**

Entry Age	Service					
	0	5	10	15	20	25
15	.1040	.0130	.0072	.0050	.0029	.0020
20	.1041	.0152	.0070	.0049	.0020	.0012
25	.1042	.0230	.0109	.0040	.0012	
30	.1010	.0199	.0110	.0022	.0003	
35	.0949	.0140	.0082	.0013		
40	.0891	.0122	.0023	.0008		
45	.0843	.0113	.0008	.0007		
50	.0815	.0059	.0007			
55	.0761	.0007				

**FEMALE PARTICIPANTS**

Entry Age	Service					
	0	5	10	15	20	25
15	.0947	.0417	.0336	.0153	.0048	.0036
20	.0947	.0436	.0253	.0138	.0046	.0010
25	.0936	.0453	.0158	.0096	.0030	
30	.0903	.0298	.0096	.0040	.0007	
35	.0858	.0136	.0080	.0007		
40	.0806	.0080	.0047	.0035		
45	.0741	.0067	.0005	.0025		
50	.0708	.0165	.0106			
55	.0696	.0246				

**TABLE D**  
**PROBABILITY OF DISABILITY**

<u>Present Age</u>	<u>Male</u>	<u>Female</u>	<u>Present Age</u>	<u>Male</u>	<u>Female</u>
29	.0003	.0011	44	.0009	.0039
30	.0003	.0011	45	.0011	.0043
31	.0003	.0012	46	.0013	.0048
32	.0003	.0012	47	.0017	.0052
33	.0003	.0013	48	.0022	.0057
34	.0003	.0014	49	.0027	.0062
35	.0003	.0014	50	.0032	.0068
36	.0003	.0015	51	.0038	.0075
37	.0003	.0015	52	.0043	.0080
38	.0003	.0017	53	.0051	.0086
39	.0004	.0021	54	.0064	.0092
40	.0005	.0024	55	.0087	.0098
41	.0007	.0027	56	.0112	.0102
42	.0007	.0032	57	.0139	.0110
43	.0008	.0035	58	.0171	.0117
			59	.0202	.0125
			60	.0233	.0137
			61	.0262	.0150
			62	.0308	.0167
			63	.0356	.0188
			64	.0411	.0217

**TABLE E**  
**PROBABILITY OF RETIREMENT**

**MALE PARTICIPANTS**

Entry Age	Service							
	15	20	25	30	35	40	45	50
15				.012	.016	.085	.220	.300
20				.013	.062	.196	.300	1.000
25			.015	.041	.161	.300	1.000	
30			.026	.126	.300	1.000		
35		.036	.072	.300	1.000			
40		.050	.300	1.000				
45		.300	1.000					
50	.300	1.000						
55	1.000							

**FEMALE PARTICIPANTS**

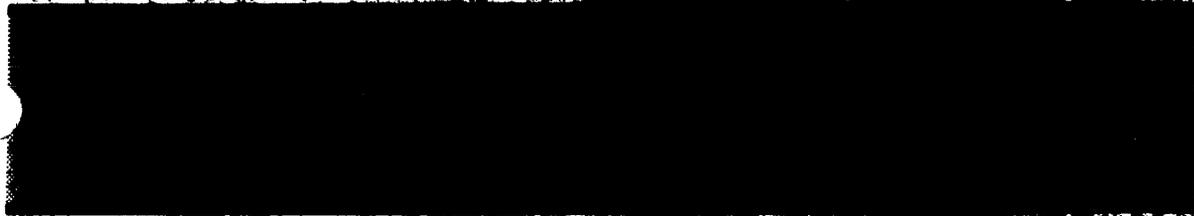
Entry Age	Service							
	15	20	25	30	35	40	45	50
15				.029	.052	.116	.212	.300
20				.032	.101	.204	.300	1.000
25			.040	.079	.181	.300	1.000	
30			.096	.161	.300	1.000		
35		.126	.146	.300	1.000			
40		.136	.300	1.000				
45		.300	1.000					
50	.300	1.000						
55	1.000							



**TABLE F**  
**Employer Cost Growth**

<u>Year</u>	<u>Net Medical</u>		<u>Net Dental Trend Rate</u>
	<u>Trend Rate</u>	<u>Inflation Rate</u>	
1993	16.0%	8.0%	5.0%
1994	14.0	8.0	4.5
1995	13.0	8.0	4.0
1996	12.0	7.0	3.5
1997	11.0	6.0	3.5
1998	10.5	5.5	3.5
1999	10.0	5.0	3.5
2000	9.5	4.5	3.5
2001	9.0	4.0	3.5
2002	8.5	3.5	3.5
2003	8.0	3.5	3.5
2004	7.5	3.5	3.5
2005	7.0	3.5	3.5
2006	6.5	3.5	3.5
2007	6.0	3.5	3.5
2008+	5.5	3.5	3.5

# OVERVIEW OF FAS 106



## OVERVIEW OF FAS 106

### Background

In December 1990, the Financial Accounting Standards Board finalized the accounting rules for postretirement benefits other than pensions in Statement of Financial Accounting Standards No. 106 ("FAS 106"). These rules, generally effective for the first fiscal year beginning after December 15, 1992, require employers to charge the cost of postretirement benefits (most notably postretirement medical benefits) against income over the working lifetimes of employees. This is in sharp contrast to the current practice of expensing postretirement benefit costs only when the related benefits are paid, which is after employees retire.

The new expense calculation considers expected future medical costs, not just the cost of benefits today. It also includes an accrual for all active employees, valuing the benefits they are anticipated to receive in retirement based on the likelihood that they will stay employed until eligible for postretirement benefits.

The combined effect of projecting medical cost increases and including the active work force produces a much larger expense than that determined under the current practice of expensing only current claims of current retirees.

### Scope of FAS 106

FAS 106 applies to all postretirement benefits other than pensions, including:

- Health care benefits--medical and dental,
- Life insurance outside of pension plan, and
- Other welfare benefits--day care, legal services, housing subsidies, tuition assistance, etc.

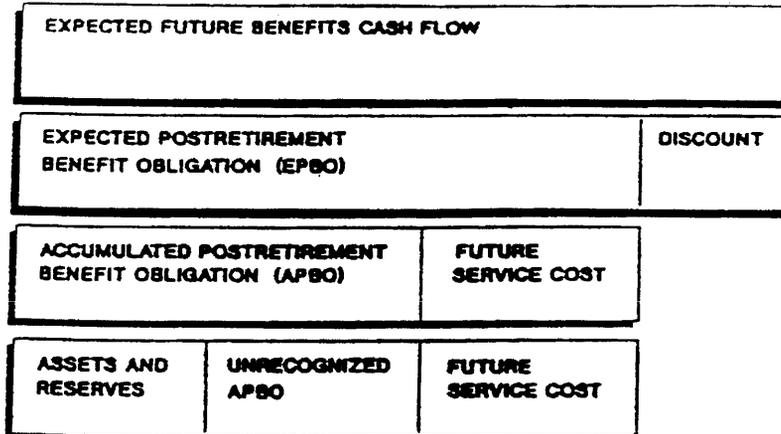
The statement applies to any arrangement that is in substance a postretirement benefit plan. It can be written or unwritten.

### Substantive Plan

The accounting for postretirement benefits is based upon the substantive plan, which is the plan as understood by the employer and employees. Generally, it is the written plan, but an employer's cost sharing policies as evidenced by past practice or communication to employees may differ from the written plan.

OVERVIEW OF FAS 106 (Continued)

FAS 106 Terminology



- The Expected Postretirement Benefit Obligation (EPBO) is the actuarial present value of all postretirement benefits expected to be paid to each employee and his/her covered dependents in the future. The calculation considers the probability that the employee will remain with the Company until retirement, the expected retirement age, and the anticipated level of medical claims at that time.

The EPBO is not used directly in the expense calculation nor is it disclosed. It is, however, a good measure of total exposure.

- The Accumulated Postretirement Benefit Obligation (APBO) is the portion of the EPBO that is attributed to employee service rendered prior to the valuation date:
  - For retired employees and actives who have reached their Full Eligibility Date, the APBO equals the EPBO.
  - For active employees not yet eligible for full benefits, the APBO equals a pro rata portion of the EPBO based on years of service worked prior to the valuation date to those expected to be worked at the Full Eligibility Date.

The APBO is used in the accounting calculations to establish the plan's funded status and to develop postretirement benefit expense.

- The Transition Obligation is the unfunded and unreserved portion of the APBO as of the date of initial application of the accounting standards.

## OVERVIEW OF FAS 106 (Continued)

- The Prior Service Cost is the increase or decrease in the APBO due to a plan amendment subsequent to initial application of the accounting standards. The Unrecognized Prior Service Cost is the portion of the Prior Service Cost that has not been recognized as a part of annual expense.
- The Service Cost is one-year's pro rata share of the EPBO for current active employees. There is no Service Cost for retirees or active employees who have already met the eligibility conditions for full benefits.
- The Discount Rate is the interest rate selected as of the measurement date to determine the present value of future cash outflow of postretirement payments. FASB suggests that employers should look to rates of return on high-quality, fixed-income investments currently available whose cash flows match the timing and amount of expected benefit payments.
- The Full Eligibility Date is the date at which an employee has rendered all service necessary to receive all of the benefits expected to be received by that employee.
- The Attribution Period is the period to which EPBO is assigned. It begins at hire date and ends at the employee's Full Eligibility Date.

### Components of Expense

The components of expense ("net periodic postretirement benefit cost" using FAS 106 terminology) are:

- The Service Cost is the portion of the EPBO attributed to employee service during the fiscal period (again, attributing costs to full eligibility instead of over the whole service period).
- The Interest Cost accounts for the increase in the APBO due to the passage of time. It is calculated as interest on the APBO, less interest on expected benefit payments.
- The Expected Return on Plan Assets accounts for the expected earnings on certain plan assets set aside to provide benefits under these plans.

OVERVIEW OF FAS 106 (Continued)

- The Transition Obligation is amortized on a straight-line basis over the average remaining service period of active plan participants, or 20 years if greater. Alternatively, an employer can choose to recognize the transition obligation immediately in the net income of the compliance year as the effect of a change in accounting principle. Note that a single method of transition must be used for all postretirement plans. Also, any phase-in recognition may not be less than pay-as-you-go accounting.
- The Prior Service Cost, if any, is generally amortized over the remaining service to full eligibility of each plan participant active on the date of the amendment.
- Any Unrecognized Gain or Loss exceeding 10% of the APBO is subject to amortization. The minimum amortization is the excess divided by the average remaining service period of active plan participants.



## OVERVIEW OF FAS 106 (Continued)

Using the components above, the annual expense under FAS 106 equals:

- (a) Service Cost; plus
- (b) Interest Cost; minus
- (c) Expected Return on Plan Assets, if any; plus
- (d) Amortization (or one-time charge) of Transition Obligation; plus
- (e) Amortization of Prior Service Cost, if any; plus
- (f) Required Amortization of (Gains) or Losses.

In the initial year of compliance, (e) and (f) will be zero.

### Disclosure

The disclosure required by FAS 106 is quite extensive. It includes:

- Description of substantive plan(s).
- Components of expense.
- Reconciliation of plan's funded status.
- Assumed health care cost trend rate ("inflation").
- Economic assumptions used to develop costs.
- Effect of a one percentage point increase in inflation on:
  - The aggregate of the service and interest cost components of expense, and
  - APBO.
- Description of plan assets.
- Amount of gain or loss due to settlements/curtailments.
- Cost of providing special termination benefits.

*Actuarial Report*

*NYNEX Corporation*

*FAS 106 Valuation  
Non-Management Plans*

*1993*



**Hewitt Associates**

PREPARATION OF THIS ACTUARIAL VALUATION

AS OF JANUARY 1, 1993

NYNEX POSTRETIREMENT BENEFIT PLANS  
FOR NON-MANAGEMENT EMPLOYEES

This material has been prepared to present to management the 1993 accounting requirements for postretirement benefits other than pensions as determined under the standards set forth in the Statement of Financial Accounting Standards No. 106 ("FAS 106"), Employers' Accounting for Postretirement Benefits Other Than Pensions.

In conducting the valuation, we have used personnel, asset, claims and plan design information supplied by NYNEX Corporation, and the actuarial assumptions and methods described in the Actuarial Assumptions Section of this report.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices and in accordance with our understanding of FAS 106.

HEWITT ASSOCIATES

*Anthony P. Yezzi*

Anthony P. Yezzi  
Fellow of the Society of Actuaries

July 21, 1993



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**SUMMARY**

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SUMMARY

January 1, 1993

Accumulated Postretirement  
Benefit Obligation (APBO)

Active	\$ 748,473,000
Retired	<u>1,887,340,000</u>
Total	\$2,635,813,000

Assets

\$ 564,518,000

Net Periodic Postretirement  
Benefit Cost

Service Cost	\$ 29,003,000
Interest Cost	217,284,000
Expected Return on Plan Assets	(48,854,000)
Amortization of Transition Obligation	<u>117,716,000</u>
Total Cost	\$ 315,149,000
Estimated 1993 Annual Base Pay	\$1,747,999,000
Benefit Cost as a Percent of Annual Base Pay	18.0%
Expected Benefit Payments	\$ 159,077,000

Personnel Information

Active	50,842
Retired	<u>36,307</u>
Total	87,149

# ACCOUNTING REQUIREMENTS



ACCOUNTING REQUIREMENTS

Reconciliation of Funded Status, January 1, 1993 (\$000's omitted)

The following is the reconciliation of funded status with the amounts reported in the company's financial statement. The postretirement benefit obligations (i.e., plan liabilities) are shown as negative numbers.

	<u>Health Care</u>	<u>Life Insurance</u>	<u>Total</u>
Accumulated Postretirement Benefit Obligation (APBO)			
- Active			
-- Fully Eligible	\$ (246,418)	\$ (21,962)	\$ (268,380)
-- Not Fully Eligible	(433,454)	(46,639)	(480,093)
-- Total Active	\$ (679,872)	\$ (68,601)	\$ (748,473)
- Retired	(1,736,536)	(150,804)	(1,887,340)
- Total	\$ (2,416,408)	\$ (219,405)	\$ (2,635,813)
Plan Assets at Fair Value	295,950	268,568	564,518
Funded Status	\$ (2,120,458)	\$ 49,163	\$ (2,071,295)
Unrecognized Transition (Asset)/Obligation	2,403,479	(49,163)	2,354,316
Unrecognized Prior Service Cost	0	0	0
Unrecognized Net (Gain)/Loss	0	0	0
Prepaid/(Accrued) Post-retirement Benefit Cost	\$ 283,021	\$ 0	\$ 283,021
Expected Benefit Payments	\$ 144,710	\$ 14,367	\$ 159,077



ACCOUNTING REQUIREMENTS (Continued)

Net Periodic Postretirement Benefit Cost (\$000's omitted)

	<u>Health Care</u>	<u>Life Insurance</u>	<u>Total</u>
Service Cost	\$ 25,341	\$ 3,662	\$ 29,003
Interest Cost	199,245	18,039	217,284
Expected Return on Plan Assets	(26,636)	(22,218)	(48,854)
Amortization of:			
- Transition (Asset)/ Obligation	120,174	(2,458)	117,716
- Prior Service Cost	0	0	0
- Actuarial (Gain)/Loss	<u>0</u>	<u>0</u>	<u>0</u>
Net Postretirement Benefit Cost	\$ 318,124	\$ (2,975)	\$ 315,149

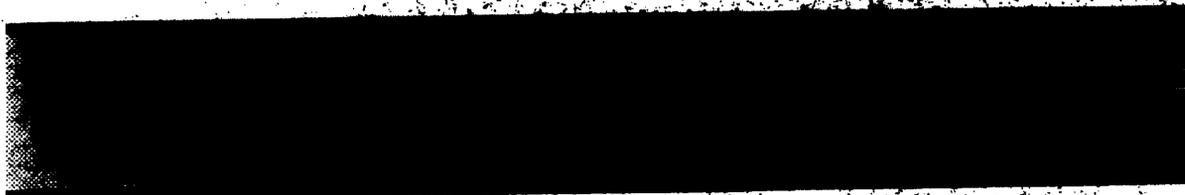
ACCOUNTING REQUIREMENTS (Continued)

Schedule of Amortization Payments (\$000's omitted)

	<u>Date Established</u>	<u>Amount 01/01/93</u>	<u>Amortization Period</u>	<u>Amortization Payment</u>
• <b>Health Care</b>				
Transition Obligation	01/01/93	\$2,403,479	20	\$120,174
Prior Service Cost	N/A	N/A	N/A	N/A
(Gain)/Loss Subject to Amortization	N/A	N/A	N/A	N/A
• <b>Life Insurance</b>				
Transition (Asset)	01/01/93	\$ (49,163)	20	\$(2,458)
Prior Service Cost	N/A	N/A	N/A	N/A
(Gain)/Loss Subject to Amortization	N/A	N/A	N/A	N/A

# PERSONNEL INFORMATION

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PERSONNEL INFORMATION

The actuarial valuation is based on the 1992 census data provided by NYNEX for the actuarial valuation of the NYNEX Pension Plans. In addition, information was provided on terminations in 1992 to update the active data. The following identifies the groups covered by the FAS 106 valuation:

- All active employees eligible for participation in the NYNEX Pension Plan except for temporary employees who have worked less than 5 years.
- All service and disability pensioners from the NYNEX Pension Plan including those eligible for disability pensions pre-1976.

PERSONNEL INFORMATION (Continued)

I. Personnel Characteristics of Active Employees as of  
January 1, 1993

	<u>Number</u>	<u>Average Age</u>	<u>Average Years of Service</u>	<u>Average Entry Age</u>
Male	26,108	41.6	17.0	24.6
Female	24,734	41.8	16.1	25.7
Total	<u>50,842</u>	41.7	16.6	25.1

Estimated average annual base pay per active employee is  
\$34,381.

II. Service and Disability Pensioners as of January 1, 1992

	<u>Number</u>	<u>Average Age</u>	<u>Average Years in Retirement</u>	<u>Average Age at Retirement</u>
Male	12,544	65.6	6.4	59.2
Female	23,763	68.9	10.4	58.5
Total	<u>36,307</u>	67.7	9.1	58.6

# PLAN PROVISIONS

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PLAN PROVISIONS (Continued)

Medical Expense Plan

- Coordination With Medicare Post-age 65 Medicare carve-out.
- Company Contribution
  - Retired Pre-1/2/92 Company paid. However, a contribution may be required from HMO participants.
  - Retired Post-1/1/92 Following maximum company contributions based on 1991 bargaining agreement:

<u>Coverage</u>	<u>Pre-65</u>	<u>Post-65</u>
Single	\$ 6,350	\$2,180
Family	\$11,430	\$4,360

No contributions will be due from retirees before 1996. However, a contribution may be required from HMO participants.

- Hospital Room and Board and Miscellaneous 100% for 120 days (Major Medical on excess).
- Surgical 95% (Major Medical on excess).
- In-Hospital Doctor Visits 90% (Major Medical on excess).
- Out-Patient Diagnostic 100% of R&C
- Prescription Drugs Major Medical (100% over \$5 if mail order).
- Major Medical
  - Deductible 1% of pension benefit (minimum \$25; maximum \$150 per person, family maximum three times individual deductible).
  - Coinsurance 80% of R&C.
  - Out-of-Pocket Maximum (excluding deductible) \$1,000 per person.

PLAN PROVISIONS (Continued)

Medical Expense Plan (Continued)

- Lifetime Maximum on Major Medical      \$250,000 per person; first \$3,500 of benefits each year not applied to maximum.
- Continuation of Dependent Coverage at Death of Retiree      Company paid coverage is extended for six months after death of retiree.

PLAN PROVISIONS (Continued)

Dental Expense Plan

- **Company Contribution**                      Company paid.
- **Lifetime Deductible**                      \$50 per person for corrective care and orthodontia; waived for routine preventive and diagnostic care.
- **Coinsurance**
  - **Routine**                                      100% of R&C.
  - **Corrective**                                  Schedule.\*
  - **Orthodontia**                                Schedule.\*
- **Maximum Benefits**
  - **Non-Orthodontia (Annual)**                      \$1,250 per person (effective January 1, 1994, \$1,500).
  - **Orthodontia (Lifetime)**                      Lifetime maximum \$1,500 per person (effective January 1, 1994, \$2,000).

\*Schedule increases 5% effective January 1, 1994 and January 1, 1995 except periodontics which increases 10% effective January 1, 1995.

PLAN PROVISIONS (Continued)

Medicare Part B Premium Reimbursement

- **Employees Hired After Return Date (11/20/89 - 12/04/89, depending on local)** No coverage.
- **Retired Post-01/01/90** \$27.90 per month (retiree only).
- **Retired Pre-01/02/90** \$27.90 per month (retiree and spouse).

Life Insurance Plan

- **Initial Benefit** 100% of annual base pay at retirement rounded up to the next \$1,000.
- **Ultimate Benefit** 50% of initial benefit.
- **Reduction Pattern**
  - **Prior to Age 66** No reduction.
  - **At Age 66** Reduced beginning at age 66 in five equal annual steps to 1/2 the initial benefit at age 70 or older.
- **Annual Base Pay** Basic wage rate, annual performance incentives, plus incentive compensation (e.g., sales commissions). If incentive compensation is used, it is based on the average annual incentive compensation paid for the 36-month period prior to retirement.
- **Company Contribution** Company paid.

# HEALTH CARE CLAIMS DEVELOPMENT

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## HEALTH CARE CLAIMS DEVELOPMENT

Retiree health care costs for 1993 are based on retiree paid claims for 1991. Due to the size of the claim base, no creditability or smoothing adjustments were made in the rating process. This approach assumes that the retiree claim base is representative of current and future (with cost trend) plan costs. The 1991 claims cost was "trended" to 1993 based on the assumptions outlined in this section.

HEALTH CARE CLAIMS DEVELOPMENT (Continued)

• Medical Expense Plan

	<u>Medical</u>	
	<u>Pre-Age 65</u>	<u>Post-Age 65</u>
Total 1991 Paid Claims	\$39,932,837	\$29,026,251
Estimated Adjustment to True Age for Dependent Claims Reported Based On Retiree Age	<u>+ 1,355,443</u>	<u>- 1,355,443</u>
Adjusted 1991 Paid Claims	\$41,288,280	\$27,670,808
Average 1991 Covered Group	<u>+ 13,757</u>	<u>+ 28,348</u>
1991 Average Paid Claims Per Covered Participant	\$ 3,001	\$ 976
Trend (2 Years at 13% and 18%)	<u>x 1.3334</u>	<u>x 1.3334</u>
1993 Expected Cost Per Covered Participant	\$ 4,002	\$ 1,301

Age Graded Rates

The claims rate for the medical expense plan has been established separately for the under age 65 and over age 65 groups. Actual costs will be influenced by age at retirement and overall aging of the retiree group. To recognize this in the valuation, we used age-graded costs assuming increases as follows:

	<u>Medical Expense Plan</u>
Under Age 65	2.0% per year
Over Age 65	1.0% per year up to age 80

HEALTH CARE CLAIMS DEVELOPMENT (Continued)

• Dental Expense Plan

	<u>Dental</u>
Total 1991 Paid Claims	\$6,195,216
Average 1991 Covered Group	+ 44,357
1991 Average Paid Claims Per Covered Participant	\$ 140
Trend (2 Years at 5% Per Year)	x 1.1025
1993 Expected Cost Per Participant	\$ 154

HEALTH CARE CLAIMS DEVELOPMENT (Continued)

• Administrative Cost

	<u>Medical</u>	<u>Dental</u>
Total 1991 Administrative Cost	\$4,494,273	\$754,183
Average Covered Retirees	+ <u>28,546</u>	+ <u>29,770</u>
1991 Average Administrative Cost Per Retiree	\$ 157	\$ 25
Trend (2 Years at 3.5% Per Year)	x <u>1.0712</u>	x <u>1.0712</u>
1993 Administrative Costs Per Retiree	\$ 168	\$ 27

# ACTUARIAL ASSUMPTIONS

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## ACTUARIAL ASSUMPTIONS

### Demographic Assumptions

- Mortality Table
  - Active See Table A.
  - Retiree See Table B.
  - Dependent 1983 Group Annuity Mortality Table.
- Withdrawal See Table C.\*
- Disability See Table D.
- Retirement Age See Table E.\*
- Plan Participation All employees assumed to elect coverage.
- Dependent Coverage
  - New Retirees
    - Male 80%.
    - Female 60%.
  - Current Retirees Based on current coverage elected.
- Spouse Age A wife is assumed to be three years younger than her husband.
- HMO Participation Cost of HMO participation is assumed to be identical to indemnity plans.
- Calculation Date January 1, 1993.

\*These tables represent a sample of the entire set of assumptions.

ACTUARIAL ASSUMPTIONS (Continued)

Demographic Assumptions (Continued)

• **Employee Data**

- **Retirees**

The 1992 census data was valued as of January 1, 1992 and projected forward to January 1, 1993 assuming no actuarial gain or loss.

- **Actives**

The 1992 census data, reduced for all terminations through October of 1992, which did not result in postretirement benefit eligibility, was valued at January 1, 1993. Temporary employees who have less than 5 years of service are excluded from the calculation. The annual base pay for the life insurance benefit was based on 1992 pay projected to 1993 at 4%.

ACTUARIAL ASSUMPTIONS (Continued)

Economic Assumptions

- Discount Rate 8.5%.
- Expected Rate of Return On Plan Assets (After-Tax)
  - Health Care 9.0%.
  - Life Insurance 8.5%.
- Salary Growth 4.0%.
- Medical Cost Growth Medical trend rate (see Table F).
- Dental Cost Growth See Table F.
- Administrative Cost Growth 3.5%.
- AT&T Reimbursement For all retirees with a Pension Effective Date prior to January 2, 1984, postretirement medical and dental costs are reimbursed based on a constant factor currently equal to 11.11% of total costs.

**TABLE A**

**PROBABILITY OF PRERETIREMENT MORTALITY**

<u>Present Age</u>	<u>Male</u>	<u>Female</u>	<u>Present Age</u>	<u>Male</u>	<u>Female</u>
15	.0011	.0003	40	.0015	.0010
16	.0011	.0003	41	.0016	.0011
17	.0011	.0003	42	.0018	.0012
18	.0011	.0003	43	.0021	.0013
19	.0010	.0003	44	.0024	.0015
20	.0010	.0003	45	.0027	.0017
21	.0009	.0003	46	.0030	.0019
22	.0009	.0004	47	.0034	.0021
23	.0008	.0004	48	.0038	.0022
24	.0008	.0004	49	.0041	.0024
25	.0008	.0004	50	.0045	.0025
26	.0008	.0004	51	.0050	.0026
27	.0008	.0004	52	.0055	.0027
28	.0007	.0005	53	.0061	.0030
29	.0007	.0005	54	.0068	.0033
30	.0007	.0006	55	.0075	.0037
31	.0007	.0005	56	.0083	.0040
32	.0007	.0007	57	.0092	.0044
33	.0007	.0007	58	.0102	.0049
34	.0008	.0008	59	.0111	.0053
35	.0008	.0008	60	.0121	.0058
36	.0009	.0008	61	.0132	.0063
37	.0011	.0009	62	.0143	.0068
38	.0012	.0009	63	.0154	.0074
39	.0013	.0010	64	.0165	.0080
			65	.0177	.0086
			66	.0190	.0093
			67	.0202	.0101
			68	.0215	.0110
			69	.0228	.0119



**TABLE B**

**PROBABILITY OF POSTRETIREMENT MORTALITY**

<u>Present Age</u>	<u>Male</u>	<u>Female</u>	<u>Present Age</u>	<u>Male</u>	<u>Female</u>
30-45	.0313	.0218	75	.0463	.0281
46	.0265	.0180	76	.0504	.0311
47	.0222	.0148	77	.0547	.0344
48	.0185	.0120	78	.0592	.0381
49	.0153	.0097	79	.0641	.0422
50	.0129	.0080	80	.0694	.0467
51	.0110	.0067	81	.0754	.0518
52	.0097	.0059	82	.0821	.0574
53	.0090	.0055	83	.0899	.0638
54	.0087	.0054	84	.0986	.0709
55	.0087	.0055	85	.1082	.0786
56	.0090	.0058	86	.1188	.0869
57	.0095	.0063	87	.1307	.0958
58	.0101	.0067	88	.1435	.1052
59	.0108	.0072	89	.1574	.1155
60	.0116	.0077	90	.1726	.1269
61	.0125	.0082	91	.1887	.1398
62	.0135	.0087	92	.2059	.1547
63	.0146	.0092	93	.2242	.1718
64	.0158	.0098	94	.2432	.1921
65	.0172	.0105	95	.2663	.2131
66	.0188	.0114	96	.2916	.2364
67	.0206	.0125	97	.3184	.2623
68	.0228	.0138	98	.3478	.2910
69	.0252	.0152	99	.3800	.3229
70	.0281	.0169	100	.4151	.3582
71	.0312	.0187	101	.4535	.3974
72	.0347	.0208	102	.4954	.4409
73	.0384	.0230	103	.5408	.4884
74	.0423	.0254	104	.5905	.5411
			105	.6447	.5994
			106	.7038	.6640
			107	.7684	.7356
			108	.8389	.8149
			109	.9159	.9027
			110	1.0000	1.0000

TABLE C

PROBABILITY OF WITHDRAWAL

MALE PARTICIPANTS

Entry Age	Service					
	0	5	10	15	20	25
15	.1970	.0280	.0112	.0080	.0049	.0050
20	.1851	.0252	.0110	.0079	.0060	.0042
25	.1573	.0180	.0099	.0060	.0042	
30	.1340	.0199	.0090	.0062	.0033	
35	.1189	.0150	.0062	.0043		
40	.1131	.0182	.0073	.0038		
45	.1134	.0143	.0038	.0007		
50	.1126	.0089	.0018			
55	.1042	.0108				

FEMALE PARTICIPANTS

Entry Age	Service					
	0	5	10	15	20	25
15	.2077	.0657	.0436	.0243	.0148	.0116
20	.1937	.0636	.0373	.0218	.0146	.0090
25	.1636	.0463	.0238	.0166	.0130	
30	.1343	.0348	.0186	.0160	.0107	
35	.1108	.0256	.0160	.0117		
40	.0926	.0230	.0137	.0075		
45	.0811	.0197	.0145	.0106		
50	.0788	.0176	.0156			
55	.0747	.0316				



TABLE D  
PROBABILITY OF DISABILITY

<u>Present Age</u>	<u>Male</u>	<u>Female</u>	<u>Present Age</u>	<u>Male</u>	<u>Female</u>
29	.0003	.0011	44	.0009	.0039
30	.0003	.0011	45	.0011	.0043
31	.0003	.0012	46	.0013	.0048
32	.0003	.0012	47	.0017	.0052
33	.0003	.0013	48	.0022	.0057
34	.0003	.0014	49	.0027	.0062
35	.0003	.0014	50	.0032	.0068
36	.0003	.0015	51	.0038	.0075
37	.0003	.0015	52	.0043	.0080
38	.0003	.0017	53	.0051	.0086
39	.0004	.0021	54	.0064	.0092
40	.0005	.0024	55	.0087	.0098
41	.0007	.0027	56	.0112	.0102
42	.0007	.0032	57	.0139	.0110
43	.0008	.0035	58	.0171	.0117
			59	.0202	.0125
			60	.0233	.0137
			61	.0262	.0150
			62	.0308	.0167
			63	.0356	.0188
			64	.0411	.0217



TABLE E

PROBABILITY OF RETIREMENT

MALE PARTICIPANTS

Entry Age	Service							
	15	20	25	30	35	40	45	50
15				.018	.027	.058	.116	.300
20				.020	.053	.108	.300	1.000
25			.015	.039	.088	.300	1.000	
30			.026	.070	.300	1.000		
35		.042	.056	.300	1.000			
40		.065	.300	1.000				
45		.300	1.000					
50	.300	1.000						
55	1.000							

FEMALE PARTICIPANTS

Entry Age	Service							
	15	20	25	30	35	40	45	50
15				.051	.071	.116	.155	.300
20				.055	.104	.143	.300	1.000
25			.051	.087	.126	.300	1.000	
30			.085	.116	.300	1.000		
35		.109	.110	.300	1.000			
40		.126	.300	1.000				
45		.300	1.000					
50	.300	1.000						
55	1.000							

**TABLE F**  
**Employer Cost Growth**

<u>Year</u>	<u>Net Medical</u>		<u>Net Dental Trend Rate</u>
	<u>Trend Rate</u>	<u>Inflation Rate</u>	
1993	16.0%	8.0%	5.0%
1994	14.0	8.0	4.5
1995	13.0	8.0	4.0
1996	12.0	7.0	3.5
1997	11.0	6.0	3.5
1998	10.5	5.5	3.5
1999	10.0	5.0	3.5
2000	9.5	4.5	3.5
2001	9.0	4.0	3.5
2002	8.5	3.5	3.5
2003	8.0	3.5	3.5
2004	7.5	3.5	3.5
2005	7.0	3.5	3.5
2006	6.5	3.5	3.5
2007	6.0	3.5	3.5
2008+	5.5	3.5	3.5

# OVERVIEW OF FAS 106

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## OVERVIEW OF FAS 106

### Background

In December 1990, the Financial Accounting Standards Board finalized the accounting rules for postretirement benefits other than pensions in Statement of Financial Accounting Standards No. 106 ("FAS 106"). These rules, generally effective for the first fiscal year beginning after December 15, 1992, require employers to charge the cost of postretirement benefits (most notably postretirement medical benefits) against income over the working lifetimes of employees. This is in sharp contrast to the current practice of expensing postretirement benefit costs only when the related benefits are paid, which is after employees retire.

The new expense calculation considers expected future medical costs, not just the cost of benefits today. It also includes an accrual for all active employees, valuing the benefits they are anticipated to receive in retirement based on the likelihood that they will stay employed until eligible for postretirement benefits.

The combined effect of projecting medical cost increases and including the active work force produces a much larger expense than that determined under the current practice of expensing only current claims of current retirees.

### Scope of FAS 106

FAS 106 applies to all postretirement benefits other than pensions, including:

- Health care benefits--medical and dental,
- Life insurance outside of pension plan, and
- Other welfare benefits--day care, legal services, housing subsidies, tuition assistance, etc.

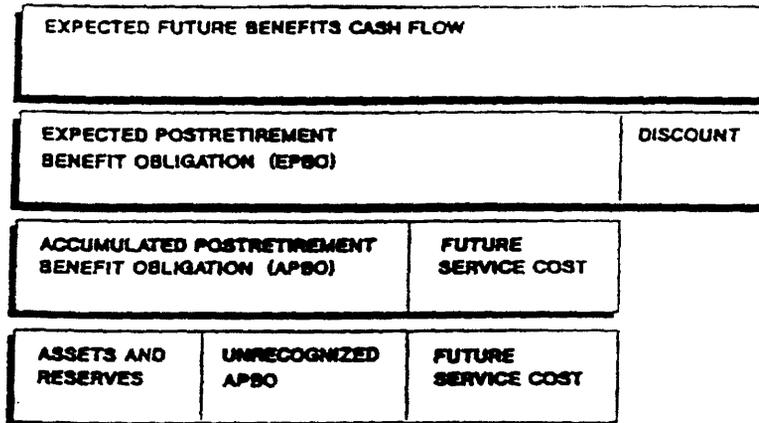
The statement applies to any arrangement that is in substance a postretirement benefit plan. It can be written or unwritten.

### Substantive Plan

The accounting for postretirement benefits is based upon the substantive plan, which is the plan as understood by the employer and employees. Generally, it is the written plan, but an employer's cost sharing policies as evidenced by past practice or communication to employees may differ from the written plan.

OVERVIEW OF FAS 106 (Continued)

FAS 106 Terminology



- The Expected Postretirement Benefit Obligation (EPBO) is the actuarial present value of all postretirement benefits expected to be paid to each employee and his/her covered dependents in the future. The calculation considers the probability that the employee will remain with the Company until retirement, the expected retirement age, and the anticipated level of medical claims at that time.

The EPBO is not used directly in the expense calculation nor is it disclosed. It is, however, a good measure of total exposure.

- The Accumulated Postretirement Benefit Obligation (APBO) is the portion of the EPBO that is attributed to employee service rendered prior to the valuation date:
  - For retired employees and actives who have reached their Full Eligibility Date, the APBO equals the EPBO.
  - For active employees not yet eligible for full benefits, the APBO equals a pro rata portion of the EPBO based on years of service worked prior to the valuation date to those expected to be worked at the Full Eligibility Date.

The APBO is used in the accounting calculations to establish the plan's funded status and to develop postretirement benefit expense.

- The Transition Obligation is the unfunded and unreserved portion of the APBO as of the date of initial application of the accounting standards.

## OVERVIEW OF FAS 106 (Continued)

- The Prior Service Cost is the increase or decrease in the APBO due to a plan amendment subsequent to initial application of the accounting standards. The Unrecognized Prior Service Cost is the portion of the Prior Service Cost that has not been recognized as a part of annual expense.
- The Service Cost is one-year's pro rata share of the EPBO for current active employees. There is no Service Cost for retirees or active employees who have already met the eligibility conditions for full benefits.
- The Discount Rate is the interest rate selected as of the measurement date to determine the present value of future cash outflow of postretirement payments. FASB suggests that employers should look to rates of return on high-quality, fixed-income investments currently available whose cash flows match the timing and amount of expected benefit payments.
- The Full Eligibility Date is the date at which an employee has rendered all service necessary to receive all of the benefits expected to be received by that employee.

The Attribution Period is the period to which EPBO is assigned. It begins at hire date and ends at the employee's Full Eligibility Date.

### Components of Expense

The components of expense ("net periodic postretirement benefit cost" using FAS 106 terminology) are:

- The Service Cost is the portion of the EPBO attributed to employee service during the fiscal period (again, attributing costs to full eligibility instead of over the whole service period).
- The Interest Cost accounts for the increase in the APBO due to the passage of time. It is calculated as interest on the APBO, less interest on expected benefit payments.
- The Expected Return on Plan Assets accounts for the expected earnings on certain plan assets set aside to provide benefits under these plans.



OVERVIEW OF FAS 106 (Continued)

- The Transition Obligation is amortized on a straight-line basis over the average remaining service period of active plan participants, or 20 years if greater. Alternatively, an employer can choose to recognize the transition obligation immediately in the net income of the compliance year as the effect of a change in accounting principle. Note that a single method of transition must be used for all postretirement plans. Also, any phase-in recognition may not be less than pay-as-you-go accounting.
- The Prior Service Cost, if any, is generally amortized over the remaining service to full eligibility of each plan participant active on the date of the amendment.
- Any Unrecognized Gain or Loss exceeding 10% of the APBO is subject to amortization. The minimum amortization is the excess divided by the average remaining service period of active plan participants.



OVERVIEW OF FAS 106 (Continued)

Using the components above, the annual expense under FAS 106 equals:

- (a) Service Cost; plus
- (b) Interest Cost; minus
- (c) Expected Return on Plan Assets, if any; plus
- (d) Amortization (or one-time charge) of Transition Obligation; plus
- (e) Amortization of Prior Service Cost, if any; plus
- (f) Required Amortization of (Gains) or Losses.

In the initial year of compliance, (e) and (f) will be zero.

Disclosure

The disclosure required by FAS 106 is quite extensive. It includes:

- Description of substantive plan(s).
- Components of expense.
- Reconciliation of plan's funded status.
- Assumed health care cost trend rate ("inflation").
- Economic assumptions used to develop costs.
- Effect of a one percentage point increase in inflation on:
  - The aggregate of the service and interest cost components of expense, and
  - APBO.
- Description of plan assets.
- Amount of gain or loss due to settlements/curtailments.
- Cost of providing special termination benefits.

## **Appendix C.2**

NYNEX TELEPHONE COMPANIES  
EXG-1 FOR SFAS 106  
EFFECT OF TOTAL OPEB

REVENUE EFFECT	Interstate	Common Line	Traffic Sensitive	Special Access	Interexchange
Depreciation Expense	582,494	203,837	294,545	83,174	938
Expense Less Depreciation	35,295,051	17,593,390	12,644,214	4,763,221	294,176
Taxes Less FIT	229,759	118,448	76,836	31,813	2,640
Net Return	(1,224,682)	(492,733)	(550,308)	(178,030)	(3,655)
FIT	(630,698)	(253,833)	(283,492)	(91,713)	(1,883)
Uncollectible Revenue & Other Adj	0	0	0	0	0
Revenue Effect	34,251,724	17,169,109	12,181,795	4,608,466	292,216
Revenue Effect Adjusted by Godwins Factor of 84.8%	29,045,345	14,559,404	10,330,162	3,907,979	247,800

	Source	
	New Traffic Sensitive	Trunking
Recasted Revenue Effect	4,554,943	9,683,198
Additional Annual Revenue Effect	3,811,181	8,109,800
Make-Whole Revenue Effect	3,811,181	8,109,800
Net Revenue Effect	7,622,362	16,219,600

RATE BASE

Total Plant in Service	7,419,041	2,988,568	3,405,935	1,015,276	9,259
Other Rate Base Items	(26,248,608)	(10,514,356)	(11,906,709)	(3,765,296)	(62,702)
Depreciation Reserve	280,837	118,606	124,270	37,598	364
Accum. Deferred Inc. Tax	(8,224,333)	(3,264,550)	(3,733,420)	(1,205,133)	(21,319)
Net Rate Base	(10,886,071)	(4,379,845)	(4,891,624)	(1,582,485)	(32,488)

NEW YORK TELEPHONE  
EXG-1 FOR SFAS 106  
EFFECT OF TOTAL OPEB

REVENUE EFFECT	Interstate	Common Line	Traffic Sensitive	Special Access	Interexchange
Depreciation Expense	335,670	110,181	169,059	55,493	938
Expense Less Depreciation	23,877,157	11,942,813	8,081,743	3,558,420	294,176
Taxes Less FIT	209,364	105,503	70,123	31,097	2,640
Net Return	(825,805)	(318,221)	(369,711)	(134,219)	(3,655)
FIT	(425,415)	(163,932)	(190,457)	(69,143)	(1,883)
Uncollectible Revenue & Other Adj	0	0	0	0	0
Revenue Effect	23,170,971	11,676,343	7,760,756	3,441,649	292,216
Revenue Effect Adjusted by Godwins Factor of 84.8%	19,648,979	9,901,539	6,581,121	2,918,519	247,800
			New Traffic Sensitive	Trunking	
Recasted Revenue Effect	19,648,979	9,901,539	3,044,473	6,455,167	247,800
Additional Annual Revenue Effect	13,682,132	5,833,928	2,473,035	5,243,551	131,618
Make-Whole Revenue Effect	13,682,132	5,833,928	2,473,035	5,243,551	131,618
Net Revenue Effect	27,364,264	11,667,856	4,946,070	10,487,102	263,236
			New Traffic Sensitive	Trunking	
	4,039,885	1,508,122	1,878,664	643,837	9,259
Total Plant in Service	(17,001,634)	(6,478,082)	(7,715,767)	(2,745,084)	(62,702)
Other Rate Base Items	159,299	61,220	72,581	25,135	364
Depreciation Reserve	(5,780,556)	(2,202,548)	(2,623,361)	(933,329)	(21,319)
Accum. Deferred Inc. Tax	(7,340,492)	(2,828,632)	(3,286,323)	(1,193,054)	(32,488)
Net Rate Base					

NEW YORK TELEPHONE  
YEAR 1993

SFAS 106 Cost (Total OPEB)  
Pay As You Go  
Other Funding  
Liability At Year End

277,400,000  
141,988,000  
0  
135,412,000

SECTION 2.1  
APPENDIX C  
WORKPAPER OPEB  
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	Benefits Clearing Factor	SFAS 106 Benefits Cleared	Pay As You Go	Total Company Incremental Cost	Percent Nonreg	Nonreg Amount	Amount Subject to Separations	Interstate Access Factor	Interstate Access Amount
6110 Network Support	0.0148%	41,193		41,193	3.2563%	1,341	39,852	25.8900%	10,318
6120 Gen'l Support	2.6729%	7,414,717		7,414,717	2.6098%	193,509	7,221,207	25.8900%	1,869,571
6210 & 6220 CO Switching & Operator Systems	8.9009%	24,691,007		24,691,007	0.0866%	21,382	24,669,624	27.4236%	6,765,299
6230 CO Transmission	3.6122%	10,020,166		10,020,166	31.5062%	6,428,805	10,011,488	25.3918%	2,745,511
6310 Info Orig/Term	7.3558%	20,404,889		20,404,889	0.0002%	92	13,976,084	26.4938%	3,548,779
6410 Cable & Wire Facilities	16.4990%	45,770,429		45,770,429	3.0859%	1,557	45,770,337	26.6900%	12,126,302
6510 Other Prop Plant & Equip Exp	0.0182%	50,461		50,461	4.9687%	2,692,087	48,904	26.9361%	13,053
6530 Network Operations	19.4534%	53,963,691		53,963,691	0.4730%	5,723	51,271,604	27.8735%	13,810,571
6560 Depreciation Exp	4.4467%	12,335,205		1,209,984	6.1502%	511,936	1,204,261	27.8000%	3,286,869
6610 Marketing	6.5168%	18,077,491		18,077,491	0.0000%	0	18,077,491	17.0643%	3,084,797
6621 & 6622 Operator Services	1.4475%	4,015,275		4,015,275	2.9967%	134,829	3,880,446	16.2111%	207,934
6623.1 Customer Accounting	13.9349%	38,655,390		38,655,390	0.0000%	0	37,497,004	0.0000%	6,078,677
6623.2 Business Office	0.4006%	0		0	4.2317%	47,022	1,064,156	16.3404%	173,887
6623.3 - .8 Customer Services -- Other	3.9556%	1,111,178	141,988,000	1,111,178	2.8964%	7,410,621	99,335,205	23.4588%	24,212,827
6710 Exec & Planning	89.2299%	10,972,751	141,988,000	(131,015,249)			(127,220,523)		(29,844,408)
6720 Gen'l & Admin		247,523,841	141,988,000	106,745,825					
Total Operating Expense									
RATE BASE				Average Amount					
IPIS	10.7701%	29,876,159		14,938,080	0.5925%	88,508	14,849,571	27.2054%	4,039,885
Accumulated Depreciation				604,992	3.7642%	22,773	582,219	27.3607%	159,299
Pension Liability				67,706,000	3.0045%	2,034,227	65,671,773	25.8888%	17,001,634
Accumulated Deferred Taxes				(23,020,040)	3.0045%	(691,637)	(22,328,403)	25.8888%	(5,780,556)
Net Rate Base				(30,352,873)		(1,276,855)	(29,076,018)		(7,340,492)

SECTION 2.1  
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NEW YORK TELEPHONE  
YEAR 1993  
TOTAL OPEB COST

	Interstate Amount	Percent Common Line	Common Line Amount	Percent Traffic Sensitive	Traffic Sensitive Amount	Percent Special Access	Special Access Amount	Percent Interexchange	Interexchange Amount
6110 Network Support	10,318	10.7968%	1,114	65.4186%	6,750	23.4410%	2,419	0.3435%	35
6120 Gen'l Support	1,869,571	10.7968%	201,854	65.4186%	1,223,047	23.4410%	438,246	0.3435%	6,422
6210 & 6220 CO Switching & Operator Systems	6,785,299	8.3164%	562,629	71.7459%	4,853,825	19.5303%	1,321,283	0.4073%	27,555
6230 CO Transmission	2,745,511	8.3164%	228,328	71.7459%	1,969,791	19.5303%	536,206	0.4073%	11,182
6310 Info Orig/Term	3,548,779	99.6909%	3,537,810	0.0000%	0	0.3091%	10,969	0.0000%	0
6410 Cable & Wire Facilities	12,126,302	79.4541%	9,634,844	9.6907%	1,175,124	10.8358%	1,313,982	0.0194%	2,353
6510 Other Prop Plant & Equip Exp	13,053	42.5571%	5,555	42.3744%	3,551	14.8858%	1,943	0.1826%	24
6530 Network Operations	13,810,371	42.2773%	5,838,736	42.3227%	5,845,006	15.1775%	2,096,099	0.2225%	30,729
6560 Depreciation Exp	3,335,670	37.4460%	110,181	50.3646%	169,059	16.5320%	55,493	0.2793%	938
6610 Marketing	3,286,869	0.0000%	1,230,827	46.3205%	525,745	15.9953%	525,745	0.2374%	7,803
6621 & 6622 Operator Services	3,084,797	81.2523%	168,951	99.9805%	3,084,196	0.0000%	10,205	0.0195%	602
6623.1 Customer Accounting	3,207,934	33.8581%	2,058,124	19.7338%	28,778	4.9080%	2,379,224	7.2677%	441,780
6623.2 Customer Office	6,078,677	25.5305%	0	46.3230%	1,199,554	39.1405%	10,205	0.0000%	0
6623.3 -.8 Customer Services -- Other	173,007	38.8465%	67,549	43.2495%	75,205	17.1143%	29,760	0.7897%	1,373
6710 Exec & Planning	(29,844,408)		(11,593,508)		(12,907,557)		(5,107,662)		(235,681)
6720 Gen'l & Admin	24,212,827		12,052,994		8,250,801		3,613,913		295,114
Total Operating Expense									
RATE BASE									
IPIS	4,039,085	37.3308%	1,508,122	46.5029%	1,878,664	15.9370%	643,837	0.2292%	9,259
Accumulated Depreciation	159,299	38.4309%	61,220	45.5624%	72,581	15.7784%	25,135	0.2283%	364
OPEB Liability	17,001,634	38.1027%	6,478,082	45.3825%	7,715,787	16.1460%	2,745,084	0.3688%	62,702
Accumulated Deferred Taxes	(5,780,536)	38.1027%	(2,202,348)	45.3825%	(2,623,361)	16.1460%	(933,329)	0.3688%	(21,319)
Net Rate Base	(7,340,492)		(2,828,632)		(3,286,323)		(1,193,054)		(32,488)
Gross Receipts and Federal Income Tax Calculation									
Interstate Rate Base	(7,340,492)		(2,828,632)		(3,286,323)		(1,193,054)		(32,488)
Return on Rate Base	0.1125		0.1125		0.1125		0.1125		0.1125
Interstate Expenses	(825,805)		(318,221)		(369,711)		(134,219)		(3,655)
Interstate Taxable Income	24,212,827		12,052,994		8,250,801		3,613,913		295,114
Interstate Federal Income Tax	(825,805)		(318,221)		(369,711)		(134,219)		(3,655)
Base to Calculate Gross Earnings Tax	(425,415)		(163,932)		(190,457)		(69,143)		(1,883)
Interstate Gross Earnings Tax	22,961,607		11,570,841		7,690,633		3,410,552		289,576
Interstate Gross Earnings Tax	209,364		105,503		70,123		31,097		2,640
Total Revenue Requirement	23,170,971		11,676,343		7,760,756		3,441,649		292,216
Times Godwins .848	19,648,979		9,901,539		6,581,121		2,918,519		247,800
New TS % of TS + SA Baskets	32.05%				New Traffic Sensitive Amount		Trunking Amount		
TK % of TS + SA Baskets	67.95%								
Recasted Revenue Requirement	19,648,979		9,901,539		3,044,473		6,455,167		247,800



NEW ENGLAND TELEPHONE COMPANY  
YEAR 1993

SFAS 106 Cost (Total OPEB)  
Pay As You Go 143,014,000  
Other Funding 67,187,000  
Liability At Year End 75,827,000  
Wage % 100.00%  
PAYG % 100.00%

SECTION 2.1  
APPENDIX C  
WORKPAPER OPEB  
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	Benefits Clearing Factor	SFAS 106 Benefits Cleared	Pay As You Go	Total NET Incremental Cost	Percent Monireg	Monireg Amount Separations	Interstate Access Factor	Interstate Access Amount
6110 Network Support		366,296		366,296		361,608		91,730
6120 Gen'l Support		2,151,709		2,151,709		2,108,073		529,462
6210 & 6220 CD Switching & Operator Systems		8,765,355		8,765,355		8,721,743		2,470,817
6230 CO Transmission		6,184,776		6,184,776		6,184,776		1,753,092
6310 Info Orig/Term		7,400,348		7,400,348		3,912,917		1,002,556
6410 Cable & Wire Facilities		23,249,205		23,249,205		23,249,205		6,698,588
6510 Other Prop Plant & Equip Exp		21,704,250		21,704,250		(165)		(10,333)
6530 Network Operations		0		0		21,077,962		5,975,102
6560 Depreciation Exp		8,565,008		8,565,008		8,204,016		246,824
6610 Marketing		11,258,773		11,258,773		11,258,773		2,195,986
6621 & 6622 Operator Services		1,534,513		1,534,513		1,509,076		1,874,707
6623.1 Customer Accounting		17,107,568		17,107,568		16,749,053		78,541
6623.2 Business Office		1,185,783		1,185,783		1,682		1,794,488
6623.3 -- .8 Customer Services -- Other		8,833,965		8,833,965		24,739		94,434
6710 Exec & Planning		119,047,765		119,047,765		(1,282,979)		273,637
6720 Gen'l & Admin		67,187,000		67,187,000		57,070,056		(13,404,912)
Total Operating Expense		67,187,000		52,714,998		49,018,379		11,664,718
RATE BASE		23,966,235		Average Amount		11,937,352		3,379,156
TPIS				11,983,117		426,415		121,538
Accumulated Depreciation				427,116		36,808,444		9,246,974
OPEB Liability				37,913,500		(9,756,965)		(2,443,778)
Accumulated Deferred Taxes				(10,040,640)		(15,540,541)		(3,545,578)
Net Rate Base				(16,296,859)				

TOTAL NEW ENGLAND TELEPHONE  
YEAR 1993  
TOTAL OPEB COST

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	Interstate Amount	Percent Common Line	Common Line Amount	Percent Traffic Sensitive	Traffic Sensitive Amount	Percent Special Access	Special Access Amount	Inter- exchange Amount
6110 Network Support	91,730		19,829		57,497		14,404	0
6120 Gen'l Support	529,462		115,845		330,041		83,576	0
6210 & 6220 CO Switching & Operator Systems	2,470,817		409,633		1,781,692		279,491	0
6230 CO Transmission	1,753,992		281,794		1,268,407		196,891	0
6310 Info Orig/Term	1,002,556		1,001,295		0		1,261	0
6410 Cable & Wire Facilities	6,698,588		4,436,000		1,446,602		815,985	0
6510 Other Prop Plant & Equip Exp	(10,333)		(6,947)		(4,347)		(1,083)	0
6530 Network Operations	5,975,102		2,757,000		2,564,339		53,763	0
6560 Depreciation Exp	2,246,824		93,656		125,486		77,681	0
6610 Marketing	1,874,707		973,504		980,552		1,933	0
6621 & 6622 Operator Services	78,541		70,782		6,217		0	0
6623.1 Customer Accounting	1,794,488		828,152		495,639		470,97	0
6623.2 Business Office	94,434		27,154		55,664		11,16	0
6623.3 - .8 Customer Services -- Other	273,637		110,204		131,132		32,31	0
6710 Exec & Planning	(13,404,912)		(5,381,648)		(6,425,669)		(1,597,57)	0
6720 Gen'l & Admin	11,664,718		5,744,233		4,667,958		1,232,482	0
RATE BASE								
TPIS	3,379,156		1,480,446		1,527,271		371,439	0
Accumulated Depreciation	121,538		57,386		51,689		12,463	0
OPEB Liability	9,246,974		4,036,274		4,190,943		1,020,212	0
Accumulated Deferred Taxes	(2,443,778)		(1,062,002)		(1,110,060)		(271,804)	0
Net Rate Base	(3,545,578)		(1,551,212)		(1,605,301)		(389,432)	0
Gross Receipts and Income Tax Calculation								
Rate Base	(3,545,578)		(1,551,212)		(1,605,301)		(389,432)	0
Rate of Return	11.25%		11.25%		11.25%		11.25%	0
Return on Rate Base	(398,878)		(174,511)		(180,596)		(43,811)	0
Revenue Conversion (Rate Base)	(648,941)		(284,078)		(293,723)		(71,225)	0
Gross Receipt Tax (Rate Base)	(3,856)		(1,795)		(1,734)		(301)	0
State Income Tax (Rate Base)	(40,726)		(17,871)		(18,355)		(4,544)	0
Federal Income Tax (Rate Base)	(205,483)		(89,901)		(93,035)		(22,570)	0
Expenses	11,664,718		5,744,233		4,687,958		1,232,482	0
Earning Effect (Exp)	7,208,261		3,548,239		2,898,362		761,632	0
Revenue Conversion (Exp)	11,729,694		5,776,844		4,714,760		1,238,043	0
Gross Receipt Tax (Exp)	64,977		32,611		26,802		5,561	0
State Income Tax (Exp)	743,105		368,113		296,499		78,493	0
Federal Income Tax (Exp)	3,713,348		1,827,860		1,493,097		392,357	0
Total Revenue Requirement	11,080,753		5,492,766		4,621,037		1,166,818	0
Times Godwins .848	9,396,367		4,657,866		3,749,040		989,461	0
New TS X of TS + SA Baskets					New Traffic Sensitive Amount		Trunking Amount	
TK X of TS + SA Baskets					1,510,470		3,228,031	0
Recasted Revenue Requirement								



STATE OF MAINE  
YEAR 1993

SFAS 106 Cost (Total OPEB)  
Pay As You Go  
Other Funding  
Liability At Year End  
Wage %  
PAYG %

13,137,342  
6,365,766  
6,771,576  
9.186%  
9.47%

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	Benefits Clearing Factor	SFAS 106 Benefits Cleared	Pay As You Go	Maine Incremental Cost	Percent Nonreg	Nonreg Amount Separations	Amount Subject to Separations	Interstate Access Factor	Interstate Access Amount
6110 Network Support	0.2700%	35,471		35,471	1.0514%	373	35,098	24.8813%	8,733
6120 Gen'l Support	1.2800%	168,158		168,158	0.9329%	1,569	166,589	24.8813%	41,450
6210 & 6220 CO Switching & Operator Systems	6.3300%	831,594		831,594	0.0000%	0	831,594	27.2770%	226,834
6230 CO Transmission	3.0300%	398,061		398,061	0.0000%	0	398,061	27.2770%	108,579
6310 Info Orig/Term	4.7300%	621,396		621,396	37.4896%	232,959	388,437	25.5783%	99,356
6410 Cable & Wire Facilities	14.2700%	1,874,699		1,874,699	0.0000%	0	1,874,699	28.4177%	532,746
6510 Other Prop Plant & Equip Exp	-0.1500%	(19,706)		(19,706)	1.9284%	(380)	(19,326)	26.8156%	(5,182)
6530 Network Operations	12.2900%	1,614,579		1,614,579	1.8435%	29,765	1,584,815	27.8104%	440,743
6560 Depreciation Exp	0.0000%	0		0	0.0925%	95	103,033	28.4282%	29,290
6610 Marketing	8.3400%	1,095,654		1,095,654	2.1564%	23,627	1,072,028	23.7846%	254,977
6621 & 6622 Operator Services	5.3600%	704,162		704,162	0.0000%	0	704,162	27.8991%	196,455
6623.1 Customer Accounting	1.1640%	152,919		152,919	1.2775%	1,954	150,965	5.1711%	7,807
6623.2 Business Office	12.9480%	1,701,023		1,701,023	1.4025%	23,857	1,677,166	11.7063%	196,334
6623.3 Customer Services	0.6480%	85,130		85,130	0.1170%	100	85,030	12.6573%	10,763
6710 Exec & Planning	0.9600%	126,118		126,118	1.6308%	2,057	124,062	23.1014%	28,660
6720 Gen'l & Admin	7.6800%	1,008,948	6,365,766	(5,356,818)	1.4183%	(75,976)	(5,280,842)	23.1014%	(1,219,948)
Total Operating Expense	79.1500%	10,398,206	6,365,766	4,133,569		239,998	3,895,570		957,596
RATE BASE									
TPIS	20.8500%	2,739,136		Average Amount	0.0754%	1,033	1,368,535	27.7291%	379,482
Accumulated Depreciation				1,569,568	0.0518%	27	51,538	28.4249%	14,649
OPEB Liability				51,564	0.0000%	0	3,385,788	24.8186%	840,305
Accumulated Deferred Taxes				3,385,788	0.0000%	0	(824,922)	24.8186%	(204,734)
Net Rate Base				(824,922)		1,006	(1,243,868)		(270,738)

STATE OF MAINE  
SFAS NO. 106 Incremental Cost  
TOTAL OPEB COST

SECTION 2.1  
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	Interstate Amount	Percent Common Line	Common Line Amount	Percent Traffic Sensitive	Traffic Sensitive Amount	Percent Special Access	Special Access Amount	Percent Inter- exchange	Inter- exchange Amount
6110 Network Support	8,733	20.0000%	1,747	67.3026%	5,877	12.6974%	1,109		0
6120 Gen'l Support	41,450	20.0000%	8,290	67.3026%	27,897	12.6974%	5,263		0
6210 & 6220 CO Switching & Operator Systems	226,834	22.2246%	50,413	69.2784%	157,147	8.4970%	19,274		0
6230 CO Transmission	108,579	22.2246%	24,131	69.2784%	75,222	8.4970%	9,226		0
6310 Info Orig/Term	99,356	99.9130%	99,269	0.0000%	0	0.0870%	86		0
6410 Cable & Wire Facilities	532,746	74.9013%	399,034	17.7898%	94,774	7.3089%	38,938		0
6510 Other Prop Plant & Equip Exp	(5,182)	52.0833%	(2,699)	39.5833%	(2,051)	(4.32)			0
6530 Network Operations	440,743	51.0567%	225,029	41.1439%	181,339	7.7994%	34,375		0
6560 Depreciation Exp	29,290	44.7452%	13,106	47.1591%	13,813	8.0957%	2,371		0
6610 Marketing	254,977	48.7311%	124,253	43.1832%	110,107	8.0858%	20,617		0
6621 & 6622 Operator Services	196,455	0.0000%	0	100.0000%	196,455	0.0000%	0		0
6623.1 Customer Accounting	7,807	90.8824%	7,095	7.6471%	597	1.4706%	115		0
6623.2 Business Office	196,334	43.6033%	85,608	25.9224%	50,895	30.4744%	59,832		0
6623.3 -- Other	10,763	23.9766%	2,580	63.1579%	6,797	12.8655%	1,385		0
6710 Exec & Planning	28,660	43.8654%	12,572	46.9712%	13,462	9.1635%	2,626		0
6720 Gen'l & Admin	(1,219,948)	43.8654%	(535,135)	46.9712%	(573,024)	9.1635%	(111,790)		0
Total Operating Expense	957,596		515,293		359,307		82,995		0
RATE BASE									
TP15	379,482	48.4785%	183,967	43.2868%	164,266	8.2348%	31,250		0
Accumulated Depreciation	14,649	50.8344%	7,447	40.9862%	6,004	8.1794%	1,198		0
OPEB Liability	840,305	48.7395%	409,561	43.2773%	363,661	8.4034%	70,614		0
Accumulated Deferred Taxes	(204,734)	48.7395%	(99,786)	43.2773%	(88,603)	8.4034%	(17,205)		0
Net Rate Base	(270,738)		(133,254)		(116,796)		(23,358)		0
Gross Receipts and Income Tax Calculation									
Rate of Return	11.25%		(133,254)		(116,796)		(23,358)		0
Return on Rate Base	60.106%		11.25%		11.25%		11.25%		11.25%
Revenue Conversion (Rate Base)	0.00%		(14,991)		(13,140)		(2,628)		0
Gross Receipt Tax (Rate Base)	8.93%		(24,941)		(21,861)		(4,372)		0
State Income Tax (Rate Base)	34.00%		0		0		0		0
Federal Income Tax (Rate Base)	60.106%		(2,227)		(1,952)		(390)		0
Expenses	60.106%		(7,723)		(6,769)		(1,354)		0
Earning Effect (Exp)	0.00%		515,293		359,307		82,995		0
Revenue Conversion (Exp)	0.00%		309,722		215,965		49,885		0
Gross Receipt Tax (Exp)	8.93%		515,293		359,307		82,995		0
State Income Tax (Exp)	34.00%		0		0		0		0
Federal Income Tax (Exp)	84.80%		46,016		32,086		7,411		0
Total Revenue Requirement			159,554		111,255		25,699		0
Times Godwins			490,352		337,646		78,623		0
			415,818		286,154		66,673		0
New TS % of TS + SA Baskets	32.99%								0
TK % of TS + SA Baskets	67.01%								0
Recasted Revenue Requirement			415,818		116,412		236,414		0



STATE OF MASSACHUSETTS  
YEAR 1993

SFAS 106 Cost (Total OPEB) 98,115,690  
 Pay As You Go 45,577,761  
 Other Funding  
 Liability At Year End 52,537,930  
 Wage % 68.606%  
 PAYG % 67.84%

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	Benefits Clearing Factor	SFAS 106 Benefits Cleared	Pay As You Go	Mass- Incremental Cost	Percent Nonreg	Nonreg Amount	Subject to Separations	Interstate Access Factor	Interstate Access Amount
6110 Network Support	0.2400%	235,478		235,478	1.3664%	3,218	232,260	24.3066%	56,455
6120 Gen'l Support	1.5500%	1,520,793		1,520,793	2.1385%	32,522	1,488,271	24.3066%	361,748
6210 & 6220 CD Switching & Operator Systems	6.2100%	6,092,984		6,092,984	0.5711%	34,797	6,058,187	27.1856%	1,646,955
6230 CD Transmission	4.3200%	4,238,598		4,238,598	0.0000%	0	4,238,598	27.1856%	1,152,288
6310 Info Orig/Term	5.2700%	5,170,697		5,170,697	48.7260%	2,519,474	2,651,223	25.2940%	670,600
6410 Cable & Wire Facilities	16.2800%	15,973,234		15,973,234	0.0000%	0	15,973,234	28.6142%	4,570,613
6510 Other Prop Plant & Equip Exp	-0.0200%	(19,623)		(19,623)	0.3247%	(64)	(19,559)	27.1037%	(5,301)
6530 Network Operations	15.8100%	15,512,091		15,512,091	3.1908%	494,960	15,017,131	27.6841%	4,157,358
6560 Depreciation Exp	0.0000%	0		0	0.6093%	2,182	530,980	27.9759%	148,547
6610 Marketing	5.1600%	5,062,770		5,062,770	5.5275%	279,845	4,782,925	26.6886%	1,276,496
6621 & 6622 Operator Services	8.5400%	8,379,080		8,379,080	0.0000%	0	8,379,080	13.4341%	1,125,654
6623.1 Customer Accounting	1.0113%	992,207		992,207	1.7019%	16,886	975,320	5.1642%	50,367
6623.2 Business Office	12.1713%	11,941,918		11,941,918	1.9324%	230,766	11,711,152	10.1687%	1,190,872
6623.3 - 8 Customer Services - Other	0.4575%	448,855		448,855	0.2539%	1,140	447,716	11.3838%	50,967
6710 Exec & Planning	0.7700%	755,491		755,491	2.2134%	16,722	738,769	22.7563%	168,116
6720 Gen'l & Admin	6.5700%	6,446,201	45,577,761	(39,131,560)	2.3408%	(915,992)	(38,215,568)	22.7563%	(8,696,449)
Total Operating Expense	84.3400%	82,750,773	45,577,761	37,173,013		2,716,456	34,989,720		7,925,285

	Average Amount	Interstate Access Factor	Interstate Access Amount
TPIS	7,682,459	27.4078%	2,094,991
Accumulated Depreciation	266,581	27.4252%	72,953
OPEB Liability	26,268,965	24.2908%	6,112,515
Accumulated Deferred Taxes	(7,218,847)	24.2908%	(1,679,751)
Net Rate Base	(11,634,241)		(2,410,726)



STATE OF NEW HAMPSHIRE  
EXG-1 FOR SEAS 106  
EFFECT OF TOTAL OPEB

REVENUE EFFECT	Interstate	Common Line	Traffic Sensitive	Special Access	Inter-exchange
Depreciation Expense	32,628	14,948	14,392	3,287	0
Expense Less Depreciation	1,196,042	680,254	429,080	86,707	0
Taxes Less FIT	(5,241)	(2,653)	(2,073)	(515)	0
Net Return	(39,779)	(20,135)	(15,736)	(3,909)	0
FIT	(20,492)	(10,373)	(8,107)	(2,014)	0
Uncollectible Revenue & Other Adj	0	0	0	0	0
Revenue Effect	1,163,158	662,041	417,556	83,556	0
Revenue Effect Adjusted by Godwins Factor of 84.8%	986,354	561,411	354,087	70,856	0

	New Traffic Sensitive	Trunking
Recasted Revenue Effect	561,411	258,633
Additional Annual Revenue Effect	377,513	266,510
Make-whole Revenue Effect	377,513	266,510
Net Revenue Effect	755,026	533,020

RATE BASE

Total Plant in Service	435,552	218,098	173,799	43,655	0
Other Rate Base Items	(1,022,781)	(514,823)	(406,366)	(101,592)	0
Depreciation Reserve	16,264	8,038	6,593	1,633	0
Accum. Deferred Inc. Tax	(249,899)	(125,788)	(99,289)	(24,822)	0
Net Rate Base	(353,594)	(178,974)	(139,871)	(34,748)	0

STATE OF NEW HAMPSHIRE  
YEAR 1993

SFAS 106 Cost (Total OPEB)  
Pay As You Go  
Other Funding  
Liability At Year End  
Wage %  
PAYG %

13,708,592  
6,691,035  
7,017,557  
9.585%  
9.96%

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	Benefits Clearing Factor	SFAS 106 Benefits Cleared	Pay As You Go	New Hampshire Incremental Cost	Percent Nonreg	Monreg Amount	Subject to Separations	Interstate Access Factor	Interstate Access Amount
6110 Network Support	0.3700%	50,722		50,722	0.9883%	501	50,221	29.2573%	14,693
6120 Gen'l Support	1.6000%	219,337		219,337	2.1622%	4,743	214,594	29.2573%	62,784
6210 & 6220 CO Switching & Operator Systems	5.6000%	767,681		767,681	0.0082%	63	767,618	33.8229%	259,631
6230 CO Transmission	3.9800%	545,602		545,602	0.0000%	0	545,602	33.8229%	184,538
6310 Info Orig/Term	5.2100%	714,218		714,218	40.3368%	288,093	426,125	27.2472%	116,107
6410 Cable & Wire Facilities	16.8500%	2,309,898		2,309,898	0.0000%	0	2,309,898	30.3529%	701,121
6510 Other Prop Plant & Equip Exp	0.0000%	0		0	0.0000%	0	0	30.7359%	0
6530 Network Operations	16.1800%	2,218,050		2,218,050	1.8946%	42,023	2,176,027	31.7630%	691,171
6560 Depreciation Exp	0.0000%	0		0	0.2003%	204	101,421	32.1704%	32,628
6610 Marketing	8.4700%	1,161,118		1,161,118	1.9006%	22,068	1,139,050	29.1552%	332,092
6621 & 6622 Operator Services	7.1600%	981,535		981,535	0.0000%	0	981,535	31.5270%	309,449
6623.1 Customer Accounting	1.3860%	189,996		189,996	1.4852%	2,822	187,174	5.1649%	9,667
6623.2 Business Office	10.4225%	1,428,772		1,428,772	3.6333%	51,912	1,376,860	14.6044%	201,082
6623.3 -- .8 Customer Services -- Other	0.8316%	113,998		113,998	0.1898%	216	113,781	15.1899%	17,283
6710 Exec & Planning	1.0300%	141,198		141,198	1.8395%	2,597	138,601	26.9891%	37,407
6720 Gen'l & Admin	0.8200%	112,410	6,691,035	(6,578,624)	1.9446%	(127,928)	(6,450,696)	26.9891%	(1,740,985)
Total Operating Expense	79.9100%	10,954,536	6,691,035	4,365,126		287,314	4,077,811		1,228,670
RATE BASE				Average Amount					
IPIS	20.0900%	2,754,056		1,377,028	0.1904%	2,622	1,374,406	31.6902%	435,552
Accumulated Depreciation				50,812	0.1070%	54	50,758	32.0423%	16,264
OPEB Liability				3,508,779	0.0000%	0	3,508,779	29.1492%	1,022,781
Accumulated Deferred Taxes				(857,311)	0.0000%	0	(857,311)	29.1492%	(249,899)
Net Rate Base				(1,325,252)		2,567	(1,327,819)		(353,594)

STATE OF NEW HAMPSHIRE  
SFAS No. 106 Incremental Cost  
TOTAL OPEB COST

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WORKPAPER OPEB  
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	Interstate Amount	Percent Common Line	Common Line Amount	Percent Traffic Sensitive	Traffic Sensitive Amount	Percent Special Access	Special Access Amount	Percent Inter- exchange	Inter- exchange Amount
6110 Network Support	14,693	19.1760%	2,818	64.2300%	9,437	16.5940%	2,438		0
6120 Gen'l Support	62,704	19.1760%	12,040	64.2300%	40,326	16.5940%	10,418		0
6210 & 6220 CO Switching & Operator Systems	259,631	20.4458%	53,084	69.0401%	179,249	10.5141%	27,298		0
6230 CO Transmission	184,538	20.4458%	37,730	69.0401%	121,405	10.5141%	19,403		0
6310 Info Orig/Term	116,107	99.8530%	115,936	0.0000%	0	0.1470%	171		0
6410 Cable & Wire Facilities	701,121	77.8719%	545,976	13.0274%	91,338	9.1007%	63,807		0
6510 Other Prop Plant & Equip Exp	0	53.5211%	0	38.0282%	0	8.6507%	0		0
6530 Network Operations	691,171	53.1218%	367,163	37.3089%	257,868	9.5693%	66,140		0
6560 Depreciation Exp	32,628	45.8152%	14,948	44.1092%	14,392	10.0756%	3,287		0
6610 Marketing	332,092	49.9916%	166,018	39.8381%	132,299	10.1703%	33,775		0
6621 & 6622 Operator Services	309,449	0.0000%	0	100.0000%	309,449	0.0000%	0		0
6623.1 Customer Accounting	9,667	91.0326%	8,800	7.0652%	309,449	1.9022%	184		0
6623.2 Business Office	201,082	51.5354%	103,629	24.8819%	50,033	23.5627%	47,421		0
6623.3 -- B	17,283	29.7819%	5,144	59.5236%	10,288	10.7143%	1,852		0
6710 Exec & Planning	37,407	43.3255%	16,207	45.7447%	17,112	10.9299%	4,089		0
6720 Gen'l & Admin	(1,740,965)	43.3255%	(754,290)	45.7447%	(796,408)	10.9299%	(190,288)		0
Total Operating Expense	1,228,670		695,202		443,472		89,994		0
RATE BASE									
TPIS	435,552	50.0740%	218,098	39.9031%	173,799	10.0229%	43,655		0
Accumulated Depreciation	16,264	49.4233%	8,038	40.5348%	6,593	10.0420%	1,633		0
OPEB Liability	1,022,781	50.3356%	514,823	39.7315%	406,366	9.9329%	101,592		0
Accumulated Deferred Taxes	(249,899)	50.3356%	(125,788)	39.7315%	(99,289)	9.9329%	(24,822)		0
Net Rate Base	(353,594)		(178,974)		(139,871)		(34,748)		0
Gross Receipts and Income Tax Calculation									
Rate Base	(353,594)		(178,974)		(139,871)		(34,748)		0
Rate of Return	11.25%		11.25%		11.25%		11.25%		11.25%
Return on Rate Base	(39,779)		(20,135)		(15,736)		(3,909)		0
Revenue Conversion (Rate Base)	(85,512)		(33,160)		(25,916)		(6,438)		0
Gross Receipt Tax (Rate Base)	0.00%		0		0		0		0
State Income Tax (Rate Base)	(5,241)		(2,653)		(2,073)		(515)		0
Federal Income Tax (Rate Base)	(20,492)		(10,373)		(8,107)		(2,014)		0
Expenses	1,228,670		695,202		443,472		89,994		0
Earning Effect (Exp)	746,048		422,127		269,276		54,644		0
Revenue Conversion (Exp)	1,228,670		695,202		443,472		89,994		0
Gross Receipt Tax (Exp)	0.00%		0		0		0		0
State Income Tax (Exp)	98,294		55,616		35,478		7,200		0
Federal Income Tax (Exp)	384,328		217,459		138,718		28,150		0
Total Revenue Requirement	1,163,158		662,042		417,556		83,556		0
Times Godwins	84.80%		561,412		354,087		70,856		0
New TS % of TS + SA Baskets	39.14%				New Traffic Sensitive Amount		Trunking Amount		
TK % of TS + SA Baskets	60.86%				166,310		258,633		
Recasted Revenue Requirement	986,355		561,412		166,310		258,633		0

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STATE OF RHODE ISLAND  
EXG-1 FOR SFAS 106  
EFFECT OF TOTAL OPEB

REVENUE EFFECT	Interstate	Common Line	Traffic Sensitive	Special Access	Inter-exchange
Depreciation Expense	17,102	6,755	8,914	1,433	0
Expense Less Depreciation	1,000,864	504,150	410,979	85,691	0
Taxes Less FIT	61,121	30,816	25,068	5,240	0
Net Return	(39,868)	(18,558)	(17,933)	(3,117)	0
FIT	(20,538)	(9,568)	(9,238)	(1,606)	0
Uncollectible Revenue & Other Adj	0	0	0	0	0
Revenue Effect	1,018,681	513,602	417,790	87,661	0
Revenue Effect Adjusted by Godwins Factor of 84.8%	864,157	435,535	354,286	74,336	0

	New Traffic Sensitive	Trunking
Recasted Revenue Effect	170,915	257,707
Additional Annual Revenue Effect	137,027	210,739
Make-whole Revenue Effect	137,027	210,739
Net Revenue Effect	274,971	421,478

RATE BASE

Total Plant in Service	109,251	107,097	19,057	0
Other Rate Base Items	(360,562)	(351,317)	(61,635)	0
Depreciation Reserve	4,196	3,414	612	0
Accum. Deferred Inc. Tax	(90,548)	(88,226)	(15,478)	0
Net Rate Base	(164,959)	(159,407)	(27,711)	0

STATE OF RHODE ISLAND  
YEAR 1993

SFAS 106 Cost (Total OPEB)  
Pay As You Go 11,554,303  
Other Funding 5,387,591  
Liability At Year End 6,166,712  
Wage % 8.079%  
PAYG % 8.02%

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	Benefits Clearing Factor	SFAS 106 Benefits Cleared	Pay As You Go	Rhode Island Incremental Cost	Percent Nonreg	Nonreg Amount Separations	Subject To Separations	Interstate Access Factor	Interstate Access Amount
6110 Network Support	0.2400%	27,730		27,730	1.3575%	376	27,354	25.2186%	6,898
6120 Gen'l Support	1.4600%	168,693		168,693	2.3095%	3,896	164,797	25.2186%	41,559
6210 & 6220 CO Switching & Operator Systems	5.4800%	633,176		633,176	1.1819%	7,484	625,692	29.7497%	186,162
6230 CO Transmission	6.9500%	803,024		803,024	0.0000%	0	803,024	29.7497%	238,897
6310 Info Orig/Term	5.4600%	630,865		630,865	51.5315%	325,094	305,771	25.4513%	77,823
6410 Cable & Wire Facilities	17.7400%	2,049,733		2,049,733	0.0000%	0	2,049,733	27.7409%	568,614
6510 Other Prop Plant & Equip Exp	0.0200%	2,311		2,311	12.4561%	288	2,023	28.2565%	568,614
6530 Network Operations	13.6500%	1,577,162		1,577,162	2.7681%	43,657	1,533,505	28.4438%	436,187
6560 Depreciation Exp	0.0000%	0		0	0.3006%	177	58,717	29.1259%	17,102
6610 Marketing	6.7300%	777,605		777,605	3.0740%	23,904	753,701	26.9123%	202,838
6621 & 6622 Operator Services	7.1900%	830,754		830,754	0.0000%	0	830,754	15.7611%	130,936
6623.1 Customer Accounting	1.0300%	119,097		119,097	1.9547%	2,328	116,769	5.6596%	6,609
6623.2 Business Office	11.1272%	1,285,669		1,285,669	2.9036%	37,331	1,248,338	8.8261%	110,180
6623.3 - .8 Customer Services -- Other	0.8321%	96,138		96,138	0.1626%	156	95,982	10.9208%	10,482
6710 Exec & Planning	0.8200%	94,745		94,745	2.3596%	2,236	92,510	23.1602%	21,425
6720 Gen'l & Admin	6.8100%	786,848		786,848	2.5567%	(117,627)	(4,483,116)	23.1602%	(1,038,299)
Total Operating Expense	85.5400%	9,883,551	5,387,591	(4,600,743)		329,299	4,225,554		1,017,966
			5,387,591	4,554,854					
RATE BASE				Average Amount					
TPIS	14.4600%	1,670,752		835,376	0.2559%	2,138	833,238	28.2519%	235,406
Accumulated Depreciation				29,447	0.0905%	27	29,420	27.9449%	8,221
OPEB Liability				3,083,356	0.0000%	0	3,083,356	25.1867%	776,596
Accumulated Deferred Taxes				(774,325)	0.0000%	0	(774,325)		(195,027)
Net Rate Base				(1,503,102)		2,111	(1,505,213)		(354,384)

STATE OF RHODE ISLAND  
SFAS No. 106 Incremental Cost  
TOTAL OPEB COST

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	Interstate Amount	Percent Common Line	Common Line Amount	Percent Traffic Sensitive	Traffic Sensitive Amount	Percent Special Access	Special Access Amount	Percent Inter- exchange	Inter- exchange Amount
6110 Network Support	6,898	25.9864%	1,793	62.6544%	4,322	11.3591%	784		0
6120 Gen'l Support	41,559	25.9864%	10,800	62.6544%	26,039	11.3591%	4,721		0
6210 & 6220 CO Switching & Operator Systems	186,142	16.8973%	31,453	75.0893%	139,772	8.0134%	14,916		0
6230 CO Transmission	238,897	16.8973%	40,367	75.0893%	179,586	8.0134%	19,144		0
6310 Info Orig/Term	77,823	99.8818%	77,731	0.0000%	0	0.1182%	92		0
6410 Cable & Wire Facilities	568,614	71.8459%	408,526	18.5859%	105,682	9.5682%	54,406		0
6510 Other Prop Plant & Equip Exp	436,187	47.5177%	272	44.6809%	255	0.0000%	0		0
6530 Network Operations	17,102	48.2566%	210,489	43.8066%	191,079	34,619	0		0
6560 Depreciation Exp	202,838	39.4968%	6,755	52.1233%	8,914	8.3799%	1,633		0
6610 Marketing	130,936	46.4085%	94,134	45.3704%	130,936	8.2211%	16,676		0
6621 & 6622 Operator Services	6,609	0.0000%	0	100.0000%	0	0.0000%	0		0
6623.1 Customer Accounting	110,180	82.8996%	5,479	14.4981%	958	2.6022%	172		0
6623.2 Business Office	10,482	43.9754%	48,452	25.4797%	28,073	30.5449%	33,654		0
6623.3 -- .8 Exec & Planning	21,625	28.4314%	2,980	57.8431%	6,063	13.7255%	1,639		0
6710 Gen'l & Admin	(1,038,299)	42.1218%	9,025	48.5425%	10,400	9.3356%	2,000		0
6720 Total Operating Expense	1,017,966	42.1218%	(437,350)	48.5425%	(504,016)	9.3356%	(96,931)		0
RATE BASE			510,904		419,893		87,124		0
IPIS	235,406	46.4097%	109,251	45.4948%	107,097	8.0955%	19,057		0
Accumulated Depreciation	8,221	51.0311%	4,196	41.5262%	3,414	7.4427%	612		0
OPEB Liability	776,596	46.4286%	360,562	45.2381%	351,317	7.9365%	61,635		0
Accumulated Deferred Taxes	(195,027)	46.4286%	(90,548)	45.2381%	(88,226)	7.9365%	(15,478)		0
Net Rate Base	(354,384)		(164,959)		(159,407)		(27,711)		0
Gross Receipts and Income Tax Calculation									
Rate Base	(354,384)		(164,959)		(159,407)		(27,711)		0
Rate of Return	11.25%		11.25%		11.25%		11.25%		11.25%
Return on Rate Base	(39,868)		(18,558)		(17,933)		(3,117)		0
Revenue Conversion (Rate Base)	(64,262)		(29,913)		(28,906)		(5,024)		0
Gross Receipt Tax (Rate Base)	(3,856)		(1,795)		(1,734)		(301)		0
State Income Tax (Rate Base)	0		0		0		0		0
Federal Income Tax (Rate Base)	(20,538)		(9,560)		(9,238)		(1,606)		0
Expenses	1,017,966		510,904		419,893		87,124		0
Earning Effect (Exp)	671,657		331,197		277,130		57,502		0
Revenue Conversion (Exp)	1,082,942		543,515		446,696		92,685		0
Gross Receipt Tax (Exp)	64,977		32,611		26,802		5,561		0
State Income Tax (Exp)	0		0		0		0		0
Federal Income Tax (Exp)	346,108		173,707		142,764		29,622		0
Total Revenue Requirement	1,018,680		513,602		417,790		87,661		0
Times Godwins	864,157		435,534		354,286		74,337		0
New TS % of TS + SA Baskets	39.88%		435,534		170,915		257,707		0
TK % of TS + SA Baskets	60.12%								
Recasted Revenue Requirement	864,157		435,534		170,915		257,707		0



STATE OF VERMONT  
YEAR 1993

SFAS 106 Cost (Total OPEB)  
Pay As You Go 6,498,073  
Other Funding 3,164,848  
Liability At Year End 3,333,226  
Wage % 4.544%  
PAYG % 4.71%

SFAS 106 Cost (Total OPEB)

Pay As You Go  
Other Funding  
Liability At Year End  
Wage %  
PAYG %

6110 Network Support  
6120 Gen'l Support  
6210 & 6220 CO Switching & Operator Systems  
6230 CO Transmission  
6310 Info Orig/Term  
6410 Cable & Wire Facilities  
6510 Other Prop Plant & Equip Exp  
6530 Network Operations  
6560 Depreciating Exp  
6610 Marketing  
6621 & 6622 Operator Services  
6623.1 Customer Accounting  
6623.2 Business Office  
6623.3 -- Other  
6710 Exec & Planning  
6720 Gen'l & Admin  
Total Operating Expense

	Benefits Clearing Factor	SFAS 106 Benefits Cleared	Pay As You Go	Vermont Incremental Cost	Percent Nonreg	Nonreg Amount	Subject to Separations	Interstate Access Factor	Interstate Access Amount
	0.2600%	16,895	16,895	16,895	1.3011%	220	16,675	29.6936%	4,951
	1.1500%	74,728	74,728	74,728	1.2123%	906	73,822	29.6936%	21,920
	6.7700%	439,920	439,920	439,920	0.2883%	1,268	438,651	34.6821%	151,256
	3.0700%	199,491	199,491	199,491	0.0000%	0	199,491	34.4821%	68,789
	4.0500%	263,172	263,172	263,172	46.2857%	121,811	141,361	27.3556%	38,670
	16.0300%	1,041,641	1,041,641	1,041,641	0.0000%	0	1,041,641	31.2481%	325,493
	-0.0200%	(1,300)	(1,300)	(1,300)	0.7299%	(9)	(1,290)	32.5926%	(420)
	12.0400%	782,368	782,368	782,368	2.0302%	15,884	766,484	32.5698%	249,642
	0.0000%	0	0	0	0.1466%	84	57,339	33.5853%	19,257
	7.2000%	467,861	467,861	467,861	2.4684%	11,549	456,313	28.3978%	129,583
	5.5900%	363,242	363,242	363,242	0.0000%	0	363,242	30.8921%	112,213
	1.2357%	80,295	80,295	80,295	1.8033%	1,448	78,847	5.1885%	4,091
	11.5447%	750,186	750,186	750,186	1.9529%	14,650	735,536	13.0544%	96,020
	0.5296%	34,412	34,412	34,412	0.2025%	1,128	33,284	26.8665%	4,939
	1.0500%	68,230	68,230	68,230	1.6529%	(45,457)	(2,639,833)	26.8665%	18,028
	7.3600%	479,558	479,558	479,558	1.6928%	123,551	1,829,724	26.8665%	(709,231)
	77.8000%	5,060,700	3,164,848	(2,685,290)					535,202
			3,164,848	1,953,275					
				Average Amount					
				718,687					
				28,712					
				1,666,613					
				(385,235)					
				(591,403)					

RATE BASE

TPIS	22.1200%	1,437,374	1,292	717,395	0.1798%	1,292	717,395	32.5796%	233,724
Accumulated Depreciation			21	28,691	0.0722%	21	28,691	32.9374%	9,450
OPEB Liability				1,666,613	0.0000%	0	1,666,613	29.6876%	494,777
Accumulated Deferred Taxes				(385,235)	0.0000%	0	(385,235)	29.6876%	(114,367)
Net Rate Base				(591,403)		1,271	(592,674)		(156,136)

STATE OF VERMONT  
SFAS No. 106 Incremental Cost  
TOTAL OPEB COST

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	Interstate Amount	Percent Common Line	Common Line Amount	Percent Traffic Sensitive	Traffic Sensitive Amount	Percent Special Access	Special Access Amount	Percent Inter- exchange	Inter- exchange Amount
Network Support	4,951	16.4517%	815	69.5406%	3,443	14.0077%	694		0
Gen'l Support	21,920	16.4517%	3,606	69.5406%	15,244	14.0077%	3,071		0
CO Switching & Operator Systems	151,256	17.8656%	27,023	72.9363%	110,321	9.1981%	13,913		0
CO Transmission	68,789	17.8656%	12,290	72.9363%	50,172	0.0000%	6,327		0
Info Orig/Term	38,670	100.0000%	38,670	0.0000%	0	0.0000%	0		0
Cable & Wire Facilities	325,493	73.9519%	240,708	17.7623%	57,815	8.2858%	26,970		0
Other Prop Plant & Equip Exp	(4,200)	47.7273%	(201)	43.1810%	(182)	9.0909%	(38)		0
Network Operations	249,642	48.7590%	121,723	42.6089%	106,370	8.6321%	21,549		0
Depreciation Exp	19,257	41.2037%	7,935	49.9106%	9,612	8.8857%	1,711		0
Marketing	129,583	46.4211%	60,154	44.6316%	57,835	8.9474%	11,594		0
Operator Services	112,213	0.0000%	0	100.0000%	112,213	0.0000%	0		0
Customer Accounting	4,091	90.7104%	3,711	7.6503%	313	1.6393%	67		0
Business Office	96,020	49.0358%	47,084	31.1295%	29,890	19.8347%	19,045		0
Customer Services -- Other	4,939	29.2308%	1,444	61.5385%	3,039	9.2308%	456		0
Exec & Planning	18,028	40.4310%	7,289	49.9317%	9,002	9.6373%	1,737		0
Gen'l & Admin	(709,231)	40.4310%	(286,749)	49.9317%	(354,131)	9.6373%	(68,351)		0
Total Operating Expense	535,202		285,501		210,956		38,745		0
TPIS	233,724	46.3930%	108,432	44.7108%	104,500	8.8962%	20,793		0
Accumulated Depreciation	9,450	49.3323%	4,662	41.8464%	3,954	8.8213%	834		0
OPEB Liability	494,777	47.2222%	233,645	44.4444%	219,901	8.3333%	41,231		0
Accumulated Deferred Taxes	(114,367)	47.2222%	(54,007)	44.4444%	(50,830)	8.3333%	(9,531)		0
Net Rate Base	(156,136)		(75,868)		(68,526)		(11,742)		0
Receipts and Income Tax Calculation	(156,136)		(75,868)		(68,526)		(11,742)		0
Rate Base	11,25%		11,25%		11,25%		11,25%		0
Return on Rate Base	(17,565)		(8,535)		(7,709)		(1,321)		0
Revenue Conversion (Rate Base)	(29,007)		(14,095)		(12,731)		(2,181)		0
Gross Receipt Tax (Rate Base)	0		0		0		0		0
State Income Tax (Rate Base)	(2,393)		(1,163)		(1,050)		(180)		0
Federal Income Tax (Rate Base)	(9,049)		(4,397)		(3,971)		(681)		0
Expenses	535,202		285,501		210,956		38,745		0
Earning Effect (Exp)	324,091		172,885		127,744		23,462		0
Revenue Conversion (Exp)	535,202		285,501		210,956		38,745		0
Gross Receipt Tax (Exp)	0		0		0		0		0
State Income Tax (Exp)	44,154		23,554		17,404		3,196		0
Federal Income Tax (Exp)	166,956		89,062		65,808		12,087		0
Total Revenue Requirement	506,195		271,406		198,225		36,564		0
Times Gooding	429,253		230,152		168,094		31,007		0
New TS X of TS + SA Baskets	38.46%				New Traffic Sensitive Amount		Trunking Amount		0
TK X of TS + SA Baskets	61.54%				76,582		122,519		0
Recasted Revenue Requirement			230,152		76,582				

Calculation of Full SFAS 106 Accrual Exogenous Cost Adjustment

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NYNEX

Line Item	Source	Interstate	Common Line	Traffic Sensitive	Trunking	Interexchange
1. TBO Retirees & Interest Annual Revenue Effect	1994 Annual Filing WP OPEBREV	8,065,702	5,632,360	743,762	1,573,398	116,182
2. Total SFAS-106 Revenue Effect	WP OPEB, PG 1 OF 23	29,045,345	14,559,404	4,554,943	9,683,198	247,800
Difference Between Total SFAS-106 Revenue Effect and TBO Retirees & Interest						
3. Annual Revenue Effect	Ln 2 - Ln 1	20,979,643	8,927,044	3,811,181	8,109,800	131,618

NEW YORK

Line Item	Source	Interstate	Common Line	Traffic Sensitive	Trunking	Interexchange
1. TBO Retirees & Interest Annual Revenue Effect	1994 Annual Filing WP OPEBREV	5,966,847	4,067,611	571,438	1,211,616	116,182
2. Total SFAS-106 Revenue Effect	WP OPEB, PG 2 OF 23	19,648,979	9,901,539	3,044,473	6,455,167	247,800
Difference Between Total SFAS-106 Revenue Effect and TBO Retirees & Interest						
3. Annual Revenue Effect	Ln 2 - Ln 1	13,682,132	5,833,928	2,473,035	5,243,551	131,618

NEW ENGLAND

Line Item	Source	Interstate	Common Line	Traffic Sensitive	Trunking	Interexchange
1. TBO Retirees & Interest Annual Revenue Effect	1994 Annual Filing WP OPEBREV	2,098,855	1,564,749	172,324	361,782	0
2. Total SFAS-106 Revenue Effect	WP OPEB, PG 5 OF 23	9,396,366	4,657,865	1,510,470	3,228,031	0
Difference Between Total SFAS-106 Revenue Effect and TBO Retirees & Interest						
3. Annual Revenue Effect	Ln 2 - Ln 1	7,297,511	3,093,116	1,338,146	2,866,249	0

## **Appendix H.1**

# ***United States Telephone Association***

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Perspectives on Analysis of Impact of  
SFAS 106 on GNP-PI

August 14, 1995

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## Introduction

In order to assist in responding to the FCC's recent Order Designating Issues for Investigation, the United States Telephone Association ("USTA") has asked us to provide a summary of our prior analysis of the impact of SFAS 106 on GNP-PI and to provide an opinion as to the extent to which that analysis should still be considered valid now that three years have passed since the original study was issued and SFAS 106 has now been adopted by all companies for whom it was required.

As discussed in this material, we believe that the actual impact of SFAS 106 on GNP-PI was not materially different than that estimated in our original analysis. Further, we believe that the actual portion of the Price Cap LEC's additional cost due to the adoption of FAS 106 in 1993 that recovered through the GNP-PI was not materially different than that reported in our original analysis.

The rest of this material reviews our prior analysis and discusses this conclusion in more detail.

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### Determination of Impact of SFAS 106 on GNP-PI

In our original study ("Analysis of Impact of FAS 106 Costs on GNP-PI") issued in February 1992, we provided an analysis of what percentage of the additional costs incurred by Local Exchange Carriers subject to Federal Price Cap regulations (hereinafter referred to as "Price Cap LECs") as a result of the Financial Accounting Standards Board's Statement No. 106 (SFAS 106) would be reflected in the GNP Price Index (GNP-PI) and what percentage would not be so reflected.

That study found that ultimately the increase in GNP-PI caused by SFAS 106 (0.0124%) would provide for recovery of only 0.7% of the additional costs incurred by Price Cap LECs. This result was produced by performing both an actuarial analysis and a macroeconomic analysis. The actuarial and macroeconomic analyses were performed in a very conservative manner to ensure that we did not understate the effect of SFAS 106 on the GNP-PI.

In addition to developing this basic result, the study included a sensitivity analysis to test the robustness of the result. That sensitivity analysis lent further support to our finding that any resulting increase in the GNP-PI would allow the Price Cap LEC's to recover only a very small fraction of their additional costs due to SFAS 106.

Subsequent to the submission of the study, we were asked by the FCC staff to extend our analysis in two ways. First, we were asked to develop a "best estimate" determination of the impact of SFAS 106 on the GNP-PI; secondly, we were asked to extend our sensitivity analysis to include every possible combination of parameter values regardless of how unreasonable or internally inconsistent those combinations might be. We performed the additional analysis and reported the results in a supplemental report issued in March 1993. In that report, we found that on a "best estimate" basis, only 0.3% of the Price Cap LEC's additional costs due to SFAS 106 would be recovered as a result of increases in the GNP-PI. As might be expected, for some of the parameter combinations examined in the extended sensitivity analysis, the percentage of additional SFAS 106 costs recovered through the GNP-PI was higher than in the original sensitivity analysis. However, even these higher values indicated that only a small fraction of additional SFAS 106 costs would be recovered through the GNP-PI. Moreover, these higher values resulted only from extremely unlikely combinations of parameter values. For example, the ten highest values were obtained only with a price elasticity of demand equal to 3.0, and with a direct impact of SFAS 106 on labor costs in sector 2 of 4.5%. As discussed in the March 1993 Supplemental Report, price elasticities of demand in sectors 1 and 2 are almost surely less than 1.0, and our baseline value of 1.5 for this elasticity was chosen to guard against understating the impact of SFAS 106 on the GNP-PI; a value of 3.0 for this elasticity is too high to be taken seriously. Also the value of 4.5% for the direct impact of SFAS 106 on labor costs in sector 2 is almost double the best estimate of 2.5% and is less plausible than the baseline estimate of 3.0%.

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We want to emphasize that the original study was done in a very conservative manner and the baseline result of that study (0.7% of the Price Cap LEC's additional costs recovered through GNP-PI increases) is more than twice the value produced under a "best estimate" approach. Pages 34-38 of the original study provide a detailed discussion of the conservative nature of the analysis, including a discussion of the rationale behind the choice of each actuarial and macroeconomic parameter utilized in the study.

#### **Additional Macroeconomic Effect of SFAS 106**

Above and beyond the GNP-PI effect reported above, when the original study was done, our macroeconomic model indicated that, in response to the impact of SFAS 106, the wage rate in the national economy will, over time, reduce in relative terms by 0.93% (i.e., relative to what it would have been in the absence of SFAS 106). To the extent that a Price Cap LEC could also benefit from a relative reduction in its wage rate, this would help offset its increase in costs due to SFAS 106. If a Price Cap LEC's were able to achieve the full reduction of 0.93%, it would finance 14.5% of its additional SFAS 106 costs. As discussed in our report, this wage rate reduction reflects the **ultimate** effect of SFAS 106 after all macroeconomic variables have adjusted to their new equilibrium levels. This macroeconomic adjustment is unlikely to be completed within a year, and may indeed take a few years to complete. Thus, during 1993, the fraction of additional SFAS 106 costs financed by a relative reduction in wages is likely to be less than 14.5% — perhaps substantially less.

Thus, even after complete macroeconomic adjustment has taken place, the combined effect of the impact of SFAS 106 on the GNP-PI and on the wage rate would still leave 84.8% (i.e., 100% minus 0.7% minus 14.5%) of the Price Cap LEC's additional SFAS 106 costs unrecovered. The original study also included sensitivity analysis on how much of the Price Cap LEC's additional costs could potentially be recovered through the combination of increases in GNP-PI and this wage rate effect. That analysis lent additional support to our finding that 15.2% was a reasonable estimate of the fraction of additional costs that would be recovered through the combination of both sources.

Again, in response to the FCC staff requests, the analysis of the impact of the combination of GNP-PI increases and potential wage rate reductions was extended to produce a "best estimate" impact and a sensitivity analysis incorporating all combinations of actuarial and macroeconomic parameters. On a best estimate basis, we determined that 12.7% of the Price Cap LEC's additional costs would be recovered through the combination of GNP-PI increases and wage rate reductions; the additional sensitivity analysis again confirmed our finding that most of the Price Cap LEC's additional costs would not be recovered through the GNP-PI and other macroeconomic effects.

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## Purpose of Sensitivity Analysis

As noted above, our original report (February 1992) contained a sensitivity analysis. At the request of the FCC staff our March 1993 Supplemental Report contained additional sensitivity analysis (while this sensitivity analysis broadened the range of parameter values considered, many of these additional combinations of parameters were, as explained below, implausible.) In order to interpret and apply the results of these sensitivity analyses, it is important to keep in mind the purpose of these analyses and the conservative philosophy underlying their implementation. We have already discussed that our conservative approach produced a baseline calculation of the impact of SFAS 106 on GNP-PI that is larger than a calculation based on our best estimates. The comprehensive sensitivity analysis provides an additional degree of comfort that the baseline results are, in fact, conservative.

The primary goal of the sensitivity analysis was to explore the robustness of our findings and to illustrate the quantitative impact on our findings of various changes in the numerical values of the inputs. *The ranges of values used in the sensitivity analysis were not intended to represent the ranges of plausible parameter values.* Instead, our conservative approach led us to choose ranges of values so wide they include all plausible values, and then some. To guard against the risk of omitting some plausible values, we intentionally used ranges of values so wide they include implausible values as well. As a consequence, some of the extreme values of the calculated effect of SFAS 106 on the GNP-PI simply reflect implausible values for inputs.

As discussed earlier, our March 1993 Supplemental Report contains a best estimate of the impact of SFAS 106, as well as a conservative baseline estimate, and a comprehensive sensitivity analysis. Our best estimate (p. 14) is that only 0.3% of the increase in the Price Cap LECs' costs due to SFAS 106 are recovered through the GNP-PI. This finding illustrates that our baseline calculation of 0.7% is indeed conservative. The comprehensive sensitivity analysis, which included input values that are clearly implausible, produced some results for the impact on GNP-PI that are considerably larger. The sensitivity analysis considered three different values of each of four different inputs to the macroeconomic model, two different values of one input, and four different values of one input,<sup>1</sup> and computed results using all 648 (= 3 x 3 x 3 x 3 x 2 x 4) combinations of these values.

Finally, note that using two or more implausible values together heightens the degree of implausibility. For example, suppose there is only a one in a hundred chance that the price elasticity of demand is as high as 3.0 and there is only one in a hundred chance that the direct impact of SFAS 106 on labor cost in sector 2 is as high as 4.5%. Then there is only one chance in 10,000 that both values together are appropriate. To reiterate, our sensitivity analysis

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<sup>1</sup> Three values of the direct impact of SFAS 106 on labor costs in sector 2; 3 values of labor share in total cost in sector 1; 3 values of labor share in total cost in sector 2; 3 values of the fraction of labor employed in sector 2; 2 values of the price elasticity of demand; 4 values of the labor supply elasticity.

presents the results for all combinations of parameter values, including many combinations too implausible to merit any attention.

### Validity of Original Study

Based on the discussion above, it is clear that our original study was done in a conservative manner, most likely overestimating the impact of SFAS 106 on the GNP-PI. In addition, comprehensive sensitivity analysis was performed to confirm the robustness of the result against the possibility of error in estimating one or more of the economic or actuarial parameters used in the study.

Three years have passed since the original study was issued. During that time, all companies providing postretirement welfare benefits adopted SFAS 106. Based on what we now know, we believe our estimate of the impact of SFAS 106 on the GNP-PI<sup>2</sup> and of the percentage recovery of the Price Cap LEC's additional costs incurred by their adoption of SFAS 106 is still reasonable. Furthermore, the conservatism inherent in our original study gives us confidence that the actual recovery of additional SFAS 106 costs through the GNP-PI when SFAS 106 became mandatorily effective in 1993 was not materially greater than the 0.7% in our baseline results.

Respectfully submitted,



Peter J. Neuwirth, F.S.A., M.A.A.A.



Andrew B. Abel, Ph.D.

- 2 Since our original report was issued, the measure used in the FCC's price cap methodology was changed from GNP-PI to GDP-PI. This change would have no impact on the results of our study. Not only does the formal mathematical model ignore any distinction between GNP-PI and GDP-PI, the actual data (presented in Table I) show only a minuscule difference between these two measures of the overall price level.

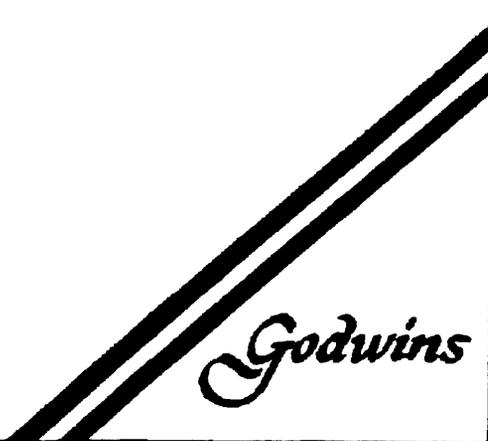
price index	1988	1989	1990	1991	1992	1993
GDP-PI	104.0	108.6	113.6	118.1	121.9	125.5
GNP-PI	104.0	108.6	113.6	118.1	121.8	125.4

Source: Survey of Current Business, August 1994. GDP-PI is from Table 7.1, p. 32, line 5, price index, fixed 1987 weights; GNP-PI is from Table 7.3, p. 40, line 5, price index, fixed 1987 weights.

**UNITED STATES  
TELEPHONE ASSOCIATION**

**Analysis of Impact of  
FAS 106 Costs on GNP-PI**

**February, 1992**

The logo for Godwins, featuring the word "Godwins" in a stylized, cursive script font. The logo is positioned in the bottom right corner of the page, partially overlapping a decorative graphic of two parallel diagonal lines that run from the bottom left towards the top right.

*Godwins*

UNITED STATES TELEPHONE ASSOCIATION  
Analysis of Impact of SFAS 106 Costs on GNP-PI

February 18, 1992

The logo for Godwin, featuring the name "Godwin" in a stylized, cursive script font. The text is positioned at the end of two parallel diagonal lines that extend from the bottom left towards the top right of the page.

*Godwin*

## BACKGROUND

Godwins has been engaged by the United States Telephone Association to perform an analysis of the impact of SFAS 106 on the GNP-PI. In particular, Godwins was asked to determine the extent to which the price cap mechanism utilized by the FCC will reflect the impact of SFAS 106 and will enable Local Exchange Carriers to recover their increase in total operating costs incurred due to their adoption of the new accounting standard.

This report describes the results of that analysis and provides detailed documentation of the data, methods, and assumptions utilized in the study.

Respectfully submitted,



Peter J. Neuwirth, F.S.A., M.A.A.A.



Andrew B. Abel, Ph.D.

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## I. EXECUTIVE SUMMARY

The purpose of this study is to determine what percentage of the additional costs incurred by Local Exchange Carriers subject to Federal Price Cap regulations (hereinafter referred to as "Price Cap LECs") as a result of the Financial Accounting Standards Board's Statement No. 106 (SFAS 106) will be reflected in the GNP Price Index (GNP-PI) and what percentage will not be so reflected.

This study finds that ultimately the increase in GNP-PI caused by SFAS 106 (.0124%) will provide for recovery of 0.7% of the additional costs incurred by Price Cap LECs. Other macroeconomic factors, principally an eventual adjustment of the national wage rate, account for recovery of an additional 14.5% of the additional costs incurred by Price Cap LECs, leaving 84.8% of these additional costs unrecovered.

This study is presented in two stages: an Actuarial Analysis followed by a Macroeconomic Analysis. The Actuarial Analysis uses demographic, economic and benefit program data collected from each Price Cap LEC to construct a composite company (hereinafter referred to as "TELCO") which reflects the characteristics of the industry as a whole. This analysis finds that the impact of SFAS 106 on the costs of the average employer in the economy is only 28.3% of the corresponding impact on TELCO. The Macroeconomic Analysis which analyzes the impact of SFAS 106 on the economy as a whole finds that only 2.3% of the average employer's additional costs resulting from SFAS 106 is passed through to the GNP-PI.

The table on the following page summarizes how the key results of the study are combined to derive the unrecovered proportion of the Price Cap LECs' SFAS 106 costs.

### Effects of SFAS 106 on TELCO's Costs

(A) Impact on national average costs relative to TELCO's costs (from the Actuarial Analysis)	28.3%
(B) Proportion of increase in national average costs passed through to GNP-PI (from the Macroeconomic Analysis)	2.3%
(C) Proportion of TELCO's SFAS 106 cost increase reflected in GNP-PI (item (A) x item (B))	0.7%
(D) Proportion of TELCO's SFAS 106 cost increase offset by other macroeconomic adjustments, including the reduction of the wage rate (from the Macroeconomic Analysis)	14.5%
(E) Proportion of TELCO's SFAS 106 cost increase unrecovered (100% - item (C) - item (D))	84.8%

#### Actuarial Analysis

Even if one were to take a conservative approach and assume that all SFAS 106 costs were passed through directly and completely to price increases and thus into the GNP-PI, 100% of each Price Cap LEC's SFAS 106 costs would be reflected in the GNP-PI, only if the following were true:

- The benefits provided by the Price Cap LEC to its employees were at the same level as those provided to all other employees in the economy.
- The benefits provided by the Price Cap LEC gave rise to the same relative increase in total costs as for other employers when SFAS 106 is applied.

Because neither of the above statements is true, the percentage of each Price Cap LEC's SFAS 106 costs that will be reflected in the GNP-PI is far less than 100%. Indeed, we have determined that ignoring macroeconomic effects, only 28.3% of the additional costs incurred by the average Price Cap LEC due to SFAS 106 would be reflected in the GNP-PI. This result was derived by the following steps:

- By utilizing demographic, economic, and benefit program data collected from each Price Cap LEC we constructed a composite company (hereinafter referred to as "TELCO") which reflects the characteristics of the industry as a whole.
- By utilizing a data base of plan provisions for retiree medical plans sponsored by 830 private sector employers (covering 19 million employees) and our Benefit Level Indicator ("BLI") methodology, we determined how TELCO's program compared to a "national average" benefit program.
- We adjusted this comparative benefit analysis to reflect specific factors that would cause similar benefit programs to generate different levels of SFAS 106 cost. In particular, we adjusted for:
  - differences in demography (average age, service, etc.)
  - differences in withdrawal and retirement patterns
  - differences in the number and impact of current retirees
  - differences in the extent of current pre-funding of benefits conducted by TELCO and that of others.
- We then took account of the very large group of workers in the national economy who are not covered by any post-retirement program or are covered by a program that is not affected by the FASB's rules. Their employers will, by definition, incur no SFAS 106 cost for them.

• We made two final adjustments to the comparative analysis due to economic factors. In particular, we:

- made an adjustment for differences between per unit labor costs for TELCO and for other employers, and
- made an adjustment for differences in the percentage of total output represented by labor costs for TELCO and for other employers.

Putting together all of these factors, we find that the impact of SFAS 106 on the costs of the average employer in the economy (including employers that do not offer post-retirement health benefits and/or are not affected by FASB's rules) is only 28.3% of the corresponding impact on TELCO. In addition, the Actuarial Analysis finds that SFAS 106 directly increases labor costs by 3% for the average employer offering post-retirement health benefits covered by SFAS 106. This 3% figure is an important input to the Macroeconomic Analysis.

#### Macroeconomic Analysis

The purpose of the Macroeconomic Analysis is to determine the extent to which the additional costs resulting from SFAS 106 would be passed through to an increase in GNP-PI. The Macroeconomic Analysis utilizes a macroeconomic model developed for Godwins by Professor Andrew Abel of the Wharton School of the University of Pennsylvania to address this question. The Macroeconomic Analysis finds that only 2.3% of direct SFAS 106 costs of the average employer in the economy are passed through to the GNP-PI. In addition, as a result of SFAS 106 the average wage rate in the economy would be 0.93% lower than it would have been in the absence of SFAS 106.

#### Effects of SFAS 106 on TELCO's Costs

As noted, the ultimate purpose of the study is to determine the extent to which GNP-PI reflects the additional costs incurred by the average Price Cap LEC (i.e. TELCO) as a result of SFAS 106. The table shown on page 2 summarizes our findings. Item (A) summarizes the Actuarial Analysis which finds that costs of

the average company in the economy increase by only 28.3% as much as TELCO's costs increase as a result of SFAS 106. Because only 2.3% of the average increase in costs is passed through to the GNP-PI (item (B)), only 0.7% (item (C), 2.3% x 28.3%) of TELCO's additional costs resulting from SFAS 106 are reflected in GNP-PI. Thus, it would appear that 99.3% of TELCO's additional costs are left unrecovered. However, the Macroeconomic Analysis finds that the national wage rate would eventually be 0.93% lower than it would have been in the absence of SFAS 106. If TELCO were able to benefit from a similar reduction in its wage rate, such a reduction would recover an additional 14.5% of TELCO's direct SFAS 106 costs (item (D)). Taking account of the 0.7% recovery due to GNP-PI and the eventual 14.5% recovery due to the adjustment of the wage rate leaves 84.8% of TELCO's direct SFAS 106 costs unrecovered (item (E)).

## II. DEVELOPMENT AND SUMMARY OF RESULTS

We wish to establish what percentage of the average Price Cap LEC's SFAS 106 costs will be reflected in the GNP-PI and hence what percentage will not be so reflected.

We begin with an actuarial analysis which proceeds in two steps. The first step in the actuarial analysis is to construct a composite company which accurately reflects the characteristics and benefit plans of the average Price Cap LEC. The second step is to determine the impact of SFAS 106 on this composite company relative to the impact of SFAS 106 on other employers in the GNP on the assumption that all additional costs are passed on completely into the GNP-PI. Following the actuarial analysis is a macroeconomic analysis to determine the extent to which the additional costs will, in fact, translate into higher prices and, therefore, affect the GNP-PI.

### Construction of Composite Company ("TELCO")

Actuarial, benefit, economic and demographic data were collected on eleven Price Cap LECs. Data included was for total Telephone Operations consistent with amounts included on the 1990 ARMIS 43-02 for each Company. These data were then combined, treating each Price Cap LEC as if it were a division of the larger combined company. The characteristics of this composite company ("TELCO") are as follows:

Number of Active employees	613,193
Number of Retired employees:	294,482
1990 Average compensation per employee:	\$38,533
1990 Total Revenue (in millions):	\$82,512.9
1990 Total Value Added (in millions):	\$61,338.4
Average Per Capita Claims Cost:	\$3,075
Average Age of Actives:	41.6
Average Service of Actives:	16.6

Impact of SFAS 106 on the Average Price Cap LEC Relative to its Impact on All Employers in the GNP

There are 95.8 million private sector employees and 18.6 million public sector employees in 'GNP', all of whom (and their dependents) may incur medical charges in retirement. Public sector employers, however, will not record SFAS 106 expense even where the entity sponsors a post-retirement medical plan (public sector employers are not subject to FASB rules).

Of the private sector employees, 30.7 million are eligible to have a proportion of their charges in retirement met by their employer's medical plan (and which plan is subject to SFAS 106), the actual proportion depending on the detailed provisions of their employer's plan(s). It is this anticipated employer cost for those employees that is reflected in SFAS 106 costs. The proportion of the charges met is an effective measure of the overall level of benefit provided by a given plan. We will refer to it as the Benefit Level Indicator ("BLI"). We must establish the average proportion of covered employees' charges that will be met collectively by their employers - the GNP BLI.

Separately we will calculate the average proportion of charges met by the average Price Cap LEC - the TELCO BLI.

All other factors being equal (which they are not), the percentage of TELCO's SFAS 106 costs that would be reflected in the GNP-PI would be represented by the following ratio:

$$\text{BLI Ratio} = \frac{\text{GNP BLI}}{\text{TELCO BLI}} = \frac{\text{Benefit Level Indicator for the average employer in the GNP}}{\text{Benefit Level Indicator for TELCO}}$$

However, this ratio requires a number of adjustments:

- Adjustment for differences in demography which will affect the SFAS 106 impact of a given program (Demographic Adjustment).

- Adjustment for the differing impact on SFAS 106 costs of current retirees at TELCO compared with other employers (Current Retiree Adjustment).
- Adjustment for any differences in the extent to which TELCO is pre-funding its post-retirement benefits compared to other employers (Pre-Funding Adjustment).
- Adjustment for employees not covered by post-retirement medical programs or covered by programs for which SFAS 106 will not apply (Non-Covered Employees Adjustment).
- Adjustment for differences between per unit labor costs for TELCO and for other employers (Per Unit Labor Cost Adjustment).
- Adjustment for differences in the percentage of total output represented by labor costs for TELCO and for other employers (Labor Cost Percentage Adjustment).

Utilizing the data, methods, and assumptions described in Section III, we have determined the following values:

- (1) GNP BLI = .2568
- (2) TELCO BLI = .4390
- (3) BLI Ratio =  $.2568 + .4390 = \underline{.5850}$
- (4) Demographic Adjustment = .5438
- (5) Current Retiree Adjustment = .9287
- (6) Pre-Funding Adjustment = 1.313
- (7) Non-Covered Employees Adjustment = .2684

(8) Per Unit Labor Cost Adjustment - 1.3062

(9) Labor Cost Percentage Adjustment - 2.0832

(10) SFAS 106 Cost Increase Ratio - BLI Ratio x (4) x (5) x (6) x (7) x  
(8) x (9) - .2833

The SFAS 106 Cost Increase Ratio can be interpreted as meaning that, at most, only 28.3% of the additional cost incurred by TELCO due to SFAS 106 will find its way into the GNP-PI because the average employer in the GNP will experience only 28.3% of the cost increase that will hit TELCO.

Extent to which Impact of SFAS 106 on All Employers in GNP Translates into an Increase in the GNP-PI

The effect of SFAS 106 on the GNP-PI is calculated using a macroeconomic model that has two sectors. In sector 1 employers do not offer post-retirement health benefits, and in sector 2 employers do offer post-retirement health benefits. The macroeconomic model treats the introduction of SFAS 106 as a direct increase in the cost of labor facing employers in sector 2. The baseline calculations using the model calculate the impact of SFAS 106 on the GNP-PI using the following information:

- (1) sector 2 accounts for 32% of private sector employment;
- (2) labor costs account for 64% of total costs in sector 1 and in sector 2; and
- (3) SFAS 106 directly increases labor costs by 3% in sector 2.

Based on these inputs, numerical solution of the macroeconomic model indicates that SFAS 106 will increase the private sector price index by 0.0138%.

To put this result in perspective we calculate a back-of-the-envelope estimate of the effect of SFAS 106 on the private sector price index as follows: a 3% increase in labor costs raises total costs and prices in sector 2 by 1.92% (64%

share of labor costs in total costs x 3% increase in labor costs) and thus raises the private sector price index by 0.614% (1.92% increase in price in sector 2 x 0.32 share of sector 2 in private sector GNP). Thus, if all direct costs were completely passed through in prices, and if there were no change in the amount of labor employed and output produced by each employer, the private sector price index would increase by 0.614%. However, taking account of the impact of labor costs on the demand for labor, and the impact of price changes on the demand for goods, the macroeconomic model finds that the private sector price index increases by only 0.0138%. We define the "passthrough coefficient" as the increase in the price index according to the macroeconomic model divided by the back-of-the-envelope price increase. In the baseline calculation, the passthrough coefficient is 0.0225 (0.0138% + 0.614%). The passthrough coefficient can be thought of as the percentage of national SFAS 106 costs that will actually be reflected in the private sector price index.

The GNP-PI covers prices of government sector production as well as prices of private sector production, with the government sector accounting for 10.6% of GNP and the private sector accounting for 89.4% of GNP. Because SFAS 106 does not apply to the government sector, the government component of the GNP-PI will not be affected by SFAS 106. Therefore the increase in the GNP-PI equals 89.4% of the increase in the private sector price index. This factor of 89.4% applies both to the back-of-the-envelope price increase and to the price increase calculated by the macroeconomic model. Thus, the back-of-the-envelope increase in the GNP-PI is 0.549% (0.894 x 0.614%) and the increase in the GNP-PI according to the macroeconomic model is 0.0124% (0.894 x 0.0138%). The passthrough coefficient is 0.0225 (0.0124% + 0.549%) which is identical to the passthrough coefficient for the private sector price index.

#### Resulting Impact of SFAS 106 on TELCO Relative to its Overall Impact on the GNP-PI

As noted above, the average employer in the GNP will experience only 28.3% of the cost increase that TELCO will experience due to SFAS 106. Furthermore, we have seen that only 2.3% of the cost increase experienced by all employers in the GNP will be passed through to the GNP-PI. From the interaction of these factors we

are able to conclude that only 0.7% of TELCO's SFAS 106 costs will be reflected in the GNP-PI and that 99.3% of these additional costs will not be reflected in this price index.

Additional Macroeconomic Effect of SFAS 106

In addition to the result reported above our macroeconomic model indicates that, in response to the impact of SFAS 106, the wage rate in the national economy will, over time, reduce in relative terms by 0.93% (i.e., relative to what it would have been in the absence of SFAS 106). To the extent that TELCO could also benefit from a relative reduction in its wage rate this would help to offset its increase in costs due to SFAS 106. If TELCO were able to achieve the full reduction of 0.93% this would finance 14.5% of its additional SFAS 106 costs. As noted, this wage rate reduction reflects the ultimate effect of SFAS 106 and would not necessarily fully occur in 1993 when SFAS 106 becomes effective.

Thus the combined effect of the impact of SFAS 106 on the GNP-PI and on the wage rate would still leave 84.8% of TELCO's additional SFAS 106 costs unrecovered.

### III. DETAILED DESCRIPTION OF ANALYSIS

#### Impact of SFAS 106 on the Average Price Cap LEC Relative to its Impact on All Employers in the GNP

This section of our report is a re-iteration of Section II but with considerably more detail.

#### Construction of Composite Company ("TELCO")

As noted earlier, eleven Price Cap LECs submitted data for this study. Each firm informed us of its number of active employees and their average ages and average service, and of the number of its retirees covered by employer subsidized Medical Plans. We were also provided detailed descriptions of the Medical Plans for Retired Employees and of the results of actuarial studies of the impact of SFAS 106 on expensing for these Plans.

Our data included a distribution by quinquennial age and service cells for 125,000 active employees, and we used the shape of this distribution for the valuations needed for this report. The distribution was shifted as required, to fit the known average age and average service for all of the Price Cap LECs. A census was constructed from the adjusted distribution, which census represents the typical Price Cap LEC.

A Benefit Level Indicator was determined for each Plan. As noted earlier, this Benefit Level Indicator measures the relative value of individual plans. The methodology for calculating the Benefit Level Indicator for a given retiree medical plan is discussed in detail beginning on page 12. The Indicators were averaged and a Plan with the average Benefit Level Indicator was used for this study. As expected, the actuarial assumptions used for the calculation of the impact of SFAS 106 differed from study to study.

The discount rate was a single number for all but 1 of the 11 Price Cap LECs (an equivalent uniform rate was proffered for the one exception) and the discount rate for the composite firm, TELCO, was taken as the average of the individual rates, weighted by number of active employees. Simple averages could not be used for turnover assumptions or retirement decrements because such rates are one or two dimensional arrays. Therefore TELCO turnover was derived by doing valuations of a standard Plan using each firm's turnover rates, the TELCO census, and a standard retirement age. The turnover table for TELCO was taken from a collection of standard turnover tables used for Pension Valuations, and was selected as that table which when used with the TELCO census, standard Plan and standard retirement age gave the best agreement as to the SFAS 106 liabilities as determined by the aggregation of individual firm's actuarial studies.

The composite retirement age assumption for TELCO was derived by setting a pattern for each firm, which pattern gave the same average retirement age for an employee attaining age 55, ignoring mortality, as given by the retirement age assumptions used for the actuarial studies. These patterns had one free parameter (the level rate to be applied for ages 55 to 61), and the composite pattern was that pattern with the average value of the free parameter. TELCO's trend rates were derived using an analysis similar to that used for determining TELCO's retirement rates. We used an ultimate trend rate equal to the average of ultimate trends rates used in the actuarial studies. We then determined a value for an initial trend rate for each Price Cap LEC such that a declining pattern of trend rates beginning with that initial trend rate and grading down to the average ultimate trend rate gave the same present value for a 30-year stream of projected claims payments as would be obtained by using the actual trend rates assumed in that Price Cap LEC's actuarial study. The composite trend assumption for TELCO was the pattern associated with the average initial trend rate grading down to the previously determined average ultimate trend rate.

### Calculation of GNP BLI and TELCO BLI

We define the Benefit Level Indicator ("BLI") to mean the percentage of total medical claims incurred by an employer's retirees that will be reimbursed by the employer's benefit program. This definition applies only to the plan for which the employer's active employees may become eligible and the BLIs are based only on current levels of medical costs and Medicare reimbursement. We consider only current levels because the SFAS 106 requirement to value the "substantive" plan suggests that it is reasonable to assume that plan provisions (e.g., deductibles, out-of-pocket maximums, etc.) will generally be projected (either explicitly or implicitly) to stay consistent with aggregate cost levels. In general, the liability for current retirees is already being expensed on a pay-as-you-go basis and is a function of prior plan provisions. As noted earlier, the impact of current retirees on SFAS 106 costs is taken account of in the Current Retiree Adjustment.

Thus, in order to calculate the BLI of a given employer's post-retirement medical plan one needs the plan provisions and an anticipated frequency distribution of medical charges broken down by type of charge and size of charge.

The calculation itself is very detailed, but relatively straight forward. For each type and size of annual claim pre- and post-65 (e.g., hospital charges between \$5,000 and \$6,000 incurred before age 65), the plan's provisions (i.e., deductible, coinsurance, etc.) are applied and a plan reimbursement amount is calculated, allowing for any integration with Medicare benefits.

After all plan reimbursement amounts are calculated, the frequency distribution is applied to calculate an overall average reimbursement ratio compared to total medical charges. This ratio is then adjusted for the amount of required retiree contributions called for by the plan. The result is the net BLI. Because of the significant differences between plan provisions that apply to retirees pre- and post-65 (Medicare integration, contribution levels, etc.), two BLIs are calculated, pre- and post-65. These two BLIs are then weighted to generate an overall BLI for the employer.

As noted above, the calculation of an employer's BLI requires both a data base of employer plan provisions and a detailed medical claims distribution. With respect to plan provisions, we have utilized a data base of over 1,000 employers which includes 830 employers who sponsor post-retirement medical programs. For each of these employers, we have detailed plan provisions which include for pre- and post-65 coverage for each type of medical charge (surgery, hospital, physicians, drugs, etc.):

- Eligibility requirements
- Deductible
- Coinsurance
- Out-of-pocket maximums
- Plan reimbursement maximums (annual and lifetime)
- Required contributions for employee and dependent coverage
- Type of Medicare Integration

The data base includes only limited information on dental coverage and no information on post-retirement life insurance. The data base itself is comprised mostly of large employers with over 1,000 employees and is distributed throughout all six of the major industry categories outlined by the General Accounting Office in its recent survey of the prevalence of post-retirement medical programs. In total, the data base covers approximately 19 million of the estimated 38 million employees who work for employers who sponsor post-retirement medical programs. A summary of the data base appears in Appendix A.

With respect to the distribution of medical claims, we utilized a distribution based on the actual 1990 experience of 39,436 retirees (pre- and post-65) covered by employer sponsored post-retirement medical plans administered by one large national insurance company. The data includes detailed breakdowns of claim amounts by size and type of claim. It covers plans throughout the United States and, to our knowledge, does not have any geographic or industry bias.

To derive GNP-BLI, Benefit Level Indicators were calculated for each employer in the data base, then a comparison was made between our data base of large employer plans and the employers who make up the GNP. In making that comparison, we

utilized information from the United States General Accounting Office March 1990 Report on "Extent of Companies Retiree Health Coverage", including unpublished supporting data obtained directly from the GAO staff. In particular, average BLIs by industry (weighted by number of employees) were determined from our data base. These average BLIs were then weighted by the percentages of covered employees working in each major industry as determined by the GAO survey. These weighted values were then averaged to come up with BLIs for the GNP for pre-65 and post-65 coverage separately. The pre- and post-65 BLIs were then weighted, based on the average demographics and retirement experience of the national workforce, to produce GNP-BLI.

TELCO in total sponsors 18 post-retirement medical programs (i.e. one or more for each of the Price Cap LECs). The same BLI calculation process described above was utilized to determine the pre- and post-65 Benefit Level Indicators for each of the 18 employee groups. These 18 sets of BLIs were then combined on an employee weighted basis to derive pre- and post-65 BLIs for TELCO as a whole. The pre- and post-65 BLIs were then weighted and combined on the basis of national average demographics and retirement patterns to produce TELCO BLI. The numerical derivation of GNP BLI and TELCO BLI is outlined below.

Calculation of Benefit Level Indicator for Average Employer in GNP

1. Calculate pre- and post-65 BLIs by industry from data base.

<u>Industry</u>	<u>Pre-65 BLI</u>	<u>Post-65 BLI</u>
Mining & Manufacturing, etc.	.7232	.2340
Construction	.7758	.0604
Transportation/Utilities	.7974	.2643
Retail	.4730	.0603
Finance/Insurance	.6721	.1926
Consumer Services	.5771	.1267

2. Calculate industry weighted average BLIs using industry weightings from GAO study. (See Appendix A for industry weightings from GAO study)

Industry Weighted Average BLI Pre-65	-	.6898
Post-65	-	.2008

3. Calculate GNP BLI based on national demographics (retirement age - 63). (See Appendix B for methodology for determination of pre- and post-65 weightings)

GNP BLI - .2568

Calculation of Benefit Level Indicator for TELCO

1. Calculate pre- and post-65 BLIs for each plan sponsored by TELCO:

Weighted Average Benefit Level Indicators for TELCO

Pre-65	-	.8295
Post-65	-	.3885

2. Calculate TELCO BLI based on national demographics:

TELCO BLI - .4390

Calculation of Demographic Adjustment

Even if the Benefit Level indicators of the GNP were equal to that of the average Price Cap LEC (i.e. if GNP BLI were equal to TELCO BLI), they would not necessarily generate the same anticipated retiree claim cost per active employee. If TELCO employees exhibit different turnover than other employees in the GNP, a different percentage of TELCO's employees will reach retirement. This will result in a different retiree claim cost per active employee. As can be seen from Appendix A, TELCO will in fact utilize lower rates of turnover than those

used by other employers in determining SFAS 106 costs. Because of this an adjustment of .7788 (Turnover rate adjustment) will need to be applied to the BLI ratio.

Furthermore each \$1 of TELCO anticipated claim cost will not translate into the same amount of SFAS 106 cost as will each \$1 of anticipated retiree claim cost in the GNP. This will be due to two types of demographic differences between TELCO and the GNP. In particular:

- TELCO employees are older and have more past service than those in the GNP.
- TELCO employees tend to retire at earlier ages than is true throughout the national economy.

The extent of these differences is illustrated in Appendix A, and will give rise to the following additional adjustments to the BLI ratio:

Adjustment due to age and past service differences = .8528 (age/service adjustment)

Adjustment due to earlier retirements among TELCO employees = .8188 (retirement rate adjustment)

The total demographic adjustment is derived as (turnover rate adjustment) x (age/service adjustment) x (retirement rate adjustment):

$$\text{Demographic Adjustment} = .7788 \times .8528 \times .8188 = .5438$$

The specific methods and assumptions utilized in the derivation of the above adjustment are described in Appendix B. In developing this as well as all future adjustments methodology was employed to ensure that no "double counting" of effects occurred.

### Calculation of Current Retiree Adjustment

Because a significant portion of SFAS 106 costs will arise due to the amortization of the liability for current retirees we must allow for the possibility that the relative SFAS 106 cost impact of these current retirees will be different for TELCO than for the GNP. In order to address this, we calculated and compared the average current retiree benefit cost per active employee for TELCO and for the GNP (using for the GNP only the 30.7 million active employees who generate SFAS 106 costs).

For TELCO the average claim cost per current retiree is \$3,075 while for the GNP it is \$1,802. Furthermore the ratio of current retirees to active employees at TELCO is .4802 compared with .1726 for the GNP. Thus the ratio of current retiree cost per active employee of the GNP to that of TELCO is  $(.1726 \times 1802) + (.4802 \times 3075)$  or .2106.

If the BLI ratio after applying Demographic Adjustment was also .2106 then no further adjustment would be required. However, the BLI ratio after the Demographic Adjustment is .3181  $(.5850 \times .5438)$ . Current retirees at TELCO represent 21.09% of the increase in costs due to SFAS 106 and active employees represent the other 78.91%. Taking this into account, we calculate:

$$\text{Current Retiree Adjustment} = .7891 + (.2109 \times .2106 + .3181) = .9287.$$

### Calculation of Pre-funding Adjustment

Thus far we have assumed that the increase in labor costs due to SFAS 106 for both the GNP and TELCO will equal expense calculated under SFAS 106 minus claim cost for current retirees (i.e. current "pay as you go" cost). If, however, either TELCO or employers in the GNP have been funding and/or accruing expense for post-retirement medical benefits in excess of "pay as you go" cost, then an adjustment must be made. In fact several of the Price Cap LECs have accumulated and are continuing to accumulate assets in trust to pay future post-retirement medical benefits. Therefore the increase in TELCO's labor costs due to SFAS 106 will be less than it would be had no pre-funding taken place. By making the

conservative assumption that no similar accumulation of assets is taking place in the GNP, we calculate an adjustment equal to the increase in TELCO's labor cost if no pre-funding was taking place divided by the increase in TELCO's labor cost taking into account both accumulated assets and ongoing annual pre-funding contributions. Specifically the adjustment was determined as:

(1991 TELCO SFAS 106 Cost assuming no prior funding - 1991 projected claims payment) + (1991 TELCO SFAS 106 Cost recognizing prior funding - 1991 projected claims payment + additional 1991 funding costs).

Therefore, expressing all amounts in \$millions:

*Pre-funding Adjustment = (2,858.4-905.5) + (2,693.1-1,205.8) = 1.313*

#### Calculation of Non-Covered Employees Adjustment

Thus far, we have developed a BLI ratio and a set of adjustments that relate to those employees who generate SFAS 106 costs. We must still adjust this ratio to reflect the fact that while TELCO extends its post-retirement medical programs to its entire workforce, there are employers in the GNP who provide benefits to only a portion of their workforce and many employers who do not provide any post-retirement medical benefits at all. Finally, we must allow for public sector employees, none of whom generates SFAS 106 costs. In fact, the Non-Covered Employee Adjustment is simply the percentage of all employees in the GNP who could become eligible for post-retirement medical benefits programs sponsored by their employers which are subject to SFAS 106.

As can be seen in Appendix A, the US General Accounting Office performed a detailed survey in 1990 to determine the extent of post-retirement medical coverage provided by US employers in the private sector. The study concluded that of the 95.8 million private sector employees, 38.5 million work for employers who provide post-retirement medical benefits, but only 30.7 million of these 38.5 million employees could actually become eligible for benefits affected by SFAS 106, with the remaining 7.8 million being ineligible because they work for non-covered subsidiaries, work in non-covered job classes, or are covered by

multi-employer plans which are not subject to SFAS 106. Since government entities are also not subject to SFAS 106 (but are part of GNP), we must adjust for all public sector employees who number 18.6 million. Thus we calculate:

$$\text{Non-Covered Employees Adjustment} = 30.7 + (95.8 + 18.6) = .2684$$

#### Calculation of Per Unit Labor Cost Adjustment

Adjustments made thus far have taken account of the fact that employers with the same Benefit Level Indicator may have different SFAS 106 costs per employee. However, even if SFAS 106 costs per employee were the same, labor costs per employee may not be and thus the relative impact of SFAS 106 on per unit labor costs may not be the same.

In fact, the labor costs per employee are significantly higher at TELCO than for other employers in the GNP. This is due, in part, to demographic differences but is also due to the different mix of skilled and unskilled workers at TELCO compared to the average mix in the GNP. As shown in Appendix A, TELCO's total annual compensation per employee is \$38,533 as compared to the national average of \$29,500. Therefore, to reflect the fact that each \$1 of per employee SFAS 106 cost will represent a smaller portion of total labor costs for TELCO than for the GNP, we calculate,

$$\text{Per Unit Labor Cost Adjustment} = 38,533 + 29,500 = 1.3062$$

#### Calculation of Labor Cost Percentage Adjustment

Even after applying the Per Unit Labor Cost Adjustment we must address the possibility that the percentage of output represented by labor costs may differ between TELCO and the GNP. If this is so, then even if SFAS 106 had the same percentage impact on the labor costs of both TELCO and the GNP, there would be a difference in its impact on the total costs of each. Unlike the explicit nature of the calculation of the other Adjustments, the Labor Cost Percentage Adjustment has to be calculated implicitly as explained below.

For the economy as a whole output is synonymous with value added (which is total revenue minus the cost of purchased inputs) and labor costs represent 64.27% of total output. For TELCO output consists of the cost of goods plus value added: the cost of goods is 25.7% of output and value added is 74.3% of output. Labor costs at TELCO are \$23,623.7M and represent 38.5% of value added.

The impact of SFAS 106 on TELCO's costs is both direct and indirect. The direct impact is the increase in TELCO's own labor costs: the indirect impact is the effect on the labor costs of TELCO's suppliers which is passed on in the prices they charge TELCO for goods.

Before calculating Labor Cost Percentage Adjustment we calculate the

$$\begin{aligned} \text{Adjusted BLI Ratio} &= \text{BLI Ratio} \times \text{all Adjustments} \\ &= .5850 \times .5438 \times .9287 \times 1.313 \times .2684 \times 1.3062 \\ &= \underline{.1360} \end{aligned}$$

This Adjusted BLI Ratio can be interpreted as meaning that for every percentage point by which SFAS 106 increases TELCO's own labor costs it will increase the labor costs of the average company in the GNP by 13.60% of a percentage point.

On the assumptions that TELCO's suppliers are like the average company in the GNP and that all additional costs will be passed through completely into prices (and into the GNP-PI) an increase of one percentage point in TELCO's own labor costs will increase TELCO's overall costs:

- by 1% of 38.5% of 74.3% of output  
in respect of its own labor costs, and  
(i.e., 1% of the percent of output represented  
by TELCO's labor costs) = .2861% of output
- by .1360% of 64.27% of 25.7% of output  
in respect of its suppliers' prices  
(i.e., by .1360% of the percent of output  
represented by TELCO's suppliers' labor costs) = .0225% of output
- for a total of .3085% of output

The corresponding increase in the GNP-PI will be

.1360% of 64.27% of output

= .0874% of output

Thus the GNP-PI would reflect only .0874 + .3085 or 28.33% of the additional costs incurred by TELCO due to SFAS 106. The Labor Cost Percentage Adjustment has increased the factor of .1360 to a factor of .2833 thus:

$$\text{Labor Cost Percentage Adjustment} = .2833 + .1360 = 2.0831$$

Extent to which Impact of SFAS 106 on All Employers in the GNP Translates into an Increase in the GNP-PI

In this section we describe the results obtained from a macroeconomic model developed to calculate the impact of SFAS 106 on the GNP-PI.

Motivation for the Macroeconomic Model

The macroeconomic model we use allows us to calculate the impact of SFAS 106 on prices in all sectors as well as the effect on the overall GNP-PI. We can get a simple view of how the price level is affected, as well as an appreciation of the need for a macroeconomic model, by first considering a "back-of-the-envelope" calculation of the effects of SFAS 106 on the price level. To make the interpretation of the calculation as simple as possible, suppose that in the absence of SFAS 106 the GNP-PI would remain constant over time; that is, the rate of inflation would be zero. Later we will consider the more realistic scenario in which there is ongoing inflation in the absence of SFAS 106.

The back-of-the-envelope calculation involves two steps:

- (1) the percentage increase in the price of goods in a given sector equals the percentage increase in the cost of a unit of labor multiplied by the share of labor cost in total costs in that sector; and
- (2) the percentage increase in the overall price index is calculated as the weighted average of the price increases in each sector.

As an example suppose that the economy is divided into two sectors. One sector, accounting for 68% of GNP pays no post-retirement health benefits and its costs per unit of labor are not directly affected by SFAS 106. In the second sector, which accounts for 32% of GNP, SFAS 106 directly increases the cost per unit of labor by 3%, and labor costs account for 64% of total costs. According to the back-of-the-envelope calculation, total costs and prices will increase by 1.92% (64% of 3%) in the second sector, and the overall price index will increase by .614% (32% of 1.92%). However, as we discuss below, this calculation overstates the effect on the overall price level.

Why does the back-of-the-envelope calculation overstate the size of the increase in the overall price level? The introduction of SFAS 106 will increase the cost of labor for employers who offer post-retirement health benefits and this increase in cost will lead to a variety of market adjustments. Although the full scope of market adjustments and their interactions can be complex (as detailed in Appendix C) we can get a simple view of the effects by first examining the effects in the labor market.

Because SFAS 106 increases the labor costs of employers who offer post-retirement health benefits, these employers will demand a smaller amount of labor at any given level of the wage rate. This reduction in the demand for labor will reduce the wage rate (not including post-retirement health benefits) facing all employers. The reduction in the wage rate will reduce labor costs of employers who do not offer post-retirement health benefits. Labor costs of employers who do pay post-retirement health benefits will increase by less than the direct impact of SFAS 106 on labor costs captured in the back-of-the-envelope calculation. With competition forcing prices to stay in line with costs, prices will fall in the sector that does not offer post-retirement health benefits and prices will rise by less than in the back-of-the-envelope calculation for employers who offer post-retirement health benefits. With prices rising in one sector and prices falling in the other sector, the overall price level may change by only a small amount.

Although the overall price level may change very little, the relative price of goods in the two sectors may change substantially to reflect the change in the relative labor costs arising from the differential impact of SFAS 106 on employers who offer post-retirement health benefits and employers who do not offer these benefits. In addition to effects we have already discussed, changes in labor costs arising from SFAS 106 will affect the mix of capital and labor used by employers in different sectors, and resulting changes in the prices of goods will shift demand away from the sector with an increased price toward the sector with a decreased price. The shift in demand will cause a reallocation of resources from one sector to the other. All of these additional adjustments are captured by the macroeconomic model which is used to get a quantitative measure of the impact of SFAS 106 on the prices of goods in each sector as well as on the GNP-PI.

Now let's consider the more realistic scenario in which there is ongoing inflation before the introduction of SFAS 106. Over the long run, the price level is very strongly related to the level of the money supply, and the rate of inflation is very strongly related to the growth rate of the money supply. With ongoing money growth there will be ongoing inflation, and the question is how much SFAS 106 affects the price level compared to the value it would have reached in the absence of SFAS 106. The basic results we presented above still hold, but with a slight re-interpretation: Whenever we said that a price increases, we now mean that it increases relative to the level it would have attained in the absence of SFAS 106; whenever we said that a price or wage decreases, we mean that it decreases relative to the level it would have reached in the absence of SFAS 106. Thus, for example, if we find that in the absence of ongoing inflation, SFAS 106 would reduce the wage by 2%, then in the presence of ongoing inflation of 5% per year, the wage would rise by 3% over the course of the year, so that it ends up 2% below the value it would have attained in the absence of SFAS 106 (if the effects of SFAS 106 were fully realized within one year). Thus, when we report that SFAS 106 causes some prices and wages to fall, we mean only that these prices and wages are lower than they would have been without SFAS 106 -- not necessarily that we will observe actual declines in these prices and wages

between one date and some later date. This focus on the effect of SFAS 106 on prices and wages relative to values they would have reached is the correct focus for analyzing the question at hand: What is the impact of SFAS 106 on the GNP-PI?

We have explained that SFAS 106 will cause some prices to rise and other prices to fall relative to their values in the absence of SFAS 106. To get a quantitative measure of this effect we use a mathematical macroeconomic model.

### Modeling Strategy

To study the quantitative impact of SFAS 106 on the GNP-PI we use a mathematical macroeconomic model that incorporates production costs for various goods and national demands for these goods. The impact of SFAS 106 is modeled as a direct increase in the cost of labor of employers who offer post-retirement health benefits, and the solution of the model indicates the ultimate effects on the prices of various goods and on the private sector price index. The model is best viewed as a long-run model that fully incorporates the effects of SFAS 106.

Before constructing a macro model to study the price impact of SFAS 106, it is helpful to list a set of desirable criteria for a macro model that can be used to analyze this question. First, the model should be a multi-sector model because SFAS 106 will have different direct impacts on different sectors. In particular, SFAS 106 will directly increase the cost of labor of employers who offer post-retirement health benefits (which we treat as sector 2), but will have no direct impact on employers who do not offer post-retirement health benefits (which we treat as sector 1).

Second, the model should explain how the costs of production are related to the cost of labor and other inputs. At the same time, the model should allow for the possibility that capital may be substituted for labor when labor becomes more expensive as it does in the SFAS 106 sector, and the model should also allow for the possibility that labor may be substituted for capital when labor becomes less expensive as it does in the sector that does not offer post-retirement health benefits.

Third, the model should provide a specification of the aggregate demand for goods related to the overall price index as well as the demands for the different goods produced in the different sectors. Combining the demand structure with the cost structure will permit calculation of the impact of cost changes in each sector on quantities, and more importantly, on prices. Then the price index can be computed.

Fourth, the model should be tractable so that numerical solutions can be computed and readily interpreted.

Fifth, the model should be internally consistent and based on sound economic foundations.

The criteria listed above for an appropriate model guide our choice of a model. To that end, we have developed a macroeconomic model that draws heavily on the model presented in an article published by two prominent macroeconomists -- Olivier Blanchard of M.I.T. and Nobuhiro Kiyotaki of the University of Wisconsin -- in the September 1987 American Economic Review. This article presents a multi-sector macroeconomic model that explicitly accounts for production and cost conditions as well as aggregate demand. Although the model is economically sophisticated and requires some mathematical manipulation to solve, the basic structure is quite tractable. Finally, the model has the advantage of being based on sound economic principles and is internally consistent.

The precise mathematical structure of our adaptation of the Blanchard-Kiyotaki model is presented in Appendix C. Here we will simply describe the three major components of the model:

- (1) the demand for goods;
- (2) the production functions;
- (3) the supply of labor.

(1) The demand for goods. The model is a two-sector model, which means that there are two types of goods. If the relative prices of the goods are held constant, the demand for goods is proportional to the overall level of aggregate demand which depends on the money supply and the overall price level. Changes in the relative price of the two goods shift demand away from the good with the increased relative price toward the good with the decreased relative price. The degree to which demand is shifted is measured by the price elasticity of demand, which is an input to the model.

(2) The production functions. Each type of good is produced using capital and labor. The amount of output that can be produced with any given combination of capital and labor is determined by a Cobb-Douglas production function. The Cobb-Douglas production function is one of the most widely used production functions in economics. Its most important characteristic is that for a competitive company, the share of labor cost in total cost is constant, regardless of the wage rate or the amount of output produced. In applying the model to the United States we specify particular Cobb-Douglas production functions that match the share of labor cost in total cost in the U.S. economy.

(3) The supply of labor. We have already pointed out that the introduction of SFAS 106 will reduce the demand for labor by firms offering post-retirement health benefits, and as a consequence, will reduce the wage rate relative to the level that would have prevailed in the absence of SFAS 106. The magnitude of the effect on the wage rate depends on the response of labor supply to the change in labor demand. The model characterizes the supply of labor in terms of the elasticity of labor supply with respect to the wage rate which measures the percentage fall in the amount of labor supplied resulting from a 1% fall in the wage rate.

To get quantitative results from the model, we must provide certain inputs to the model. Using these inputs, the mathematical macroeconomic model is solved numerically using a FORTRAN program written specifically for this model. In our baseline calculation we use the following values for the major inputs to the model:

#### Baseline Parameters

price elasticity of the demand for goods:	1.50
share of labor costs in total cost in sector 1:	0.64
share of labor costs in total cost in sector 2:	0.64
initial fraction of labor employed in sector 2:	0.32
direct impact of SFAS 106 on labor costs in sector 2:	0.03
labor supply elasticity	0.00

The price elasticity of demand of 1.5 is probably too high, but it was chosen because experimentation with the model indicated that the impact of SFAS 106 on the GNP-PI increases when the price elasticity of demand increases. Thus, using a value of 1.5 most likely overstates the impact on the GNP-PI.

The share of labor cost in total cost in each sector was set equal to 0.64 to match the actual share of labor cost in total GNP in the United States.

The value of 0.32 for the fraction of labor employed in sector 2 was chosen to match the fraction of U.S. private sector employees covered by SFAS 106. The macroeconomic model is intended as a model of the private sector, so the share of private sector employment covered by SFAS 106 is used for the fraction of employment in sector 2.

The value of 3¢ for the direct impact of SFAS 106 on labor costs is indicative of the impact of SFAS 106 on those employers who provide post-retirement medical benefits and was chosen to maintain consistency between TELCO SFAS 106 costs and

those assumed for all other employers who will incur SFAS 106 costs. Specifically this value was developed by multiplying TELCO's increase in labor costs due to SFAS 106 by all of the adjustments except for the Non-Covered Employees Adjustment and the Labor Cost Percentage Adjustment.

Finally, the value of the labor supply elasticity is set equal to zero. Empirical studies of labor supply (summarized in Chapters 1 and 2 of the Handbook of Labor Economics, North-Holland, 1986) typically find that in response to a permanent reduction in the wage rate men will tend to increase their labor supply and women tend to reduce their labor supply. That is, these studies typically find a negative labor supply elasticity for men and a positive labor supply elasticity for women. The model uses a value of the *aggregate* labor supply elasticity, which measures the response of *aggregate* labor supply (men plus women) to changes in the wage rate. The aggregate labor supply elasticity is an average of the negative labor supply elasticity of men and the positive labor supply elasticity of women. It is typically found to be close to zero, or even slightly negative (survey of uncompensated wage elasticities summarized in Table 3.5 of Mark R. Killingsworth, Labor Supply, Cambridge University Press, 1983). Because the impact of SFAS 106 on the GNP-PI is larger for higher labor supply elasticities, we set the labor supply elasticity equal to zero rather than slightly negative to guard against understating the impact on the GNP-PI.

Using the values listed above in our baseline calculation leads to an increase of 0.0138% in the private sector price index. For comparison, the back-of-the-envelope calculation for this case leads to an increase of 0.614% in the price index. It is useful to define the "passthrough coefficient" as the increase in the price index according to the model divided by the back-of-the-envelope price increase. In this case the passthrough coefficient is 0.0225 ( $0.0138\% \div 0.614\%$ ), which indicates that the increase in the private sector price index is only 0.0225 times as large as indicated by the back-of-the-envelope calculation.

Sectors 1 and 2 together comprise the private sector. The macroeconomic model treats the government sector as an independent sector with employment and output determined independently of the private sector. The effect of SFAS 106 on the GNP-PI equals the share of government sector value added in GNP (10.6%)

multiplied by the impact on government sector prices plus the share of private sector value added in GNP (89.4%) multiplied by the increase in private sector prices. Because the government is not subject to SFAS 106, the impact on government sector prices is zero. Therefore, the impact on the GNP-PI is 89.4% of the impact on the private sector price index. Thus the back-of-the-envelope calculation yields a 0.549% ( $0.894 \times 0.614\%$ ) increase in the GNP-PI, and the baseline calculation indicates that the GNP-PI will increase by only 0.0124% ( $0.894 \times 0.0138\%$ ). The passthrough coefficient for the GNP-PI is 0.0225 which is identical to the passthrough coefficient for the private sector price index.

The conclusion from the baseline calculation is very strong: The impact of SFAS 106 on the GNP-PI is only a tiny fraction of the amount indicated by the back-of-the-envelope calculation.

Resulting Impact of SFAS 106 on TELCO Relative to its Overall Impact on the GNP-PI

To calculate the resulting relative impact of SFAS 106 on the GNP-PI compared to TELCO, we return to the calculation of the Labor Cost Percentage Adjustment. This was based on the assumption that all additional costs will be passed through completely into prices (and into the GNP-PI) and we must now change that assumption to reflect the output of our macroeconomic model.

The model indicates that the GNP-PI will increase by 0.0124%.

Looking first only at the direct effect of SFAS 106 on TELCO, we find that the increase in TELCO's direct labor costs is 6.295%. Thus TELCO's costs will increase:

- by 6.295% of 38.5% of 74.3% of output - 1.8027% of output  
(i.e., by 6.295% of the percent of output represented by TELCO's labor costs)

Thus the GNP-PI would reflect only  $0.0124 + 1.8027$  or 0.69% of the additional direct costs incurred by TELCO due to SFAS 106.

Additional Macroeconomic Effects of SFAS 106

In addition to the result reported above our macroeconomic model indicates that, in response to the impact of SFAS 106, the wage rate in the national economy could eventually fall in relative terms by 0.926% (i.e., relative to what it would have been in the absence of SFAS 106) To the extent that TELCO could also benefit from a relative reduction in its wage, this could help to offset the increase in its costs due to SFAS 106. If TELCO were able to achieve the full reduction of 0.926% the effect may be calculated as explained below.

SFAS 106 increases TELCO's direct labor costs by 6.295%

If the national wage rate is, in fact, reduced  
TELCO's direct labor costs are reduced by .926%

The net increase in TELCO's direct labor costs is 5.369%

Thus TELCO's overall costs would increase

- by 5.369% of 38.5% of 74.3 of output - 1.5375% of output  
in respect of its own labor costs,  
(i.e., by 5.369% of the percent of output  
represented by TELCO's labor costs)

- by 0.0124% of 25.7% of output - .0032% of output  
in respect of its suppliers' prices  
(i.e., by .0124% of the purchased inputs  
used by TELCO)

- for a total increase of - 1.5406% of output

Thus if TELCO could benefit from a relative wage reduction of .926%, its overall costs would increase by 1.5406% of output instead of the 1.8027% of output calculated earlier. This indicates that macroeconomic effects, including a possible reduction in TELCO's wage rate could finance a percentage of its additional SFAS 106 cost, calculated to be

$$(1.8027 - 1.5406) \div 1.8027 = 14.53\%$$

Thus the combined effect of the impact of SFAS 106 on the GNP-PI (0.7%) and on other macroeconomic variables including the wage rate (14.5%) would still leave 84.8% of TELCO's additional SFAS 106 costs unrecovered.

#### IV. SENSITIVITY OF RESULTS

While we have attempted to calculate the results outlined previously in as accurate a manner as possible, it should be obvious that many of the results are subject to variability due to either the uncertainty of the underlying data or the need to make some assumptions about future or unknown factors. In this section we discuss the sensitivity of each of the previously derived values and of the aggregate result to reasonable variation in underlying data and/or assumptions.

##### The BLI Methodology

*Initial Calculation of GNP BLI and TELCO BLI:* In calculating GNP BLI and TELCO BLI there were two areas of uncertainty that we analyzed. With respect to the calculation of GNP BLI we utilized average BLIs by industry and then utilized industry weightings derived from the GAO survey to derive a final GNP BLI. Had we, instead, utilized an aggregate employee weighted average based on our data base only we would have derived GNP BLI as .2613 instead of .2568. This would have resulted in increasing the relative impact of SFAS 106 on GNP compared to TELCO from 28.3% to 28.7%. With respect to the calculation of TELCO BLI, the greatest area of uncertainty arose in deciding how to weight the various plans sponsored by each Price Cap LEC. We decided to weight them based on employee counts. We believe this was a conservative approach because in our data base only one set of plan provisions is maintained for each employer. If we assume that where an employer has more than one plan it is the more generous plan which is reported in the data base, then it would be appropriate to utilize only the more generous plans in calculating the TELCO BLI. If we had taken this approach it would have reduced the relative impact of SFAS 106 on GNP compared to TELCO from 28.3% to 27.7%.

*Demographic Adjustment* - We adjusted for the fact that TELCO will utilize lower rates of turnover than those used by other employers in determining SFAS 106 costs. It is hard to argue that the same pre-retirement withdrawal assumption should be made because TELCO's demographics are themselves the result of lower

turnover rates actually experienced by TELCO. However, if we were to assume the same withdrawal patterns for both TELCO and GNP (while retaining the different demographics), the relative impact of SFAS 106 on GNP compared to TELCO would increase from 28.3% to 34.6%.

The adjustment due to age and past service differences relies on demographic data provided by the separate Price Cap LECs and averaged into a single composite TELCO census having an average age of 41.6 with average past service of 16.6 years. If we were to reduce the age and service to 40.6 and 15.6 respectively, the relative impact of SFAS 106 on GNP compared to TELCO would increase from 28.3% to 29.7%.

A degree of uncertainty is also present in our adjustment due to earlier retirement among TELCO employees. This uncertainty arises in the determination of a national average retirement age assumption. We believe our use of age 63 was a conservative assumption in that the limited data on the subject (Gerontologist Vol. 28, No. 4) seems to indicate a national average retirement age between 63.5 and 64. Furthermore, if as expected, employers in the GNP tend to be aggressive (i.e., optimistic) in setting assumptions for accruing post-retirement liability, it might seem reasonable to utilize an age 64 assumption. If an age 64 assumption had been used the relative impact of SFAS 106 on GNP compared to TELCO would have been reduced from 28.3% to 25.6%.

*Current Retiree Adjustment* - The calculation of this adjustment is predicated on an average claim rate per retiree for the GNP of \$1,802 and a ratio of retirees to covered actives of .1726. The claim rate was derived by taking the 1990 rate of \$1,514 as reported in the Hewitt Associates Survey of Retiree Medical Benefits and increasing it by 19% for medical trend inflation. The ratio of retirees to covered actives was derived from the GAO study. While we believe 19% to be a realistic assumption for medical inflation, we recognize that the national average could actually have increased by more. If we assume a 25% increase in the average claim, to \$1,892, and further assume that the actual ratio of retirees to actives has increased to .2 (from .1726) the relative impact of SFAS 106 on GNP compared to TELCO would increase from 28.3% to 29.2%.

Also, inherent in this Adjustment is the assumption that the demography of the current TELCO retiree is identical to that of the GNP. In fact, this too is a conservative assumption because TELCO employees generally retire at younger ages than the national average and thus the liabilities for TELCO will tend to be higher on this account than for the retirees in the national economy. If, however, we were to assume that retirees at TELCO were somewhat older than those in the GNP and hence generated SFAS 106 cost per \$1 of retiree claim cost that was 10% less than that for the GNP, the relative impact of SFAS 106 on GNP compared to TELCO would only increase from 28.3% to 28.8%.

*Pre-funding Adjustment* - This adjustment looked at the effect of TELCO's existing pre-funding of post retirement medical benefits as compared with no pre-funding. By doing this we made the conservative assumption that there is no pre-funding in the GNP. If we assume there is pre-funding in the GNP to the extent that assets equal to one years claims have accumulated, and that annual contributions to such funds amount to claims plus 10%, the relative impact of SFAS 106 on GNP compared to TELCO would reduce from 28.3% to 26.2%.

*Non-covered Employees Adjustment* - This adjustment comes from the GAO survey which determined that 30.7 million private sector employees in the U.S. may eventually qualify to receive benefits under their employer's post-retirement medical plan. According to the GAO this estimate is subject to some sampling error and could be as high as 37.5 million or as low as 23.9 million. At the extremes this would cause the relative impact of SFAS 106 on GNP compared to TELCO to vary from 22.4% to 34.1% as compared to our determination of 28.3%.

*Per Unit Labor Cost Adjustment* - In calculating Per Unit Labor Cost Adjustment, allocated compensation and headcount were used. No sensitivity analysis was performed on this Adjustment because of the validity of the data used and the straightforward nature of the calculation

*Labor Cost Percentage Adjustment* - In calculating the Labor Cost Percentage Adjustment we assumed that TELCO's suppliers were like the average company in the GNP. In particular we assumed that their labor costs were 64.27% of output and that their increase in labor costs was 13.60% of the corresponding increase for

TELCO. Had we assumed that they had no increase in labor costs due to SFAS 106 the relative impact of SFAS 106 on GNP compared with TELCO would have been 30.6% instead of 28.3%; had we assumed they would experience the same increase due to SFAS 106 as TELCO the relative impact would have been 19.3% instead of 28.3%.

#### The Macroeconomic Model

How robust is the conclusion drawn from the macroeconomic model in Section III? To answer this question we have examined the effect of varying each of the baseline parameters that constitute the major inputs to the model.

We indicated earlier that we believe the price elasticity of demand of 1.5 is probably too high and thus guards against understating the effect on the GNP-PI. Nonetheless we will show the effect of increasing the value of this parameter to 3.

For the economy as a whole labor costs are 64% of output and our baseline calculations assume that the same is true in each of the two sectors of our macroeconomic model. To test sensitivity we will show the results if, in each sector in turn, labor costs were as low as 50% of output or as high as 78% of output.

We used a fraction of labor employed in sector 2 of 0.32. This was based on the same numbers from the GAO survey as were used for the Non-Covered Employees Adjustment (30.7 million out of 95.8 million private sector employees). As indicated on page 36 the GAO calculated that due to possible sampling error the figure of 30.7 million could be as high as 37.5 million (39.1% of 95.8 million) or as low as 23.9 million (24.9% of 95.8 million). We will show the effect of using fractions of labor employed in sector 2 of 0.24 and 0.40.

As noted earlier, the direct impact of SFAS 106 on labor costs in sector 2 was taken to be +3%. The corresponding impact on TELCO labor costs is +6.3% and the baseline value of 3% is derived using the Adjustment factors in Section II as

$$\begin{aligned} & 6.3 \times (3) \times (4) \times (5) \times (6) \times (8) \\ - & 6.3 \times .5850 \times .5438 \times .9287 \times 1.313 \times 1.3062 \\ - & \underline{3.18} \end{aligned}$$

There is thus an appropriate consistency in the baseline value used for this parameter. Nonetheless we will show the results of varying this value over a wide range (from 2% to 5%) while keeping the TELCO value constant at 6.3%.

Finally we will examine the sensitivity of our results to variations in the value used for labor supply elasticity. We believe, by setting the labor supply elasticity equal to zero rather than slightly negative, that already we have guarded against understating the impact on the GNP-PI. Nonetheless we will show the effect of using positive values of 0.1, 0.2, and 0.3 for the labor supply elasticity.

The table that follows shows the results obtained by changing each of the 6 baseline parameters, one at a time. In each of the rows of the table, the values of 5 of the 6 inputs to the model are the same as in the baseline calculation listed above. The input shown in the table is the one input that is changed from the baseline calculation.

### Sensitivity Analysis

	Effect on GNP Price Index	Passthrough Coefficient
Price elasticity of demand = 3	0.0227%	0.041
Labor share in total cost, sector 1 = 0.50	0.0099%	0.021
Labor share in total cost, sector 1 = 0.78	0.0145%	0.023
Labor share in total cost, sector 2 = 0.50	0.0103%	0.020
Labor share in total cost, sector 2 = 0.78	0.0141%	0.024
Fraction of labor employed in sector 2 = 0.24	0.0104%	0.025
Fraction of labor employed in sector 2 = 0.40	0.0137%	0.020
Direct impact on labor costs in sector 2 = +2%	0.0056%	0.015
Direct impact on labor costs in sector 2 = +5%	0.0336%	0.037
Labor supply elasticity = 0.1	0.0642%	0.117
Labor supply elasticity = 0.2	0.1136%	0.205
Labor supply elasticity = 0.3	0.1579%	0.287

### The Overall Results

We have concluded that the overall impact of SFAS 106 on the GNP-PI will reflect only 0.7% of the SFAS 106 costs incurred by TELCO. Separately we have calculated that if TELCO were able to benefit from the same relative reduction in its wage rate as will be experienced in the economy as a whole this would finance a further 14.5% of its additional SFAS 106 costs. This would leave 84.8% of TELCO's additional SFAS 106 costs to be met from other sources. We now show the sensitivity of the overall results to the interaction of the variability of the BLI Methodology and the variability of the inputs to the Macroeconomic Model.

The baseline inputs to the model include the assumption that the direct impact of SFAS 106 on labor costs in sector 2 is +3%. We have shown the effect on the model of reducing this figure to +2% or increasing it to +5% with other inputs remaining unchanged. The value of 3% (more precisely 3.18%) corresponds to a SFAS 106 Cost Increase Ratio of 28.3% (page 9). The values of 2% and 5% correspond to Cost Increase Ratios of 17.8% and 44.5% respectively: we believe this range adequately encompasses the likely variations in this ratio. To demonstrate the interactive effect of possible variability we have produced three sets of results, one for each of the values 2%, 3% and 5%. The following schedule shows for each of these values the results if each of the other inputs is set at the baseline values followed by the results if each of the other inputs is varied alone as indicated.

**PERCENTAGE OF TELCO'S ADDITIONAL SFAS 106 COSTS:**

- (a) reflected in the GNP-PI,
- (b) financed by potential reduction in relative wage rate and
- (c) to be met from other sources

**If Additional SFAS 106 cost of Average Employer With SFAS 106 Liabilities Is**

Input to Macroeconomic Model (All Baseline except as indicated)	29			30			31		
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
Baseline	0.3	9.9	89.8	0.7	14.5	84.8	1.9	23.4	74.7
Price elasticity of demand - 3	0.6	9.6	89.8	1.3	14.1	84.6	3.4	22.3	74.3
Labor share in total cost, sector 1 - 0.50	0.2	9.5	90.3	0.6	13.9	85.5	1.5	22.6	75.9
Labor share in total cost, sector 1 - 0.78	0.4	11.4	88.2	0.8	16.8	82.4	2.2	27.2	70.6
Labor share in total cost, sector 2 - 0.50	0.3	10.4	89.3	0.6	15.5	83.9	1.6	25.0	73.4
Labor share in total cost, sector 2 - 0.78	0.4	8.6	91.0	0.8	12.8	86.4	2.1	20.6	77.3
Fraction of labor employed in sector 2 - 0.24	0.3	7.3	92.4	0.6	10.9	88.5	1.6	17.5	80.9
Fraction of labor employed in sector 2 - 0.40	0.3	12.4	87.3	0.8	18.2	81.0	2.1	29.4	68.5
Labor supply elasticity - 0.1	2.2	8.4	89.4	3.6	12.3	84.1	6.6	19.9	73.5
Labor supply elasticity - 0.2	4.0	7.1	88.9	6.2	10.4	83.4	11.0	16.6	72.4
Labor supply elasticity - 0.3	5.7	5.8	88.5	8.8	8.4	82.8	15.1	13.6	71.3

### Other Factors

In performing this analysis there were two factors that simply could not be quantified due to lack of any relevant data. First of all as can be seen from Appendix A, our data base from which the GNP BLI was calculated included almost no employees working for employers with fewer than 500 employees. We believe that this tends to overstate the GNP BLI, because such limited data as exists suggests that the smaller the employer the less generous the benefits, but we cannot make a definitive statement to that effect. Secondly our analysis only incorporated the impact of SFAS 106 with respect to employer sponsored post-retirement medical plans. SFAS 106 also applies to Life and Dental plans as well as certain other miscellaneous benefits (e.g., subsidized telephone rates for retirees). As noted, there is simply no accessible data on the prevalence and magnitude of these plans in the GNP. We can, however, make two relevant observations:

- In general, post-retirement medical plans generate far greater SFAS 106 cost than post-retirement life, dental and other plans.
- If an employer does not sponsor a post-retirement medical plan it is almost certain that it does not provide any other post-retirement benefit coverage (other than pension).

Based on the above and the fact that only 26.8% of employees nationally will get post-retirement medical benefits subject to SFAS 106, we conclude that the inclusion of Life, Dental, and other non-pension benefits in the analysis had such data been available would not have had a material impact on the results.

### Conclusion

Remembering that at each stage of our calculation process we have sought, when faced with a choice, to adopt a conservative stance and reviewing the results of this sensitivity analysis, we feel confident that our conclusions represent a reasonably accurate reflection of what is likely to happen in practice.

## V. APPENDIX A - SUMMARY OF DATA

The tables, charts, and graphs on the following pages summarize the data utilized in this analysis. Included are the following:

- ° Summary of Godwins Company Data Base.
- ° Summary of BLI calculations.
- ° Comparison of TELCO and the GNP with respect to Demographic, Economic, and Actuarial factors.
- ° Summary of GAO findings on National Prevalence of Post-Retirement Medical Plans.

**UNITED STATES TELEPHONE ASSOCIATION  
POST-RETIREMENT HEALTH CARE STUDY  
SUMMARY OF GODWINS DATA BASE**

**I. Companies with Post-Retirement Medical Plan:**

Active Lives:	1 - 24		25 - 99		100 - 499		500 +		Total	
	# COS	# EES	# COS	# EES	# COS	# EES	# COS	# EES	# COS	# EES
Mining & Manuf.	0	0	2	135	13	5,095	431	11,124,456	446	11,129,606
Construction	0	0	0	0	0	0	6	94,893	6	94,893
Transportation	0	0	0	0	0	0	78	1,472,589	78	1,472,589
Retail	0	0	0	0	1	185	30	1,883,869	31	1,884,054
Finance/Insur.	0	0	2	115	13	4,078	207	3,545,526	222	3,549,719
Commerce Serv.	0	0	1	50	3	1,002	43	779,350	47	780,402
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>300</b>	<b>30</b>	<b>10,360</b>	<b>795</b>	<b>18,900,683</b>	<b>830</b>	<b>18,911,343</b>

**II. Companies with No Post-Retirement Medical Plan:**

Active Lives:	1 - 24		25 - 99		100 - 499		500 +		Total	
	# COS	# EES	# COS	# EES	# COS	# EES	# COS	# EES	# COS	# EES
Mining & Manuf.	6	63	11	614	22	5,287	86	893,483	125	899,447
Construction	1	9	0	0	1	160	5	23,153	7	23,322
Transportation	1	19	0	0	5	1,065	13	77,332	19	78,416
Retail	0	0	0	0	3	760	15	453,510	18	454,270
Finance/Insur.	0	0	2	65	3	740	28	168,205	33	169,010
Commerce Serv.	3	36	1	30	6	1,395	29	484,552	39	486,013
<b>TOTAL</b>	<b>11</b>	<b>127</b>	<b>14</b>	<b>709</b>	<b>40</b>	<b>9,407</b>	<b>176</b>	<b>2,100,235</b>	<b>241</b>	<b>2,110,478</b>

# UNITED STATES TELEPHONE ASSOCIATION

Post-Retirement Health Care Study  
 Summary of BLIs  
 Based on Godwins' Database

## Average BLI Weighted by Number of Employees

<u>Industry</u>	<u>Pre-Acc. \$</u>	<u>Post-Acc. \$</u>	<u>No. of Companies</u>	<u>No. of Employees</u>
Agriculture, Mining, Manufacture & Wholesale Trade	0.7232	0.2340	446	11,129,686
Construction	0.7758	0.0604	6	94,893
Transportation & Utilities	0.7974	0.2643	78	1,472,589
Retail Trade	0.4730	0.0603	31	1,884,054
Finance & Insurance	0.6721	0.1926	222	3,549,719
Consumer Services	0.5771	0.1267	47	780,402
<b>TOTAL</b>	<b>0.6887</b>	<b>0.2060</b>	<b>830</b>	<b>18,911,343</b>

<u>Company Size</u>	<u>Pre-Acc. \$</u>	<u>Post-Acc. \$</u>	<u>No. of Companies</u>	<u>No. of Employees</u>
1-24 Employees			0	0
25-99 Employees	0.4850	0.1476	5	300
100-499 Employees	0.6482	0.1787	30	10,360
500+ Employees	0.6887	0.2060	795	18,900,683
<b>TOTAL</b>	<b>0.6887</b>	<b>0.2060</b>	<b>830</b>	<b>18,911,343</b>

# UNITED STATES TELEPHONE ASSOCIATION

## Post-Retirement Health Care Study Comparison of TELCO Demographic and Economic Structures and Actuarial Basis to National Averages

### Demographic

	<u>TELCO</u>	<u>Employers in GNP</u>
Total Active Employees	613,193	114,400,000 <sup>1</sup>
Active Employees covered by Retiree Medical Plans subject to SFAS 106	613,193	30,700,000 <sup>1</sup>
Retirees covered by Medical Plans	294,482	5,300,000 <sup>1</sup>
Average Age of Actives	41.6	38.2 <sup>2</sup>
Average Service of Actives	16.6	8.5 <sup>2</sup>

### Economic

Compensation Per Employee	\$38,533	\$29,500 <sup>3</sup>
Average Claim per Retiree	\$3,075	\$1,802 <sup>3</sup>
Labor Cost as a % of Value Added	38.5% <sup>4</sup>	64.3% <sup>4</sup>
Value Added as a % of Output	74.3% <sup>4</sup>	100%
Accumulated VEBA assets	\$1,258.8 million	N/A
Annual VEBA contributions in excess of claims	300.3 million	N/A

### Actuarial

Pre-Retirement Turnover	T-2 <sup>7</sup>	T-6 <sup>8</sup>
Retirement Age	Table <sup>7</sup>	63 <sup>9</sup>
1991 SFAS 106 expense	\$2,693.1 million	N/A

1. Source - U.S. General Accounting Office
2. Source - U.S. Dept. of Labor, Bureau of Labor Statistics
3. Source - U.S. Bureau of the Census Current Population Reports
4. Source - U.S. Dept. of Commerce, Bureau of Economic Analysis Survey of Current Business
5. Source - 1990 Hewitt Associates Survey of Retiree Medical Benefits brought forward to 1991 with 19% trend
6. Source - 1990 ARMIS 43-02's for Price Cap LECs
7. See tables on page 48 for more detail
8. Source - Midpoint of Standard Tables used in generally accepted Actuarial Practice
9. Source - The Gerontologist Vol. 28 No. 4

# UNITED STATES TELEPHONE ASSOCIATION

## Post-Retirement Health Care Study

### TELCO Retirement Rates

<u>Age</u>	<u>Rate of Retirement</u>
55-61	9.54 %
62	25.00 %
63	10.00 %
64	10.00 %
65	67.00 %
66-69	10.00 %
70	100.00 %

### Comparison of TELCO Turnover Rates vs. "Standard" Rates

#### Probability of Remaining in Service Until Age 55

<u>Table</u>	<u>T-1</u>	<u>TELCO T-2</u>	<u>GNP T-6</u>	<u>T-11</u>
<u>Current Age</u>				
30	.743	.505	.250	.013
35	.873	.650	.363	.047
40	.958	.811	.510	.141
45	.995	.935	.687	.344
50	1.000	.992	.871	.664

#### Notes

1. Standard Tables in use range from T-1 (most conservative) through T-11 (least conservative). T-6 represents mid-point of range.
2. TELCO utilizes customized assumption most closely approximated by T-2.
3. Supporting evidence for low incidences of turnover at TELCO relative to national average can be seen by the higher average age and past service of TELCO employees relative to average age and service of national working population.

# UNITED STATES TELEPHONE ASSOCIATION

## Post-Retirement Health Care Study Summary of Data on National Prevalence of Post-Retirement Medical Benefit Plans (Source = United States General Accounting Office)

### Covered Employees\* by Industry

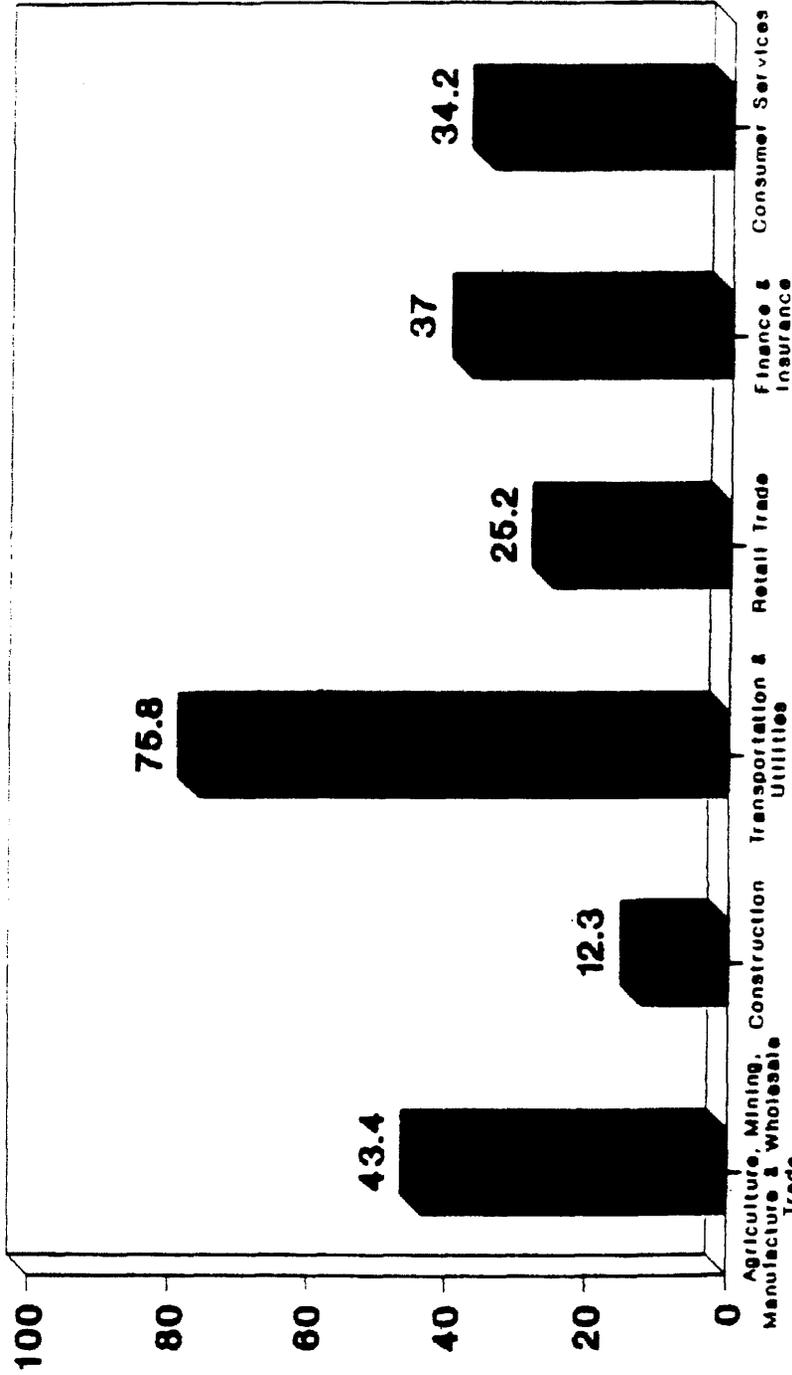
<u>Industry</u>	<u>Total Employees</u>	<u>Covered Employees</u>	<u>% Total Employees Who Are Covered</u>	<u>% of Covered Employees in Industry</u>
Agriculture, Mining, Manufacture & Wholesale Trade	26,729,660	11,602,872	43.4%	30.17%
Construction	4,592,367	562,891	12.3%	1.46%
Transportation & Utilities	11,674,827	8,853,209	75.8%	23.02%
Retail Trade	15,717,209	3,962,734	25.2%	10.31%
Finance & Insurance	28,210,193	10,431,800	37.0%	27.13%
Consumer Services	8,895,653	3,040,556	34.2%	7.91%
<b>TOTAL</b>	<b>95,819,909</b>	<b>38,454,062</b>	<b>40.1%</b>	<b>100.00%</b>

### Covered Employees\* by Company Size

<u>Company Size</u>	<u>Total Employees</u>	<u>Covered Employees</u>	<u>% Total Employees Who Are Covered</u>	<u>% of Covered Employees by Company Size</u>
1-24 Employees	13,384,195	556,209	4.2%	1.45%
25-99 Employees	12,713,231	1,663,938	13.1%	4.33%
100-499 Employees	19,631,184	3,847,903	19.6%	10.00%
500+ Employees	50,091,299	32,386,012	64.7%	84.22%
<b>TOTAL</b>	<b>95,819,909</b>	<b>38,454,062</b>	<b>40.1%</b>	<b>100.00%</b>

\*Covered Employees means employees who work for companies which sponsor post-retirement medical plans. The GAO estimates that only 30.7 million of the 38.5 million covered employees actually could potentially qualify to receive coverage from company sponsored plans. The remaining 7.8 million employees represent those working for non-covered groups within the company (e.g. a subsidiary which does not participate in the company's plan) or employees who are covered by multi-employer plans which are not subject to SFAS 106.

**United States Telephone Association  
 Post-Retirement Health Care Study  
 Summary of Data on National Prevalence  
 of Post-Retirement Medical Benefit Plans**

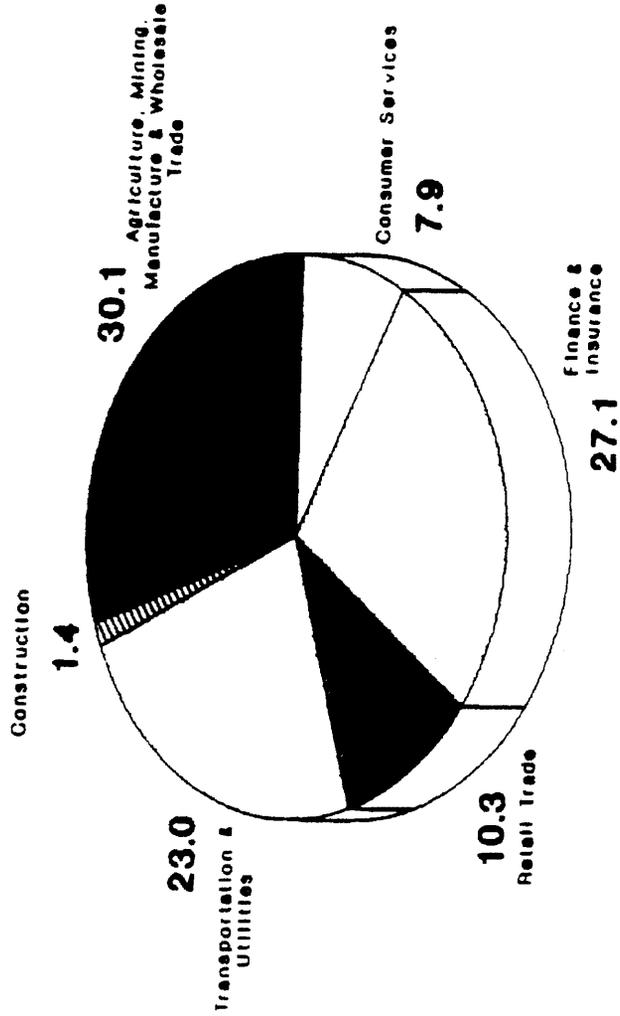


**% Total EE's Who Are Covered by Industry**

(Source = United States General Accounting Office)



# United States Telephone Association Post-Retirement Health Care Study Summary of Data on National Prevalence of Post-Retirement Medical Benefit Plans

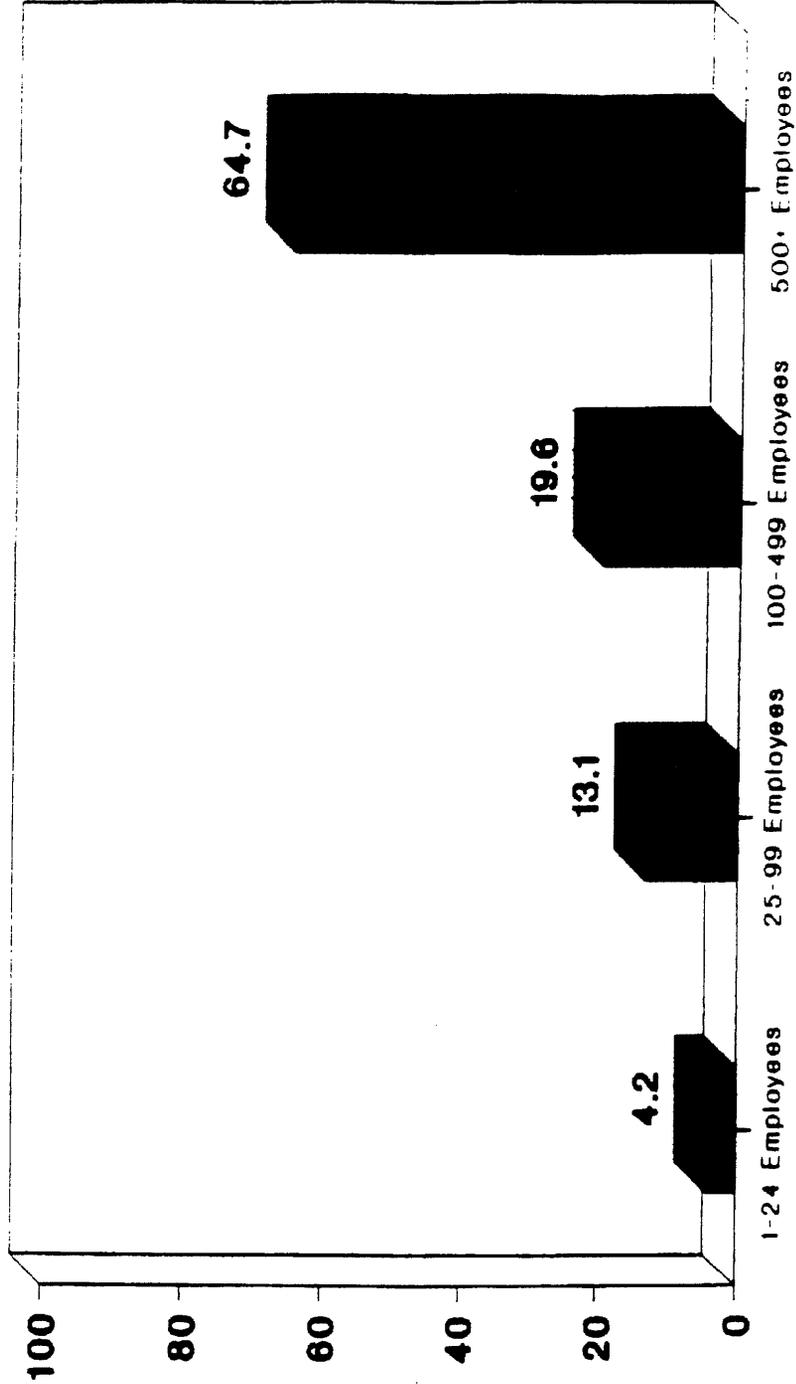


Number of Covered Employees by Industry

(Source = United States General Accounting Office)

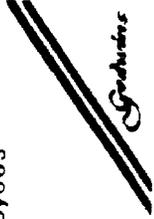


**United States Telephone Association  
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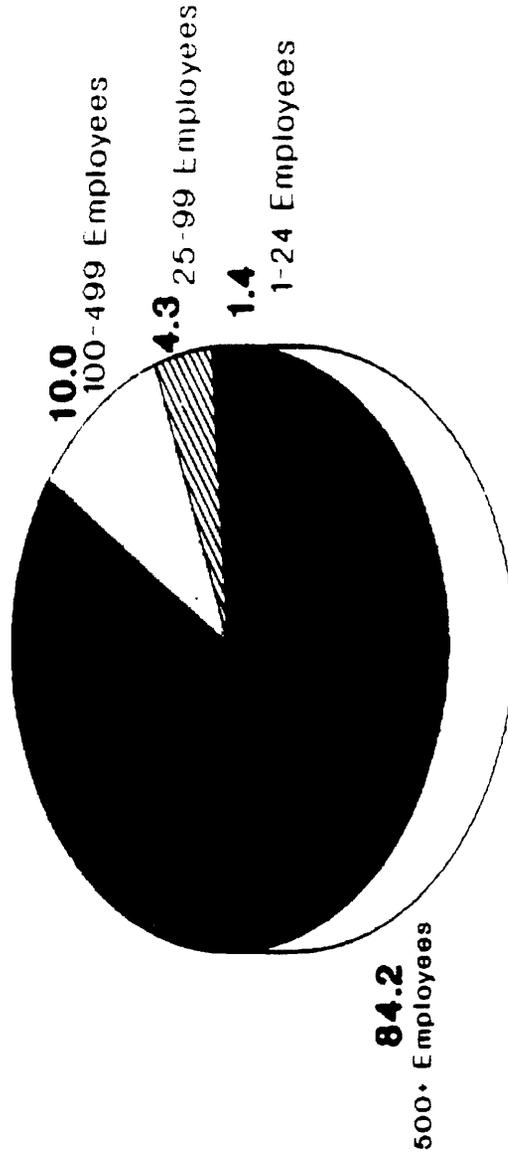


**% Total EE's Covered by Company Size**

(Source = United States General Accounting Office)



**United States Telephone Association  
 Post-Retirement Health Care Study  
 Summary of Data on National Prevalence  
 of Post-Retirement Medical Benefit Plans**



*% of Covered Employees by Company Size*

*(Source = United States General Accounting Office)*



## APPENDIX B - METHODS AND ASSUMPTIONS

Below is a description of the key methods and assumptions used for the derivation of the Demographic Adjustment as well as the basic BLI calculations. The methods and assumptions utilized in developing the other Adjustments are sufficiently documented in Section III.

### Demographic Adjustment

The three adjustments making up the Demographic Adjustment were developed by calculating and comparing SFAS 106 costs for sample populations incorporating the GNP and TELCO demographic characteristics based on the age and service distribution of GNP and TELCO employees respectively. The calculations utilized pre- and post-65 per capita claim amounts that bear the same relationships to each other as do the pre- and post-65 BLIs for GNP and TELCO. All assumptions other than withdrawal, and retirement age (already discussed) were as follows:

discount rate - 8.13%  
trend rate - 10.08% in 1991 decreasing gradually to 5.56% for the year  
2006 and later  
retirement eligibility - 55  
amortization period for transition obligation - 20 years  
percent married - 65%

### BLI Calculations

The calculation of individual plan Benefit Level Indicators used the following data and methods.

A data base of annual claim amount distributions was used, based on the experience of 39,436 retirees who participate in employer sponsored post-retirement medical programs administered by a large national insurance company. For pre- and post-65 claimants, frequency weights, monetary weights, hospital/

drug/other ratios and Medicare reimbursements by type were developed. This data base has 35 claim ranges with average claim amounts in each range from \$15 to \$48,753.

The calculations also used our data base of the post-retirement medical plan provisions for 830 private sector employers. For both comprehensive and base plus plans the following data items were available:

- ° hospital room and board, either as days covered or a percentage
- ° surgical coverage
- ° in-patient physician coverage
- ° out-patient physician coverage
- ° diagnostic coverage
- ° prescription drug coverage, either percentage or flat dollar co-pay
- ° major medical deductibles
- ° major medical co-pay percentage
- ° out-of-pocket maximums
- ° annual/lifetime maximums
- ° Medicare integration method (i.e., carve-out, supplement or coordination of benefits)
- ° participant and dependent contribution rates

These provisions are available separately for pre- and post-65 claimants.

A particular plan's gross BLI was computed by determining how much the plan would reimburse at each claim amount in the distribution data base. The reimbursement amount was determined separately for each type of charge; e.g., hospital, drug, etc. Medicare reimbursement was taken into account explicitly for each type of charge based on the form of Medicare integration in the plan. Each reimbursement was then divided by the corresponding claim to obtain a reimbursement ratio. These ratios were then weighted by the claim amount weights in the distribution to determine the gross BLI.

Per retiree contribution rates were then compared to per retiree claim amounts, and that ratio was used as an offset to the gross BLI to determine the final net pre- and post-65 BLIs for each company in the data base.

After average pre- and post-65 BLIs had been determined for GNP and TELCO (see Section III page 11 for methodology), pre- and post-65 weightings were calculated as the percentages of total SFAS 106 cost associated with pre- and post-65 claims, determined using the same methodology as for the Demographic Adjustment. These were then applied to the pre- and post-65 BLIs to develop GNP BLI and TELCO BLI.

By way of illustration, suppose a comprehensive plan pays 80% after a \$200 deductible, subject to an out-of-pocket maximum of \$1,500. After 65, Medicare integration is 'Supplement'. Participants contribute \$10 per month.

In the \$4,000 - \$5,000 claim range, for example, we find the average claim to be \$4,479. Since this is a comprehensive plan, we derive the pre-65 reimbursement utilizing the total claim amount, that is  $(4,479 - 200)$  times 80%, or \$3,423. The out-of-pocket maximum has not been met. Therefore, the pre-65 reimbursement ratio in the charge range is 0.7642. The ratios for all ranges are averaged using weights given by the distribution table to determine the gross pre-65 BLI.

The post-65 reimbursement recognizes Medicare integration, in this example the method is Medicare Supplement. We determine the breakdown of charges to be \$1,776 for hospital, \$567 for prescription drugs, and \$2,136 for all other charges. Total Medicare reimbursement is \$2,047 (calculated explicitly from

Medicare provisions) and is immediately taken out; in this case \$1,177 from hospital, \$870 from other medical charges and nothing from drug charges. The plan provisions are then applied to the balance of \$2,432, giving a plan reimbursement of \$1,786  $((2,432 - 200) \times 80\%)$ . This produces a post-65 reimbursement ratio of 0.3987 for this claim range. As with the pre-65 case the ratios for all ranges are then averaged using weights given by the distribution table to determine the gross post-65 BLI.

The gross BLIs are then adjusted to reflect participant contributions. Our example here might produce gross BLIs of 0.85 pre-65 and 0.32 post-65. The participant contribution of \$10 per month translates into a reduction in the gross BLIs of 0.03 pre-65 and 0.04 post-65, giving final BLIs of 0.82 and 0.28 respectively.

NYASZ #157

## Appendix C

## Part I: Derivation of the Model

## I. Households

All households are assumed to be identical and obtain utility from money and leisure as well as each of the  $m$  produced goods. Each household solves the following maximization problem

$$(A1) \quad U^* = \max_{(C_i, M, N)} (C^\gamma (M/P)^{1-\gamma} \cdot (\phi N^{\eta+1})^{1/\eta})$$

subject to the constraint that

$$(A2) \quad M + \sum_i P_i C_i = I$$

where

$$(A3) \quad C = (\sum_i \alpha_i C_i^{(\theta-1)/\theta})^{\theta/(\theta-1)}$$

$$(A4) \quad P = (\sum_i \alpha_i P_i^{1-\theta})^{1/(1-\theta)}$$

and  $C_i$  is the consumption of produced good  $i$ ,  $P_i$  is the nominal price of produced good  $i$ ,  $M$  is the amount of money held at the end of the period,  $N$  is the amount of labor supplied,  $I$  is the total nominal value of resources available to the household,  $C$  is the bundle of consumption goods defined by the aggregator function in (A3), and  $P$  is a price index defined in (A4). (Note that the price index  $P$  in (A4) is not the fixed-weight GNP price index. The solution of the model produces prices for each of the  $m$  goods which can then be combined to calculate the appropriate fixed-weight GNP price index.) The parameters of the utility function are  $\gamma$ , which equals the share of the household's nominal expenditure on produced goods rather than on money balances;  $\theta$ , which is the elasticity of substitution between the consumption of any pair of goods;  $\alpha_i$ ,  $i = 1, \dots, m$ , which indicate the weight of each good in the household's utility function;  $\eta$ , which is the elasticity of labor supply; and  $\phi$  which characterizes the degree of disutility of labor.

The utility function in equation (A1) is additively separable between  $(C_i, M)$  and  $N$ . This separability allows us to solve the household's maximization problem in two stages. First, we will maximize utility with respect to  $C_i$  and  $M$ , and then we will choose the utility-maximizing level of labor supply  $N$ . Choosing  $C_i$  and  $M$  to maximize the utility function in (A1) subject to the constraint in (A2) yields the following first-order conditions:

$$(A5) \quad \alpha_i C_i^{-1/\theta} \gamma C^{\gamma-1+1/\theta} (M/P)^{1-\gamma} = \mu P_i$$

$$(A6) \quad (1-\gamma) C^\gamma (M/P)^{-\gamma} / P = \mu$$

where  $\mu$  is the Lagrange multiplier on the constraint (A2).

Combining the first-order conditions (A5) and (A6) yields

$$(A7) \quad \alpha_i C_i^{-1/\theta} \gamma C^{(1-\theta)/\theta} M = (1-\gamma) P_i$$

Multiplying both sides of (A7) by  $C_i$  and then summing over all  $i$  yields

$$(A8) \quad \sum_i P_i C_i = (\gamma/(1-\gamma)) M$$

Substituting (A8) into (A2) yields

$$(A9) \quad M = (1-\gamma)I$$

Substituting (A9) into (A7), summing over all  $i$ , and using the definition of the price index in (A4) yields

$$(A10) \quad PC = \gamma I$$

Substituting (A9) into (A7) and then using (A10) yields the demand for good  $i$

$$(A11) \quad C_i = \alpha_i^\theta (P_i/P)^{-\theta} \gamma I/P$$

Substituting (A9) into (A11) yields

$$(A12) \quad C_i = \alpha_i^\theta (P_i/P)^{-\theta} (\gamma/(1-\gamma)) M/P$$

Having solved for the optimal values of  $C_i$  and  $M$ , we now solve for the optimal value of labor supply  $N$ . First, substitute the optimal values of  $C_i$  (eq. A11) and  $M$  (eq. A9) into the utility function in (A1) to obtain

$$(A13) \quad U^* = \max_N (\gamma^\gamma (1-\gamma)^{1-\gamma} (I/P) - (\phi N^{\eta+1})^{1/\eta})$$

subject to  $I = wN + rK^* + M + \pi$ , where  $\pi$  is the (present value of) post-retirement health benefits to be received by the household.

The first-order condition for labor supply  $N$  is

$$(A14) \quad \gamma^\gamma (1-\gamma)^{1-\gamma} (w/P) = ((\eta+1)/\eta) (\phi N)^{1/\eta}$$

which can be solved to obtain  $N^*$ , the optimal amount of labor supplied

$$(A15) \quad N^* = \nu (w/P)^\eta$$

where  $\nu = [\gamma^\gamma (1-\gamma)^{1-\gamma} / (\eta+1)]^\eta \phi^{-1}$

## II. Firms

Each of the  $m$  goods is produced by competitive firms with Cobb-Douglas production functions. The total production of good  $i$ ,  $Y_i$ , is given by the production function

$$(A16) \quad Y_i = A_i N_i^{\rho_i} K_i^{1-\rho_i} \quad i = 1, \dots, m$$

The firms are assumed to be competitive and thus take the nominal price of their output,  $P_i$ , the nominal rental price of capital,  $r$ , and the nominal price of labor,  $D_i w$ , as fixed. Note that the nominal price of labor consists of two parts:  $w$  reflects the nominal wage rate excluding the cost of post-retirement health benefits covered by FAS 106. The factor  $D_i$  reflects the impact on the cost per unit of labor of post-retirement health benefits covered by FAS 106. For firms that do not offer post-retirement health benefits,  $D_i = 1$ . For firms that offer such benefits,  $D_i > 1$ . Competitive firms choose  $N_i$  and  $K_i$  to maximize

$$(A17) \quad P_i A_i N_i^{\rho_i} K_i^{1-\rho_i} - w D_i N_i - r K_i \quad i = 1, \dots, m$$

The first-order conditions for labor and capital are

$$(A18) \quad \rho_i P_i Y_i / N_i = w D_i \quad i = 1, \dots, m$$

$$(A19) \quad (1-\rho_i) P_i Y_i / K_i = r \quad i = 1, \dots, m$$

Given the nominal wage  $w$  and the FAS 106 factor  $D_i$ , (A18) determines the amount of labor demanded in sector  $i$ ; given the rental price of capital, (A19) determines the amount of capital demanded in sector  $i$ .

## III. Market Equilibrium

Equilibrium in the factor markets requires that the aggregate amount of labor demanded equal the supply of labor and the aggregate amount of capital demanded equal the supply of capital:

$$(A20) \quad \sum_i N_i = N^*$$

$$(A21) \quad \sum_i K_i = K^*$$

The amount of money demanded equals the amount initially held by consumers

$$(A22) \quad M = M^*$$

The amount of good  $i$  produced must equal the amount of good  $i$  demanded, so that using (A12) we obtain

$$(A23) \quad Y_i = \alpha_i^{\theta} (P_i/P)^{-\theta} (\gamma/(1-\gamma)) M/P$$

The nominal value of production must equal the nominal value of total factor payments, including the (present value of the) cost of post-retirement health benefits.

$$(A24) \quad \sum_i P_i Y_i = rK^* + w \sum_i D_i N_i$$

The nominal value of total resources available to the household,  $I$ , equals the initial holding of money  $M^*$  plus capital income  $rK^*$ , wage income,  $w \sum_i N_i$ , and the present value of post retirement health benefits  $\pi = w \sum_i (D_i - 1) N_i$  so that

$$(A25) \quad I = M^* + rK^* + w \sum_i D_i N_i$$

The solution to the model consists of the equilibrium conditions (A20) - (A25), the production functions (A16), the labor demand equations (A18), the capital demand equations (A19), and the definition of the price index (A4).

## Part II: Calibration of the model

The model is calibrated so that in the absence of FAS 106 it yields an allocation of labor across sectors that matches the actual allocation of labor across sectors. It is also calibrated such that in the absence of FAS 106, all nominal prices are equal to one.

Inputs to the calibration procedure:

$\eta$ , the elasticity of labor supply

$\theta$ , the elasticity of substitution between the consumption of any two goods

$\gamma$ , the share of nominal expenditure devoted to produced goods

$N_0^*$ , the initial total amount of labor to be allocated across sectors

$K^*$ , the fixed total amount of capital to be allocated across sectors

$\rho_i$ , the share of labor in total cost in sector  $i$

$D_i$ , the FAS 106 cost factor in sector  $i$  (equal to 1 in the absence of FAS 106)

$s_i^N = N_i/N_0^*$ , the fraction of labor employed in sector  $i$

In the initial calibration, all nominal prices are set equal to one

$$(B1) \quad P_i = 1, \quad i = 1, \dots, m$$

$$(B2) \quad P = 1$$

The amount of labor initially used in each sector follows directly from the fraction of the labor force employed in sector  $i$ ,  $s_i^N$ , and the total amount of labor employed,  $N_0^*$

$$(B3) \quad N_i = s_i^N N_0^* \quad i = 1, \dots, m$$

Define  $s_i^Y = P_i Y_i / \sum_1 P_i Y_i$  to be the share of sector  $i$ 's output  $P_i Y_i$  in total output  $\sum_1 P_i Y_i$ . Then using the labor demand equation (A18) and the fact that the total amount of labor employed is  $N_0^*$ , it can be shown that

$$(B4) \quad s_i^Y = (D_i s_i^N / \rho_i) / \sum_1 (D_i s_i^N / \rho_i) \quad i = 1, \dots, m$$

Using the capital demand equation (A19) and the fact that the total amount of capital used is  $K^*$ , it can be shown that

$$(B5) \quad K_i = [(1 - \rho_i) s_i^Y / \sum_1 (1 - \rho_i) s_i^Y] K^* \quad i = 1, \dots, m$$

Normalize  $A_1 = 1$  so that the production function in the first sector is

$$(B6) \quad Y_1 = N_1^{\rho_1} K_1^{1-\rho_1}$$

Using  $Y_1$  from (B6), the nominal wage and the nominal rental price of capital can be determined from the first-order conditions (A18) and (A19) for sector 1 to obtain

$$(B7) \quad w = \rho_1 Y_1 P_1 / (D_1 N_1)$$

$$(B8) \quad r = (1-\rho_1) Y_1 P_1 / K_1$$

Now calculate  $\nu$  in the labor supply curve (eq. A15) as

$$(B9) \quad \nu = N_0^* (P/w)^\eta$$

To calibrate  $A_i$ ,  $i = 2, \dots, m$ , substitute the production function (A16) into the first-order condition for labor (A18) and set  $P_i = 1$  (eq. B1) to obtain

$$(B10) \quad A_i = (D_i w / \rho_i) (N_i / K_i)^{1-\rho_i} \quad i = 2, \dots, m$$

Now set all prices equal to 1 in the equilibrium condition (A23), and use (A22) to obtain

$$(B11) \quad Y_i = \alpha_i^\theta (\gamma / (1-\gamma)) M^*$$

Summing (B11) over all  $i$  we obtain

$$(B12) \quad \sum_i Y_i = (\gamma / (1-\gamma)) M^* \sum_i \alpha_i^\theta$$

Now observe that with  $P = P_i = 1$  for all  $i$ , equation (A4) implies that

$$(B13) \quad \sum_i \alpha_i^\theta = 1$$

Substituting (B13) into (B12) and rearranging yields

$$(B14) \quad M^* = ((1-\gamma)/\gamma) \sum_i Y_i$$

Finally, substituting (B14) into (B11) and recalling that when  $P_i = P = 1$ ,  $s_i^Y = Y_i / \sum Y_i$ , we obtain

$$(B15) \quad \alpha_i^\theta = s_i^Y \quad i = 1, \dots, m.$$

**UNITED STATES  
TELEPHONE ASSOCIATION**

**Analysis of Impact of  
SFAS 106 Costs on GNP-PI**

*Supplemental Report:  
Responses to Objections Raised  
Regarding Original Study*

**July, 1992**

*Godwins*

## INTRODUCTION

Earlier this year, Godwins submitted a report to the United States Telephone Association (USTA) analyzing the impact of SFAS 106 on the GNP-PI, and, in particular, the extent to which the GNP-PI will reflect the increase in costs experienced by the Price Cap LECs as a result of adopting the new accounting standard. This report was placed on the record with the FCC in Bell Atlantic's Tariff Transmittal filed on February 28, 1992 (Transmittal No. 497) and was also included in U.S. West's Tariff Transmittal filed on April 3, 1992 (Transmittal No. 246).

In their filings with the FCC, several organizations took exception to the findings of that report. In particular, AT&T, MCI and the Ad Hoc Telecommunications Users Committee raised several objections with regard to various aspects of the study. The USTA has asked Godwins to provide a detailed response to each of those objections.

The purpose of this Supplemental Report is to provide the USTA with those responses. We have organized our responses into three sections, corresponding to the three different types of objections raised.

While the objections raised were numerous, this material will demonstrate that none of the objections raised should cause the Commission to have any doubts regarding the soundness of the study, or the validity of the results.

Respectfully Submitted,



Peter J. Neuwirth, F.S.A., M.A.A.A.



Andrew B. Abel, Ph.D.

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SECTION I  
RESPONSE TO OBJECTIONS REGARDING OVERALL STUDY

A. Definition of Double Count

There were two objections raised with respect to the manner in which we defined the potential sources of double counting and what sort of analysis would be required to eliminate any double counting in determining the portion of the LECs' SFAS 106 costs that should qualify for exogenous treatment.

AT&T Contention - "The LEC's have failed to demonstrate that the Commission's third criteria is met. To the contrary, the LECs' requests for exogenous treatment appear to reflect certain OPEB costs that will be reflected in the GNP-PI ... The double count occurs because (i) the GNP-PI component of the PCI will increase as all firms with OPEB liabilities reflect those costs through higher prices, and (ii) the SFAS 106 accrual calculation includes the present value of future inflation. If the SFAS 106 accrual is afforded exogenous treatment, the amount of the accrual will be increased automatically in future periods due to growth in inflation expressed by the GNP-PI component of PCI.\*\* Therefore, if inflation is included in both the exogenous cost component and GNP-PI, an LEC would be compensated twice. Although the LECs recognize this problem, no carrier has met its burden of showing that it has effectively removed this double count."

Response - AT&T's description of what it considers the source of potential double counting in the LECs' request for exogenous treatment for increased costs due to SFAS 106 demonstrates some confusion as to both the double count problem and the Godwins Report. Essentially AT&T suggests that double counting may arise from two separate sources:

- (1) Increases in the PCI due to increases in the GNP-PI caused by "firms with OPEB liabilities reflect(ing) those costs through higher prices."

- (2) Automatic increases in the exogenously treated portion of SFAS 106 accrual "due to growth in inflation expressed by the GNP-PI component of PCI."

The first source of potential double count, while a valid concern, is precisely the factor that the Godwins Report directly and thoroughly addresses. The first paragraph of page 1 of the Godwins Report explicitly states this as the primary objective of the study. As will be seen in the responses to specific criticisms of the Godwins Report, no respondent has raised any issue which, upon scrutiny, casts doubt on any of the basic findings of the study. Therefore, the Commission should accept the Report's conclusions that (a) this source of double count accounts for 0.7% of the increase in costs attributable to SFAS 106, (b) another 14.5% of the increase will be recovered through a reduction in the national wage rate, and (c) the remaining 84.8% of such increase in costs will remain unrecovered unless exogenous treatment is granted on this amount.

The second alleged source of double counting simply doesn't exist, and is the result of confusion over exactly what the LECs are requesting. While it is true that the SFAS 106 expense calculation includes the present value of future inflation, and that the expense calculated under SFAS 106 can be expected to increase each year at something close to the rate of inflation, SFAS 106 expense is not what the LECs are requesting exogenous treatment on. It is the increase in expense due to the SFAS 106 accounting change that should be afforded exogenous treatment. This is an absolutely critical distinction which is missed by AT&T. Retiree medical plans were sponsored by firms before and after SFAS 106 was issued. It is only the accounting for those plans that has changed, and it is the increase in costs associated with this change in accounting that must be evaluated.

MCI Contention -  
(Page 30)

"If one were to include SFAS 106 costs through exogenous treatment, the revenues resulting from the increase in the price cap index to account for these costs would also increase each year by the GNP-PI, as adjusted for the productivity factor. The problem is that SFAS 106 costs have already been adjusted for future inflation...Therefore, the impact of medical care cost inflation has already been counted. As such the amount offered by the LEC's has been inflated to reflect future medical costs. To include these costs again within the price cap formula through exogenous treatment, and treat them by the full amount of GNP-PI which has medical inflation embedded as well is tantamount to double counting the medical care inflation rate."

Response -

This contention is virtually identical to the second "source" of double counting outlined by AT&T on page 7 of its filing with the Commission. Rather than repeat our response to that contention, we would just point out that, like AT&T, MCI seems to have failed to grasp the point that the LECs are not asking for exogenous treatment on the SFAS 106 expense, rather they are asking for exogenous treatment on that portion of the increase in expense due to the mandated accounting change, which will not already be reflected in GNP-PI increases caused by that accounting change.

## B. Avoidance of Double Count

Two respondents suggested "better" ways of determining the extent of the double count problem, and therefore "better" ways of determining the appropriate portion of SFAS 106 costs that should qualify for exogenous treatment.

AT&T Contention -  
(pp. 13 - 14)

"....The Commission should require the LEC's to use an alternative that is both a simpler and more reliable means for correcting the double count. AT&T suggests that the appropriate method for removing the double count between the SFAS 106 accrual and the GNP-PI term in the price cap formula is to remove the impact of expected changes in GNP-PI from the SFAS 106 accrual. This can be accomplished in a straightforward manner by requiring the LEC's to subtract the expected rate of change of GNP-PI from the health care inflation component in the SFAS 106 accrual. The Commission should specify the changes in GNP-PI over the SFAS 106 forecast period. Current estimates is (sic) that GNP-PI will increase approximately 4% over the long term."

Response -

That AT&T should suggest such an illogical and erroneous "solution" to the double count problem is indicative of a failure to understand the true source of any potential double counting. As discussed earlier, potential double counting is not related to the fact that SFAS 106 costs are calculated by discounting future medical inflation back to the present. As discussed on page 2 of this material, double counting will only arise to the extent that the increased costs companies will bear, as a result of the change in accounting method required by SFAS 106, will also cause an increase in GNP-PI.

The fact that the AT&T "solution" does not address the true source of potential double counting is illustrated in the following example, where the AT&T solution is shown to produce an identical exogenous adjustment in two factually different circumstances, where logic would dictate different exogenous adjustments be applied.

In the second footnote on page 13 of its filing, AT&T estimates that its "solution" of allowing exogenous treatment for SFAS 106 accruals, calculated using a medical trend rate 4% lower than the actual rate used by the LECs for their financial statements, might result in approximately 55% of a given LEC's actual SFAS 106 accrual being afforded exogenous treatment. Now let us consider two hypothetical scenarios:

- (1) Every U.S. firm, LECs and non-LECs alike, have identical demographic makeups and provide identical retiree medical benefits. Thus, in this case, presumably every U.S. firm would experience the same increase in labor costs due to SFAS 106. In addition, under this scenario, it is assumed that all labor cost increases associated with SFAS 106 are completely reflected in the GNP-PI, as companies raise their prices to recover those costs.
- (2) The LECs are the only firms subject to SFAS 106, and/or the additional costs due to the adoption of SFAS 106 costs are never reflected in the GNP-PI.

In the first scenario, it is obvious that the increased labor costs due to SFAS 106 experienced by the LECs would be fully and completely reflected in the GNP-PI (the Godwins Report, of course, demonstrates that this hypothetical situation does not exist), and thus no exogenous adjustment would be required. In fact, in this hypothetical scenario, providing any exogenous adjustment would result in a complete double count. Yet in this circumstance, the AT&T approach of allowing recovery of SFAS 106 costs, calculated using a lower trend rate (medical inflation minus 4%), would, as noted above, result in allowing exogenous treatment on 55% of SFAS 106 accruals.

Conversely, under the second scenario, the LECs should receive an exogenous adjustment equal to 100% of their increased costs due to SFAS 106, because the double count problem simply wouldn't exist. Yet in this circumstance as well, the AT&T approach would allow an exogenous adjustment for the same 55% of SFAS 106 accruals as before. This is clearly an illogical result.

One can therefore see that AT&T's suggested approach to the double count does not address the specific factors that affect the extent of double count, i.e.:

- Differences in plans between the LECs and non-LECs
- Differences between the LECs and non-LECs which will give rise to different SFAS 106 costs (e.g., demographic differences).
- Proportion of increased aggregate labor costs due to SFAS 106, that in fact is reflected in GNP-PI.

As noted, it is precisely these critical factors detailed above that are addressed completely and comprehensively in the Godwins Report.

MCI Contention -  
(Page 31)

"If the Commission does decide to afford these LECs exogenous treatment for SFAS 106 costs, this double counting must be eliminated. This can be accomplished either through the removal of medical care inflation from the GNP-PI or through the removal of medical care inflation from the SFAS 106 accruals."

Response -

While this "solution" differs slightly from AT&T's suggested "solution" (pages 13-14 of its filing) in that MCI focuses on the medical care inflation component of GNP-PI, conceptually it is very similar, and suffers from the same

fundamental flaws as the AT&T suggestion. As with AT&T, the MCI suggestion simply doesn't address the source of any potential double count. The double count does not arise from the discount of future inflation, but only from the differential impact of SFAS 106 on the LECs relative to others, and the extent to which the price cap index will allow the LECs to recover some of those additional costs, as the macroeconomic effects of the introduction of SFAS 106 are reflected in the economy as a whole. As with the AT&T solution, the MCI solution produces the same exogenous adjustment, whether in reality there is no double counting (no non-LEC firm incurs SFAS 106 costs), or complete double counting (all firms, including LECs, experience identical increases in costs due to SFAS 106, and the GNP-PI fully reflects those increased costs). This is clearly an illogical result.

SECTION II  
RESPONSE TO OBJECTIONS REGARDING ACTUARIAL ANALYSIS

A. Methodology

There were three objections raised with respect to the basic methodology employed in the actuarial analysis undertaken by Godwins.

AT&T Contention -  
(pp. 11 -12)

"... the study is flawed because the government sector is not included. Although SFAS 106 does not affect the accounting practices of the government, growth in retirement health care costs for the government sector of the economy will affect the growth in GNP-PI because GNP-PI includes government SFAS 106-like OPEB expense... If OPEB-related expenses of the government were included in the analyses, the GNP-PI would be higher, and this would have the effect of reducing the amount of the LEC's SFAS 106 expense potentially eligible for exogenous recovery."

Response -

AT&T's contention that the exclusion of the government sector from the analysis results in an overstatement of the amount of the LECs' SFAS 106 expense eligible for exogenous treatment is completely invalid, because it is based on a misstatement of fact. The statement that "the GNP-PI includes government SFAS 106-like OPEB expense" is simply wrong. Government entities are not subject to SFAS 106, nor are they required by the Government Accounting Standards Board (GASB) to account for retiree medical benefits on anything other than a "pay-as-you-go" basis. It must be emphasized that the critical issue is not what effect will the increase in the "pay-as-you-go" costs of retiree medical plans have on GNP-PI. (The GNP-PI will increase due to increases in "pay-as-you-go" costs, regardless of whether SFAS 106 ever becomes effective.) Rather, the critical question is what effect will there be on GNP-PI, due to the requirement that private sector employers change the way in which they account for retiree medical plans. As AT&T

itself concedes, government sector employers are not required to change their accounting for retiree medical plans, and therefore the fact that many governmental entities sponsor such plans is not relevant to the analysis. As a result, the Godwins Report considered the government sector (see page 21 of the study), and correctly excluded it from the covered population for the calculation of the increase in labor costs experienced by firms subject to SFAS 106.

MCI Contention -  
(Page 26)

"The USTA study uses data from only one insurance company to arrive at the cost of medical claims for the calculation of the nationwide Benefit Level Indicator."

Response -

The inferred intent of the MCI comment is to suggest that Godwins used "data from only one insurance company" to come up with per capita claim costs, which were then used to derive aggregate SFAS 106 costs for the U.S. as a whole. MCI has clearly failed to appreciate the validity of the data, and the limited use to which the insurance company claims data was put. In particular,

- (1) The insurance company used is, by any measure, one of the five largest Life and Health insurance carriers in the United States.
- (2) The data collected was for gross medical claims, not amounts reimbursed by company plans.
- (3) The data was sufficiently extensive to ensure that no statistical fluctuations (i.e., sampling errors) would materially affect the results.

- (4) The data was used to form a frequency and amount distribution, against which actual plan provisions of the LECs and the companies in the Godwins database were applied, to evaluate the relative benefit levels of the TELCO plans compared to those provided by other employers.
- (5) Changes in the underlying distributions derived from the insurance company data would not have had any significant effects on the ultimate result. This is because the key results of the Godwins study were related to the ratio of the GNP-BLI to TELCO-BLI, and not to the absolute value of either.

Ad Hoc Contention - "Finally, the Godwins Report ignores the usual uncertainty that is associated with survey results measured by calculated standard errors. As we discussed, Godwins utilized data from a survey of 830 employers who sponsor post-retirement plans and 170 employers who do not. It is a well accepted fact that data from surveys are subject to uncertainty which is usually measured by the standard error.<sup>1</sup> However, these standard errors are never taken into account in the calculation of the Benefit Level Indicators (BLIs). Thus the data shown in the table on page 28 of the Godwins Report assumes that the standard deviation is zero. This is obviously incorrect. Furthermore, there is no information as to the variance or the standard deviation of the sample data so that the sensitivity of the results can be analyzed. Combined with the fatal errors discussed above, this shows a report which was designed to come to a particular conclusion favorable to the LEC's."

(ETI)  
(Page 21)

Response - The "standard error" for the calculation of the average Benefit Level Indicators was not shown<sup>1</sup> because in this case, the effect of the "standard error" was deemed to be

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1 Ad Hoc references page 28 of the Godwins Report. We assume that they are referring to the table shown on page 16 of the report since there is no table nor any data appearing on page 28 of the Godwins Report.

immaterial. The reason it is immaterial is that the Godwins data is not a "survey" in the traditional sense of the word (i.e., a small sample from a large universe); rather, it is a data base comprising companies that employ approximately one-half of all employees who work for companies that provide post-retirement medical benefits.

However, in the interest of completeness, we have included in Appendix A the calculation of the variance and standard deviation, which are inherent in the calculation of the average BLIs used in the Report. As can be seen from the exhibits, the standard deviation for the average pre-65 BLI is .015, while the standard deviation for the post-65 BLI is a mere .008. Had the average BLIs been one standard deviation higher than the values actually used for both the pre-65 and the post-65 BLI, the relative impact of SFAS 106 on GNP compared to TELCO would have increased from 28.3% to 29.1%. Given that the sensitivity analysis of the overall result utilized a range for this value of 17.8% to 44.5%, it is quite clear that the effect of the "standard error" referred to by ETI is immaterial.

**B. Actuarial Assumptions**

There was one objection raised regarding the reasonableness of the assumptions utilized in determining the ratio of GNP-BLI to TELCO-BLI.

**MCI Contention** -  
(Page 28)  
FN 35

"Within the USTA study, in its flawed attempt to estimate relative benefit ratio levels, the consultant utilizes turnover rates that are markedly lower than the average turnover rate. This results in inflated estimates of the OPEB liability. Like most of the assumptions used by USTA, the grounds for this are unsupported. USTA remarks that it chose this estimate because of the historical patterns of longer service life and higher average age for TELCO employees versus other employees. Unfortunately, the study does not indicate what time frame was used for this comparison, or whether the experience of the last few years, with the large amount of downsizing exhibited by the TELCO firms, has been included."

**Response** -

There appear to be two contentions made in MCI's comment. First, that the Godwins study did not use the "average turnover rate" for TELCO and second, that even if the average rate, based on "historical patterns of longer service life and higher average age" were used, such turnover rates would still be too low because of "the large amount of downsizing exhibited by the TELCO firms."

With respect to the first contention, the turnover rates used for TELCO (T-2) are the average of the rates used by the LECs in their most recent actuarial studies (generally 1990 or 1991). With respect to the second contention, downsizing through Early Retirement programs should not have any impact on assumed turnover rates because such turnover rates are only utilized for projecting future pre-retirement withdrawals. This should be obvious since an individual is no longer subject to the turnover rates once that individual becomes eligible for retirement.

Further, MCI seems to have misinterpreted the statement made

in the Godwins Report (page 48-FN 3) that,

"Supporting evidence for low incidence of turnover at TELCO relative to national average can be seen by the higher average age and past service of TELCO employees relative to average age and service of national working population."

The point here is not that there have been "historical patterns of longer service life and higher average age for TELCO employees," but rather that the current age/service characteristics of TELCO (age = 41.6 / service = 16.6, as of 1/1/91) provide evidence of low turnover rates (i.e. low turnover rates in the past produced the current demographic makeup of the group). Recent downsizing could not have contributed to producing these age/service characteristics because recent staff reductions among the LECs were not accomplished through layoffs among the younger short-service employees prior to 1991.

While the above concept is well known among professional actuaries, we have performed some additional analysis and provided a more detailed explanation below, which should make our point somewhat clearer.

The average age and service of an employee group is not a simple function of withdrawal rates, but higher withdrawal will generally push down averages.<sup>2</sup>

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2 The fact that the average age of a population will increase if mortality rates are reduced is obvious. It can also be shown that a similar effect occurs in a company's "population". An employee group has exits from death, retirement, and termination, which exits correspond to mortality in the general population. Population growth, the growth of the firm, and the economic cycle all affect the number and average ages of replacements, which replacements correspond to births in the general population. Since the calculations for TELCO were based on very large employee groups, the variations in growth of firms cannot hide the effect of withdrawals.

Calculations were performed to test the hypothesis that the "T<sub>1</sub> / T<sub>2</sub>" choice of withdrawal tables was consistent with the observed differentials between average age and average service of TELCO compared to the nation as a whole. With hire age and retirement age as parameters for calculating the average age and average service of stationary populations resulting from T<sub>1</sub>, T<sub>4</sub>, and T<sub>6</sub>, based upon all retirements at a given retirement age and all hires at a given hire age, the table in Appendix B clearly indicates differences that are not only consistent with the results shown in the Godwins Report, but in fact suggest that the differences in turnover rates between TELCO and the rest of the U.S. working population may be even greater than T-2 versus T-6.

For example, if one were to look at a company that hires new employees at an average age of 27, that experiences turnover rates equal to T-2, and retirements at age 62 (a situation not unlike TELCO), one would find that after this company matures it can expect to have an employee population with an average age of 41.54, and an average past service of 14.54 years. If, instead, turnover rates equal to T-6 were applied, the average age and service of the population would be 38.80 and 11.80, respectively. This theoretical difference, between populations subject to T-6 and T-2, is actually less than the observed differences in age/service characteristics between TELCO and the non-TELCO firms (see page 47 of the Godwins Report). While TELCO and the rest of the GNP have different retirement patterns, it can be seen from the table that differences in average retirement ages have only a minor impact on the basic result.

Finally, it should be noted that the sensitivity analysis performed by Godwins is more than sufficient to allow for any potential understatement of TELCO's turnover rates. On

pages 34 and 35 of the Godwins Report, it is shown that even if the same turnover rates were used for both TELCO and the rest of the working population, the relative impact of SFAS 106 on GNP, compared to TELCO, would only increase from 28.3% to 34.6%. As noted on page 40 of the Godwins Report, overall results are shown using values for this relative impact, ranging from 17.8% to 44.5%.

### C. Accuracy and Reliability of Results

There were two objections raised with respect to the overall accuracy and reliability of the Godwins findings that labor costs of non-LEC firms sponsoring retiree medical plans will increase 3.19% as a result of SFAS 106.

AT&T Contention - "The results of the Godwins Study depend on the calculation that the adoption of SFAS 106 will increase labor costs by 3% for firms incurring OPEB expenses. The 3% estimate is derived using numerous factors, each subject to error as noted in Godwins' section on sensitivity of results (pp. 34-43). The cumulative impact of reasonable variations in each factor renders the 3% estimate suspect."

Response - It is precisely the sensitivity analysis referred to by AT&T that gives us great confidence in the robustness of the bottom line result. In the extremely unlikely event that the actual increase in labor costs is as high as 5% (extremely unlikely, because such a result would require that virtually all of the factors for which uncertainty exists<sup>4</sup> have been maximally understated<sup>4</sup>) then the total amount of unrecovered SFAS 106 costs is reduced by a mere 12% (from 84.8% to 74.7% as shown on page 41 of the Godwins study). Thus, there can be little doubt as to the solidity of the results, and the Commission can be quite confident that any uncertainty in the basic results of the actuarial analysis will not have a significant effect on the final result.

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3 See pp. 34-37 of the Godwins study.

4 In fact, great care was taken to be conservative in estimating those factors to ensure that the impact of SFAS 106 on GNP-PI was, if anything, overstated. See, for example, the following in the Godwins Report:

- Calculation of prefunding adjustment (page 19)
- Basic BLI methodology (page 34)
- Average retirement ages for non-LECs (page 35)
- Discussion of labor cost percentage adjustment (pages 36-37)

**MCI Contention** -  
(Page 25)

"In no place within the study is there an attempt to verify the costs of SFAS 106 to non-LEC firms."

"The 3.19% increase in labor costs to non-LEC firms providing OPEB does not square with other estimates of the SFAS 106 costs. . . . This amount is only 40% of the estimates by Warshawsky (in Postretirement Health Benefit Plans: Costs and Liabilities for Private Employers, No. 76 Finance and Economics Discussion series, Division of Research and Statistics, Division of Monetary Affairs, Federal Reserve Board, Washington, D.C., June 1989)."

**Response** -

MCI's contention is a gross misrepresentation of the facts. It is true that in the referenced article Warshawsky does estimate that, based on 1988 data, the aggregate increase in retiree medical expense due to the introduction of SFAS 106 would be much higher than the 3.19% estimated by Godwins. However, despite the fact that Warshawsky is a well trained economist and clearly undertook his research in a responsible manner, MCI has utilized the results of that research irresponsibly. Specifically, the following must be noted:

- (1) Warshawsky himself now recognizes that his original estimate was unrealistically high, and he has significantly reduced this estimate in his most recent analysis.<sup>5</sup>
- (2) Even Warshawsky's revised estimate is significantly higher than other aggregate estimates produced by the GAO<sup>6</sup> and EBRI<sup>7</sup> for the same time period. Despite this,

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5 "The Uncertain Promise of Retiree Health Benefits," the AEI Press, 1992.

6 General Accounting Office, Human Resources Division, "Employee Benefits: Companies' Retiree Health Liabilities Large, Advance Funding Costly," June 1989, GAO/HRD-89-51.

7 Employee Benefit Research Institute, "Issues and Trends in Retiree Health Insurance Benefits", Issue Brief No. 84, November 1988.

MCI selected Warshawsky's earlier estimate and chose to ignore both Warshawsky's revision and other lower estimates. These other estimates are quite consistent with the Godwins estimate, and are fully encompassed by the sensitivity analysis included in the Godwins Report.

- (3) Warshawsky's revised estimate is itself too high because his assumptions regarding plan provisions, actuarial assumptions, and demographics were wrong. These erroneous assumptions are described in greater detail below.
- (4) Estimates produced by Warshawsky, as well as the GAO and EBRI, are all based on 1988 plan provisions. The Godwins estimate is more accurate because it is based on 1990 plan provisions, which are more up-to-date.

Each of these points is discussed in greater detail below.

- (1) *Warshawsky now recognizes that his original estimate was wrong.*

In the material referred to by MCI, Warshawsky estimated that aggregate SFAS 106 costs in 1988 dollars would have been \$67.9 billion, while "pay-as-you-go" costs were \$14.5 billion. This net increase in costs of \$53.4 billion translates to approximately 6.82% of 1988 total compensation<sup>8</sup> for covered employees, and directly corresponds to the Godwins estimate of 3.19%.

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<sup>8</sup> 1988 Total Compensation for U.S. workers was \$2921.3 billion as shown in the November, 1991 Survey of Current Business. Based on the GAO study, 26.8% of all workers are covered by plans subject to SFAS 106 (see page 21 of the Godwins Report). Therefore, according to Warshawsky, additional SFAS 106 costs are  $53.4 + (2921.3 \times .268) = 6.82\%$  of compensation.

Warshawsky now realizes that his earlier estimate was based on an erroneous demographic makeup of the total covered population (for example, the ratio of active employees to retirees used was 3.8 to 1, which is far lower than for the typical company<sup>9</sup>). In his recent book (The Uncertain Promise of Retiree Health Benefits, the AEI Press 1992), Warshawsky revises his estimate of aggregate 1988 SFAS 106 accrued liability and expense downward by 25% and 12%, respectively. In this new study, the aggregate estimate of SFAS 106 expense becomes \$58.9 billion, while "pay-as-you-go" costs are reduced to \$11.3 billion. Thus the net increase due to SFAS 106 of \$47.6 billion now translates to an increase of 6.08% of compensation. As shown in item (3) below, even this estimate is unrealistically high, due to the incorrect assumptions that Warshawsky relies on.

- (2) *Warshawsky's revised estimate is significantly higher than other estimates of aggregate SFAS 106 costs.*

Both the GAO and EBRI produced estimates of SFAS 106 liabilities, based on 1988 data, that can be directly compared to that produced by Warshawsky. Warshawsky's revised estimate of \$332.1 billion is, in fact, 50% higher than the GAO estimate of \$221.0 billion, and 34% higher than EBRI's estimate of \$247.0 billion. While neither the GAO nor EBRI explicitly calculated the increase in aggregate annual expense as a result of SFAS 106, their liability estimates translate to increases of 4.05%<sup>10</sup> and 4.52%<sup>11</sup> of compensation, respectively. Both of these values are well within the range of values used in the sensitivity analysis performed by Godwins. Page 41 of the Godwins Report illustrates results assuming the aggregate increase in costs due to SFAS 106 range from 2% to 5% of total compensation of covered employees. Even at the very high value of 5% (high because this

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9 See page 47 of the Godwins Report.

10  $221 + 332.1 \times 6.08\% = 4.05$

11  $247 + 332.1 \times 6.08\% = 4.52$

value, in addition to being materially higher than both the GAO and EBRI estimates, would also require that virtually all the factors outlined on pages 34-37 of the Godwins Report to have been maximally underestimated), the percentage of TELCO's SFAS 106 costs that are not recovered, through the GNP-PI increase and wage rate reduction, is only reduced from 84.8% to 74.7%.

(3) *Warshawsky's revised estimate is too high due to incorrect assumptions.*

In carefully reviewing the methodology employed by Warshawsky, it becomes quite clear why he arrives at aggregate cost estimates that are so much higher than the GAO and the EBRI estimates, as well as the Godwins estimate. Simply put, the methodology employed by Warshawsky utilizes assumptions regarding plan provisions, the demographic profile of the covered population, and actuarial assumptions to be used by companies to calculate SFAS 106 expense, that are demonstrably wrong. Specifically, in estimating the SFAS 106 accrued liability, Warshawsky:

- Assumes a "reasonably generous health plan with low deductibles and co-payments" for all companies (Pg. 92). A multitude of surveys (see, for example, Health Care for Retired Employees by Betty Malroy Stagg, The Conference Board Research Bulletin No. 202, 1987) demonstrate that this is simply not the case. Many companies in fact provide quite a bit less than "reasonably generous" benefits.<sup>12</sup> In fact, using data not available to Warshawsky, the Godwins BLI methodology was developed to specifically isolate the variation of "generosity" among companies' retiree medical plans.

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12 See page 7 of the Conference Board report cited above and pages 9-11 of the Hewitt Associates 1990 Survey of Retiree Medical Benefits.

- Assumes lifetime coverage for both the retiree and his spouse, for all companies. This is clearly unrealistic, and contradicted by the Conference Board material referenced above.<sup>13</sup>
- Assumes all active employees become eligible for full benefits at age 55. This also is contradicted by the studies referred to above.<sup>14</sup>
- Assumes mortality at 83 GAM<sup>15</sup> rates while many companies continue to assume higher mortality rates.
- Utilizes a 1% spread between the discount rate and medical trend rate combined with a 4% per year aging factor.
- Assumes a retirement age of 62.5, in contrast with the evidence of average retirement ages between 63.5 and 64, as shown on page 35 of the Godwins Report.

Strong evidence that Warshavsky's actuarial assumptions as to trend and mortality result in unrealistically high SFAS 106 costs can be seen from the fact that the LECs used much lower cost assumptions to calculate their SFAS 106 costs. In fact, only 2 out of the 11 LECs on whom data was collected used the 83 GAM table for their SFAS 106 calculations, and the average spread between the discount rate and the ultimate trend rate for the LECs' SFAS 106 calculations is 2.57%. This is particularly compelling, given the fact that the respondents to the LECs' filings with the Commission have indicated that they believe that the assumptions used by the LECs overstate their SFAS 106 accruals.

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13 See pages 7-8 of the Conference Board report.

14 See page 9 of the Hewitt Associates study cited in footnote 12 on the previous page.

15 The 1983 GAM mortality table is the most modern (lowest death rates) currently used for pension valuations in the United States. While it was published by the Society of Actuaries in October, 1983, it still has not been universally adopted by enrolled actuaries for their pension valuations.

In addition to the problems cited above, Warshawsky also assumes that the demographic profile of the entire covered population is a "reasonably mature and stable group" which is "typical of many large companies." While Warshawsky does not disclose the specific age and service characteristics of this group, based on his statements we must assume that it is older and has longer service than the average covered group. (Note that the GAO survey<sup>16</sup> reports that a very significant number of retiree medical programs are sponsored by companies with less than 500 employees.) By utilizing a demographic profile of such age/service characteristics, Warshawsky is undoubtedly overstating aggregate costs still further.

- (4) *All three estimates (Warshawsky, GAO and EBRI) are based on out-of-date data.*

After rejecting Warshawsky's estimate due to the serious problems noted above, there still remains the question of why the GAO and EBRI estimates are both slightly higher than the Godwins estimate of aggregate SFAS 106 costs. The simple explanation for this is that retiree medical plans have changed substantially, between the time the data was gathered for the three estimates noted above (1988), and the time period for which plan provision data was collected for the Godwins study (1990). In fact, according to the Hevitt Associates 1990 Survey of Retiree Medical Benefits, 70% of all surveyed companies changed their retiree medical plans in 1988 or 1989. Thus, the Godwins estimate must be regarded as more accurate because it uses more recent information.

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16 General Accounting Office, Employee Benefits, "Extent of Companies' Retiree Health Coverage," GAO/HRD-90-92, March 1990.

SECTION III  
RESPONSE TO OBJECTIONS REGARDING MACROECONOMIC ANALYSIS

A. Methodology and Choice of Model

MCI and AT&T raise three questions about the choice of a macroeconomic model and its use in estimating the impact of SFAS 106 on GNP-PI.

MCI Contention -  
(Page 31)

"Such a model, in its final form, is nothing more than a somewhat advanced spreadsheet model. ... This cannot be viewed as an objective forecasting tool, but rather as a means to legitimize overly simplistic calculations."

Response -

By calling the Godwins model a "somewhat advanced spreadsheet model", MCI means that the model is used to perform "what if" exercises. But a "what if" exercise is exactly what is required to study the impact on GNP-PI of the introduction of SFAS 106. To calculate the differential impact of SFAS 106, we need to ask "what happens to the value of GNP-PI if SFAS 106 is introduced." Any economic model, even a large-scale commercial econometric forecasting model, would have to be put through a "what if" exercise to determine the impact of SFAS 106. The criticism of the Godwins model for being used to perform "what if" exercises is unwarranted.

MCI Contention -  
(Page 32)

"USTA contends that the model, while not being useful for forecasting macroeconomic activity, can somehow be used for forecasting the differences in macroeconomic activity depending on a shift in an exogenous variable (the multiplicative term used to adjust labor costs for the SFAS-106 impacts.)" [footnote not repeated here] This distinction is artificial--if a model cannot be relied upon to forecast the interactions within the economy, how can it be utilized to predict the differences due to some alteration to one value within the model?"

Response -

To appreciate the distinction that MCI asserts is artificial, consider a simple example from outside the realm of regulation or economics. Suppose you are planning to take a 500-mile trip by car and you are concerned about how long the drive will take. The length of time will depend on the weather, road constructions along the way, traffic, accidents along the way, whether your car has mechanical trouble, and so on. Owing to the various unpredictable factors, any forecast of the duration of the trip may well be in error by an hour or more.

Now suppose that in planning your trip you want to know how much driving time you can save by packing lunch to eat while driving. If lunch at a fast food restaurant takes about half an hour, you estimate that packing lunch saves about half an hour. This informed guess can be made without having to (1) predict the overall duration of a trip that includes stopping for lunch; and (2) predict the overall duration of a trip that does not include stopping for lunch. You can avoid all of the complicating factors involved in trying to predict the overall duration of the trip. The prediction of the effect on duration of stopping for lunch may not be exactly right. (Indeed if you pack lunch rather than stop for lunch, you will never know if your prediction was right.) However, the forecast error of the effect of stopping for lunch is likely to be much smaller than the forecast error for the overall duration of the trip.

This example illustrates that when estimating the effect on a variable caused by a particular event, it is not necessary to forecast the actual value of that variable. The Godwins model calculates the effect of SFAS 106 on GNP-PI without having to forecast the actual level of GNP-PI.

AT&T Contention -  
(Page 10)

"Second, Godwins offers no methodology to test the validity of the macroeconomic model's results...If the model parameters and equations do not adequately describe real world data, then any predictions it gives are of little value."

Response -

These comments raise two separate questions: (1) do the model's parameters and equations adequately describe real world data? and (2) how can one test the validity of the model's results about the impact of the introduction of SFAS 106? In answer to the first question, the model's key parameters do describe real world data. The inputs to the model consist of 6 numerical parameters. Two parameters measure the share of labor cost in total cost, and the baseline values of these parameters were chosen to match the actual share of labor cost in total cost in the United States. One parameter measures the share of private sector employment covered by SFAS 106 benefits, and the value of this parameter was chosen to reflect the fact that of the 95.8 million private sector employees, 30.7 million are eligible to have a portion of their medical costs in retirement met by their employer's medical plan, subject to SFAS 106. A fourth parameter measures the percentage by which SFAS 106 directly increases the labor costs of employers that offer post-retirement medical benefits. The baseline value for this parameter was based on the extensive actuarial study in the Godwins Report. A fifth parameter is the wage elasticity of labor supply, and as discussed on page 30 of the Godwins Report, the value of this elasticity was based on a published summary, by Mark R. Killingsworth, of the extensive econometric literature on the elasticity of labor supply. A sixth parameter, the price elasticity of demand, was not based directly on a specific set of data or a specific set of econometric studies. However, econometric studies of demand for various goods tend to find price elasticities on the order

of one, or smaller. (For example, on page 16 of its report submitted in opposition to the direct cases, ETI cites a price elasticity of demand of 0.723 for interstate switched access, in a study by J. Gatto et. al. of AT&T.) Experimentation with the model revealed that (1) the results of the model are not very sensitive to the price elasticity of demand; and (2) higher values of the price elasticity of demand tend to increase the calculated impact of SFAS 106 on GNP-PI. To guard against understating the impact on GNP-PI of the introduction of SFAS 106, it was decided to use a value for this parameter that likely overstates the true value, so a value of 1.5 was used in the baseline case, as explained on page 29 of the Godwins Report.

The second question, which concerns testing the model's results about the impact of SFAS 106, is a conceptual question that would confront any model, not just the Godwins model, used to estimate the impact of SFAS 106 on GNP-PI. As AT&T points out on page 10, "there is no way to independently verify by observation the true change in GNP-PI due to SFAS 106 even after SFAS 106 goes into effect." This quoted sentence is correct, but notice that this sentence is independent of the choice of a model. As explained in the May, 1992 Godwins Response to Paragraph 16 of the FCC Order of Investigation and Suspension (p. 7), it is impossible to directly observe the impact of SFAS 106 on GNP-PI, even after the fact, because we have no way to directly observe what GNP-PI would have been in the absence of SFAS 106. This problem is faced by predicted changes based on econometric models as well as changes based on quantitative classical general equilibrium models, such as the one used in the Godwins Report.

AT&T (p. 10) goes on to point out that "standard economic practice is to perform tests whenever a model is based on estimates to see how closely the model mirrors actual data." For example, large-scale commercial econometric forecasting models are designed to forecast the values of various macroeconomic variables. Then the actual values of these variables are compared to the values forecasted by the model, and the difference between the actual and forecasted values is called the forecast error. Statistical properties of forecast errors, such as the root mean square error or the mean absolute forecast error, are then calculated. Although this statistical analysis of forecasts is commonly applied to large-scale econometric models, one should not be misled into thinking that these analyses can test the validity of a model's prediction about a change in a macroeconomic variable (such as GNP-PI), when some aspect of the model is changed (such as the introduction of SFAS 106). Statistical properties of forecast errors can be used to test the accuracy of conditional forecasts<sup>17</sup>, but do not address the question of the model's accuracy when predicting the effects of a change in the model's inputs.

We are faced with a choice between a quantitative classical general equilibrium model of the sort used in the Godwins Report and a large-scale commercial econometric forecasting model. Neither type of model has been tested for the validity of the predicted macroeconomic effects resulting from the introduction of SFAS 106. Both types of models

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17 Conditional forecasts use assumed future values of various inputs to the model, and thus are "conditional" on these assumed future values.

"fit" their key parameters to real world data: quantitative classical general equilibrium models base their parameters on independent econometric studies and/or calibration of certain parameters to make the values of certain variables match actual data; econometric models estimate the values of their parameters econometrically.

Which type of model should we use? The Godwins Report lists five desirable criteria for a model to be used to study the impact of SFAS 106 on GNP-PI. The quantitative classical general equilibrium model in the Godwins Report satisfies all five of these criteria, but as explained in the May, 1992 Godwins Response to Paragraph 16 of the FCC Order of Investigation and Suspension, large-scale commercial econometric forecasting models fail to satisfy at least two of these criteria.

## B. Sensitivity

AT&T raised three questions about the sensitivity of the results.

AT&T Contention -  
(Page 10)

"Third, the validity of the macroeconomic model is further called into question because of the great sensitivity it exhibits to changes in assumptions. For example, altering the baseline assumption of labor elasticity from zero to an elasticity of 0.1 increases the impact on GNP-PI by more than 400% (a 0.0642% impact vs. the 0.0124% base case impact.)"

Response -

In judging whether the difference between 0.0124% and 0.0642% is large, it is important to look at the magnitudes involved. Both of these numbers are a tiny fraction of 1 percent. True, the larger of these two numbers is 5 times as large as the smaller number, but both of these numbers are essentially zero, and five times zero is still zero. To see that there is no essential difference, suppose that in the absence of SFAS 106, GNP-PI would have a value of 125.0. A 0.0124% increase would result in a GNP-PI of 125.0155, whereas a 0.0642% increase would result in a GNP-PI of 125.0802. GNP-PI is only reported to one decimal place, so the alleged "great sensitivity" amounts to the difference between 125.0 and 125.1 for GNP-PI. Rather than looking unstable, the results appear remarkably robust to this change in parameter value.

Instead of focusing on the sensitivity of the GNP-PI effect, one might want to focus on the percentage of additional SFAS 106 costs "to be met from other sources" reported in columns headed (c) in the sensitivity analysis on page 41 of the Godwins Report. This number is the "bottom line" number. As shown on page 41, in the baseline case, the portion of additional SFAS 106 costs to be met from other sources is 84.8%; increasing the labor supply

elasticity to 0.1 reduces this number to 84.1%. Again, the results are remarkably robust.

AT&T Contention -  
(Page 11)

"Moreover, Godwins' analysis looks at changes in parameter values on a 'one at a time' basis (p. 38)."

Response -

Section IV of the Godwins Report is devoted entirely to sensitivity analysis, and it presents two tables of results (page 39 and page 41). The table on page 39 focuses only on the sensitivity of GNP-PI to changes in parameter values, and examines these changes in parameter values one at a time. However, the table on page 41, which summarizes the sensitivity analysis for the overall results, does not look at parameter changes one at a time.

Why does the table on page 39 focus on changes in parameter values one at a time? It was recognized at the outset that there are 648 possible combinations of parameter values.<sup>18</sup> Rather than grind through all of these combinations, it was decided to first examine the effects of changes in parameter values one at a time to learn which parameters have the largest impact on GNP-PI. As shown on page 39, the direct impact on labor costs in sector 2 and the labor supply elasticity are the two parameters for which GNP-PI exhibits the most sensitivity. Then, having learned that GNP-PI exhibits the greatest sensitivity to these two parameters, the sensitivity analysis for the overall results on page 41 examines all combinations of these two parameters.

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18 Including the baseline values, the Godwins Report examined:

- 2 values of the price elasticity of demand;
- 3 values of labor share in total cost, sector 1;
- 3 values of labor share in total cost, sector 2;
- 3 values of fraction of labor employed in sector 2;
- 3 values of direct impact on labor costs in sector 2;
- 4 values of labor supply elasticity

Thus, there are  $2 \times 3 \times 3 \times 3 \times 3 \times 4 = 648$  combinations of parameter values.

It still does not seem to be worthwhile to grind through all 648 combinations, but, in response to AT&T's comment, additional sensitivity analysis was performed to explore parameter values that lead to low values of the percentage of additional SFAS 106 costs to be met from other sources (which is 84.8% in the baseline case). The additional sensitivity analysis was performed as follows: Four of the parameters were each set at the value that led to the largest increase in GNP-PI when the parameters were varied one at a time. (Price elasticity of demand = 3.0; share of labor costs in total cost, sector 1 = 0.78; share of labor costs in total cost, sector 2 = 0.78; initial fraction of labor employed in sector 2 = 0.4.) While these four parameters were set at values that individually contributed to the largest impact on GNP-PI, each of the four values of the labor supply elasticity was examined in combination with each of the three values of the direct impact on labor costs in sector 2. The results of this additional sensitivity analysis are reported in Appendix C. Notice that the lowest value obtained for the percentage of additional SFAS 106 costs to be met from other sources is 60.1%. This number was obtained by combining unlikely and extreme values of all 6 parameters. The chance that all 6 of these parameters simultaneously take on such extreme values is essentially negligible. Whereas the finding in the Godwins Report that 84.8% of additional SFAS 106 costs need to be met from other sources should be regarded as a conservative estimate, the 60.1% figure should be regarded as an unrealistically low underestimate of the amount requiring recovery from other sources.

AT&T Contention -  
(Pages 12-13)

"Because the SFAS 106 accrual is inherently imprecise and measurement of its impact on the economy is extremely difficult to assess, it is not possible to predict the full extent that SFAS 106 will affect prices in the economy generally (as both Godwins and NERA attempt to do).\*" [footnote omitted]

Response -

The Godwins Report explicitly recognizes that there are uncertainties associated with the calculation of the effects of the introduction of SFAS 106, and deals with these uncertainties in two ways: (1) whenever a decision needs to be made about the numerical value of some data or parameter, the Godwins Report always attempts to err on the side of overstating the impact on GNP-PI of the introduction of SFAS 106. In the macroeconomic analysis, this conservative approach is represented by the choice of baseline values of the price elasticity of demand and the labor supply elasticity that are likely to be higher than the true values of these parameters, as explained on pages 29 and 30, respectively, of the Godwins Report. (In the actuarial analysis, this same conservative approach is noted in footnote 4 on page 16 of this Report.) This conservative approach lends additional support to the finding that SFAS 106 will have a tiny effect on GNP-PI, because even the small effect predicted by Godwins is probably an overstatement of the true effect. (2) Recognizing the uncertainty associated with the data and parameters, Godwins devoted an entire section of its report (Section IV) to sensitivity analysis. Again, the sensitivity analysis lends additional support to the conclusion that the introduction of SFAS 106 has only a tiny effect on GNP-PI.

C. Details of Specification of the Macroeconomic Model

MCI raised three questions concerning the detailed specification of the model.

MCI Contention - MCI asserts that the USTA model assumes among other things  
(Page 32) "perfect substitutability of capital and labor."

Response - This assertion is plain wrong. The most common measure of the substitutability of capital and labor is the elasticity of substitution between capital and labor. "Perfect substitutability" describes the situation in which the value of this elasticity of substitution is infinite. In the USTA model, the value of this elasticity of substitution is equal to one, rather than infinity, as implied by MCI's assertion.

MCI Contention - MCI states (correctly) that the model "has no international  
(Page 33) sector."

Response - Every economic model is a simplification of reality. As a practical matter, a usable model must ignore many aspects of reality. The skill in building a good model rests in including those aspects of reality that are quantitatively important for the issues being studied, and in ignoring those aspects of reality that are less quantitatively important for the issues being studied. Despite all the attention that international trade and foreign competition receive in the press, it must be remembered that international trade is a small part of U.S. GNP. In 1991, net exports were equal to 0.5% of GNP in the U.S. (net exports were negative, so it is the magnitude, or absolute value, of net exports that was 0.5% of GNP). Even looking at gross trade flows rather than the net flow, imports accounted for only 10.9% of GNP, and exports accounted for

only 10.4% of GNP in 1991. Thus, the inclusion of an international sector did not seem important to study the impact of SFAS 106, and there is nothing convincing in the MCI statement that would lead to revising this judgment.

MCI Contention -  
(Page 33)

"Finally, although the model is attempting to review a dynamic phenomenon, the structure of the model is static in form."

Response -

Rather than being a weakness, the static nature of the model is a virtue. There is quite a bit of disagreement among macroeconomists about the short-run dynamic behavior of the macroeconomy, and indeed economists seem to have a lot of trouble predicting short-run dynamic behavior, such as turning points in the business cycle. Because the prediction of short-run macroeconomic behavior is so difficult, it was decided to avoid this task, and instead to analyze the ultimate effects of SFAS 106 when the economy reaches a new equilibrium. A static model, which simply avoids difficult short-run dynamics, is appropriate for analyzing the ultimate effects of the introduction of SFAS 106. As stated in the Godwins Report (p. 26), "The model is best viewed as a long-run model that fully incorporates the effects of SFAS 106." An additional advantage of focusing on the "long-run" or full effect of SFAS 106 is that it probably overstates the short-run impact on GNP-PI of the introduction of SFAS 106 because, owing to various lags in the economy's adjustment process, short-run effects are generally smaller than long-run effects. This likely overstatement of the impact of SFAS 106 is consistent with the conservative approach of the Godwins Report, which is to guard against understating the impact on GNP-PI of SFAS 106.

D. Response to Comments of Independent Macroeconomist on the Model and its Results

The statement below represents the entire commentary on the macroeconomic model by an independent economist engaged by MCI.

MCI (Drazen) -  
(Pages 8-9)

"The USTA study also presents a macroeconomic model to estimate the effect of SFAS 106 on the GNP Price Index (GNP-PI) to see what fraction of costs will be recovered via the increase in GNP-PI. The macroeconomic model is theoretically correct, but a very highly simplified and abstract model of the U.S. economy. For example, there are assumed to be only two aggregate factors of production, total capital and total labor, and the whole economy is assumed to be perfectly competitive. Hence, the true effect of SFAS 106 on the GNP-PI may be significantly different (in a statistical sense, though probably not in order of magnitude) than the figure of 0.0124% that is presented. The true effect on the average wage rate in the economy may also be very different than what the very simple macroeconomic model predicts, both in terms of statistical significance and in terms of order of magnitude."

Response -

This statement is clearly and carefully written by Allan Drazen, a well-respected economist. The remarks below are presented to help non-economists interpret some of the economic jargon used by Drazen.

Drazen's assertion that the "macroeconomic model is theoretically correct" should be regarded as praise, since this judgment comes from a macroeconomist who has published many of his own theoretical models. To an economist, the statement that the model is theoretically correct indicates that the basic economics underlying the model is sound, and that the mathematical formulation of the model is an appropriate formalization of the economics.

Although Drazen certifies the model as theoretically correct, he points out that it is "very highly simplified and abstract." Whether "very highly simplified and

abstract" is a virtue or a vice depends on the benefits and drawbacks associated with simplification and abstraction. In this case, simplification and abstraction has the benefit of allowing the model to be a tractable representation of the important economic phenomena associated with an increase in labor costs, such as that associated with the introduction of SFAS 106. In addition to promoting tractability, the simplification avoids the possibility that irrelevant complications somehow contaminate the model's results.

Drazen's statement focuses on the drawbacks of simplification and abstraction in this case. As will be explained below, a careful reading of Drazen's statement indicates that he thinks that, despite the simplification and abstraction, the Godvins model produced essentially the right answer for the effect on GNP-PI, but he has some doubt about the effect on the wage rate.

The key to understanding Drazen's statement lies in the parenthetical statement in the quote "may be significantly different (in a statistical sense, though probably not in order of magnitude)". Economists often distinguish between two concepts of significance: statistical significance vs. economic significance. For instance, the true effect of something is said to be statistically significantly different from the estimated effect if econometric and/or statistical analyses indicate that we can have a high degree of confidence (usually 95% confidence) that the true effect is different from the estimated effect. It is possible that the estimated effect is very close to the true effect, and yet statistical and/or econometric methods may detect a statistically significant difference; in this case, economists would describe the difference as

statistically significant, but not economically significant.

Drazen's statement indicates that the true effect of SFAS 106 on GNP-PI may be statistically significantly different -- but not economically significantly different -- from the effect estimated by the Godwins model. He states that the true effect on GNP-PI is probably not different, in order of magnitude, from the 0.0124% effect estimated by Godwins. That is, the order of magnitude of the Godwins estimate is tiny, and Drazen does not dispute the finding of a tiny effect on GNP-PI.

The calculated effect of SFAS 106 on the wage rate is almost two orders of magnitude larger than the calculated effect on GNP-PI, and Drazen suggests that the true effect on the wage rate may differ from the calculated effect, both in terms of statistical significance, and in terms of order of magnitude. However, he does not indicate whether the effect calculated by Godwins is likely to be too large or too small.

To summarize, Drazen's remarks about the macroeconomic results of the Godwins Report serve as much to bolster the results as to challenge them. Drazen pronounces the macroeconomic model to be theoretically correct and he notes, but does not challenge, the finding of a tiny impact on GNP-PI. Finally, he does not indicate whether his doubts about the effects on the wage rate would lead him to expect a larger or a smaller effect than is found in the Godwins Report.

## E. Response to Ad Hoc Users

The criticisms of the macroeconomic analysis in the Godwins Report presented in The Opposition of the Ad Hoc Telecommunications Users Committee to Direct Cases is simply a summary of criticisms made in a report prepared by Economics and Technology, Inc. (ETI) for the International Communications Association. To avoid repetition, we will not separately respond to the Opposition of the Ad Hoc Telecommunications Users Committee report, and to the ETI report. Instead, we will respond only to the ETI report. Responding to the ETI report presents a special challenge. Unlike the oppositions filed by AT&T, MCI, and the remainder of the Ad Hoc Users filing, the report submitted by ETI is unprofessional in both its tone and its substance. When reading the assertions that appear instead of reasoned economic analysis, one wonders why ETI chose to write the report this way. Was it the result of an inability to understand the economic analysis in the Godwins Report, or was it the result of a deliberate attempt to misrepresent and distort the report? Regardless of the reason, ETI's reckless assertions have been entered into the record, so it is necessary to set them straight.

ETI asserts on page 13 of its report that the Godwins Report contains at least six fatal flaws. The first alleged fatal flaw deals with the role of calibration, and the remaining five alleged fatal flaws are numbered 1 - 5 on page 15 of the ETI report.

ETI Contention -  
(Page 14)

"In the Godwins model, the key numbers which determine the results are simply invented. They are made up. ... A quote from Appendix C-5 of the Godwins Report illustrates the process:

The model is calibrated so that in the absence of FAS-106 it yields an allocation of labor across sectors...It is also calibrated such that in the absence of FAS-106, all nominal prices are equal to one." [emphasis added by ETI]

Response -

Several comments are in order. First, let's look at what ETI omitted from the quoted passage from the Godwins Report where the ellipsis appears after "labor across sectors." The following words were left out: "that matches the actual allocation of labor across sectors." [emphasis added] Now why were these nine words omitted by ETI? Certainly not because they took up too much extra space. And certainly not because these nine words were not germane to the point ETI was trying to make. Quite the contrary--these nine words indicate that the numbers were not made up or invented; the numerical values of the parameters were chosen so that the share of workers eligible for SFAS 106 benefits in the model would equal the actual share in the U.S. economy. That is, these nine words prove the opposite of ETI's assertion, and ETI simply chose to suppress them.

Second, the passage quoted from the Godwins Report states that in the initial equilibrium, before the introduction of SFAS 106, all nominal prices are set equal to one. It seems that the authors of the ETI report regard this as an invented number. However, there is a difference between a price index and the price of a specific good measured in local currency. GNP-PI is a price index, and like all indexes, a single specific numerical value of the index is meaningless, unless the scale or base is specified. The value of an index in a base year is entirely arbitrary, and to make the interpretation of the numbers simple, the price indexes were normalized so that the price index in the initial situation had a value of one. The concept of normalization should be familiar to anyone with graduate training in economics, and there is no meaningful sense in which normalization should be interpreted as "inventing numbers."

Third, ETI italicizes the word "calibrated" twice in the quoted passage, as if to emphasize that "calibrated" means "invented" or "made up." The problem is that the authors of the ETI report do not appear to know what calibration is. They ask the question on page 14: "What is this calibration?" Then they assert that calibration does not involve real economic data, and they cite as proof the fact that the term calibration is not used in standard econometrics textbooks. The problem is that the authors looked in the wrong place to find out about calibration. The right place to look is in the macroeconomics literature, in particular the burgeoning literature on quantitative general equilibrium macroeconomic models. An influential paper that uses calibration and is already becoming a classic in this literature is Edward C. Prescott's "Theory Ahead of Business Cycle Measurement," Quarterly Review, Federal Reserve Bank of Minneapolis, Fall 1986, pp. 9-22. Calibration is at the frontier of quantitative macroeconomics and has not yet filtered into many undergraduate textbooks. However, calibration is described in Chapter 11 of Macroeconomics by Andrew B. Abel and Ben S. Bernanke, Addison-Wesley Publishing Co., 1992, a book co-authored by one of the authors of the Godwins Report and used at dozens of leading colleges and universities.

Calibration is an alternative method to direct econometric estimation for choosing numerical values of parameters in a macroeconomic model. In calibrated models, numerical values may be based on econometric estimation of microeconomic data and/or they may be chosen so that variables in the model match actual values of real economic data. Both of these techniques were used in the model in the Godwins Report. For instance, the parameters of the

production functions were calibrated so that the share of labor cost in total cost matched the actual share of labor in total cost in the U.S. economy. Contrary to the assertion in the first paragraph on page 14 of the ETI report ["Another key factor, the labor supply elasticity, the response of labor supplied to real wage changes, is assumed to be 0.00, again a number simply invented for the purposes of their report."], the value of the labor supply elasticity was based on a multitude of econometric studies. The first complete paragraph on page 30 of the Godwins Report discusses the summary by Mark R. Killingsworth of the extensive econometric literature on the elasticity of labor supply. Each of the many studies finds different numerical values for this elasticity, and it seems pointless to try to pick one of the estimates in one of the studies. It is even more pointless to econometrically estimate this elasticity independently, given the multitude of existing estimates. The sensible approach is to observe that the estimates tend to show a small, even slightly negative, elasticity. Because the impact of SFAS 106 on the GNP-PI is larger for higher labor supply elasticities, a value of 0.0 was chosen so as not to understate the impact on GNP-PI. Furthermore, the sensitivity analysis explored the effect of even higher values of this elasticity.

It should be acknowledged that the value of one parameter, the price elasticity of demand, was not directly calibrated from a specific set of data or a specific set of econometric studies. The value of this parameter was chosen by observing that econometric studies of the demands for various goods tend to find price elasticities of demand on the order of one, or smaller. For instance, the ETI report on page 16 cites a price elasticity of demand of 0.723 for interstate switched access in a study by

J. Gatto, et. al. of AT&T. Because price elasticities of demand tend to be smaller for broader categories of goods, the price elasticities of demand for sectors 1 and 2 in the Godwins model (which account for about 2/3 and 1/3 of private sector output, respectively) are most likely smaller than one. The baseline calculation used an elasticity of 1.5 because experimentation with the model indicated that the effect of SFAS 106 on GNP-PI is (1) not very sensitive to the price elasticity of demand, and (2) higher for higher values of the price elasticity of demand. Therefore, to provide a cushion against understating the effects on GNP-PI, the value of the price elasticity of demand was purposely set higher than the likely true value of this elasticity.

The ETI report complains that only "after much evasion" (p. 14) did the May, 1992 Godwins Response to Paragraph 16 of the FCC Order of Investigation and Suspension admit that its model is not econometrically estimated. The first paragraph of the May Response states that the original Godwins Report contained enough information so that a well-trained professional economist could reproduce the numerical results of the macroeconomic model. The second paragraph begins by pointing out that it would be helpful to contrast the model in the Godwins Report with conventional large-scale short-run econometric forecasting models. This is clearly not evasive.

Having addressed the ETI report's misrepresentation of calibration, we now discuss the five numbered alleged flaws.

ETI Contention -  
(Page 16)

"Godwins choose (sic) the wrong kind of model to evaluate the effects of FAS 106."

Response -

According to ETI, a large-scale commercial econometric model would have been preferable to a classical general equilibrium model for the purpose of analyzing the impact of SFAS 106. The May, 1992 Godwins Response to Paragraph 16 of the FCC Order of Investigation and Suspension has already addressed in detail the choice of a classical general equilibrium model rather than a large-scale commercial econometric forecasting model. ETI has already complained on page 14 that that response contained "duplication of material from the February report" so that discussion will not be repeated here. It should be noted, however, that the Godwins Report listed five desirable criteria for a model to use in addressing the impact of SFAS 106. The classical general equilibrium model used in the Godwins Report meets all five of these criteria, but as pointed out in the Godwins Response to Paragraph 16, large-scale commercial econometric forecasting models fail to meet at least two of these criteria.

ETI's discussion on pages 16-18 adds nothing of substance to the issue of choosing an appropriate type of model. The distinction drawn on page 16 between mathematical models and models explicitly designed to be estimated with actual data again reveals the authors' ignorance of the burgeoning macroeconomic literature on quantitative general equilibrium models. (See especially the sentence on page 16: "They are designed and studied to investigate a concept qualitatively not quantitatively." [italics in original]). The authors waste a few paragraphs on pages 17 and 18 deriding the monopolistic competition in the Blanchard-Kiyotaki model. Apparently they have failed to realize that monopolistic competition is one aspect of the

Blanchard-Kiyotaki model that is not present in the adaptation of this model used in the Godwins Report.

ETI Contention -  
(Page 18)

"The key numerical parameters of the model are invented by Godwins and not estimated from any economic database."

Response -

There is nothing new in this false assertion that has not already been addressed in this Supplemental Report. All of this material in this false assertion is a repetition based on the ignorance of calibration by the authors of the ETI Report.

ETI Contention -  
(Page 19)

"The Godwins model erroneously assumes that workers do not evaluate the value from post-retirement benefits and that employers do not view these benefits as current costs."

Response -

Page 19 of the ETI report states "The fundamental Godwins assumption is that employers who pay these post-retirement benefits do not now consider them labor costs." This quoted sentence presumably means that the Godwins Report assumes that, in the absence of SFAS 106, employers do not recognize post-retirement benefits as current costs. The reason for this assumption is that the Godwins Report attempted to take a conservative approach wherever possible. In this particular context, conservative means guarding against understating the impact of SFAS 106 on GNP-PI. Equivalently, the approach was to err on the side of overstating the impact on GNP-PI. Now if one argues that in the absence of SFAS 106 employers and employees fully recognize post-retirement benefits, then the introduction of SFAS 106 would have no effect on any prices, and the GNP-PI would be unaffected. Thus, GNP-PI would provide absolutely no recovery to Price Cap LECs who would then be entitled to seek 100% recovery of the increase in costs due to SFAS 106 because Price Cap LECs have not been able to recover these costs in the past.

However, to the extent that SFAS 106 formalizes and focuses attention on future post-retirement liabilities, and to the extent that firms carry larger liabilities on their balance sheets and thus face higher costs of borrowing, the introduction of SFAS 106 will lead to an increase in recognized current costs. How large is the increase in costs? As explained above, the conservative approach dictates that we overstate the effect of SFAS 106 on GNP-PI, so for macroeconomic purposes we treat all of the additional SFAS 106 expense as a cost.

ETI Contention -  
(Page 20)

"Next, the Godwins model incorrectly uses an outdated functional form to represent the production function for the economy."

Response -

Although the Cobb-Douglas production function was first used more than 60 years ago, it is still widely used in quantitative economic analysis, and one of its major predictions -- that factor shares are constant over time -- seems to hold up well in U.S. data. It is true that during the 1970s there was a flurry of activity to generalize the Cobb-Douglas production function, and this flurry included estimation of the translog production function cited in footnote 48 of the ETI report. The translog production function is considerably more general than the Cobb-Douglas production function, but this added generality comes at a cost. The translog production function has many more parameters to estimate or calibrate, and the quality of aggregate data on inputs may be sufficiently poor to make estimates of these additional parameters unreliable. It is worth noting that when these additional parameters are equal to zero, the translog production function becomes a Cobb-Douglas production function. In practice, estimates of many of these additional parameters have large standard errors and are not significantly different from zero at

standard confidence levels (see Ernst R. Berndt, The Practice of Econometrics: Classic and Contemporary, Reading Massachusetts: Addison-Wesley Publishing Co., 1990, Table 9.2 p. 473). In addition, the estimated elasticity of substitution between capital and labor, in a four-factor translog production function presented by Berndt on p. 475, is 0.97, which is very close to the elasticity of substitution of 1.0 that is characteristic of the Cobb-Douglas production function.

The ETI report closes its criticism of the use of the Cobb-Douglas production function on page 21 with the sentence, "Although it is not clear how significant the bias is from the use of the Cobb-Douglas model, it is clear that the analysis involves simplified assumptions dating back over 60 years." It is worth noting that not only does the ETI report admit that the significance of the bias is unclear, it does not speculate on the direction of any bias. The only thing that is clear to the authors of the ETI report is that the Cobb-Douglas production function is over 60 years old. Interestingly enough, the source cited in the ETI report states that the translog production function introduced in 1970 is "identical to the production function considered by Heady several decades earlier." (Berndt, p. 458)

Perhaps the best response to the criticism raised by the ETI report is contained in a 1988 book by Zvi Griliches (former Chairman of the Department of Economics at Harvard University, 1984 Vice President of the American Economic Association, 1965 winner of the John Bates Clark Medal for the best economist under the age of 40, and Fellow of the Econometric Society whose distinguished career has been devoted to the study of productivity): "There is also the issue of functional form for the estimated production

functions and the associated productivity computations. I could never take this range of issues seriously." (Zvi Griliches, Technology, Education, and Productivity, New York: Basil Blackwell Inc., 1988, pp. 306-307.)

ETI Contention -  
(Page 21)

"Finally, the Godwins Report ignores the usual uncertainty that is associated with survey results measured by calculated standard errors."

Response -

This criticism applies to the actuarial analysis and has been addressed on pp. 10-11 of this Supplemental Report.

F. Response to Miscellaneous Comment by MCI

MCI Contention -  
(Page 6,  
and FN 8)

"If exogenous treatment is afforded to one portion of the compensation package, an asymmetrical relationship will be afforded carriers under price caps. This will allow carriers to offer increased OPEB, for which they would receive exogenous treatment, and decrease other forms of compensation." (footnote 8: In fact, the USTA study itself predicts a similar situation where SFAS-106 costs increase, the wage rate in the economy will fall, offsetting the increase in labor costs associated with SFAS-106.)"

Response -

Here it is appropriate to comment only on footnote 8.

In the Godwins Report prepared for USTA, the introduction of SFAS 106 leads to a reduction in the wage rate, relative to the wage rate that would have prevailed in the absence of SFAS 106. The fall in the wage rate is not a consequence of "an asymmetrical relationship [that] will be afforded carriers under price caps." The wage rate falls for all firms in the economy, even those firms that do not offer OPEBs covered by SFAS 106. The predicted nationwide fall in the wage rate is a market equilibrium phenomenon reflecting the nationwide fall in the demand for labor at any given wage rate, as explained on page 24 of the Godwins Report. Because the fall in the wage rate is an equilibrium phenomenon, it is beyond the control of any single firm or small group of firms.

Appendix A

Calculation of "Standard Error" of Average BLI  
(Description of Methodology)

In response to a contention raised by the Ad Hoc Telecommunications Users Committee, we have provided an analysis which was performed to determine whether "the uncertainty that is associated with survey results" could have materially affected the results outlined in the Godwins Report. The methodology employed in that analysis is described below.

The Godwins BLI database is extensive (830 plans in all) and holds data on Plans for 18 million participants out of a universe of 38 million participants. Statistical sampling error should have been minor. Godwins tested this hypothesis by calculating standard errors for the pre-65 and post-65 average BLI's. The analysis took account of the six industry groups used in the USTA Report, the BLI weightings within each industry group, the weightings of the industry-group BLI's in developing the final averages, and of the finite universe effect whereby dispersion tends to zero when a sample enlarges to exhaust the universe.

For each industry group ( $i=1, i=2, \dots, i=6$ ) a variance was calculated for the set of BLI's ( $j=1, N_i$ ) observed for the group,  $N_i$  being the number of Plans in the Godwins database for industry group  $i$ . Weighted means were used in the USTA study, and the variance for the weighted mean for industry group  $i$  was calculated as the variance of the observed BLI's times the sum of the squares of the weights based on participant counts in the plans included in the industry group. The Godwins database has information for substantial percentages of covered employees in each industry group. The total number of plans in each industry group,  $T_i$ , was taken as the number of plans in the Godwins database for the industry group,  $N_i$ , times the ratio of covered employment for the industry group in the economy (a GAO figure) to the covered employment included in the Godwins database for the industry group. A standard adjustment factor of  $(T_i - N_i) / (T_i - 1)$  was applied to account for the "finite universe effect".

The estimate of the variance of the means was taken as the sum of the products of the square of the "GAO weights" times the estimates of the industry-group variances. The square root of the estimate is the measure of the dispersion of the means. Numerical results from the calculations are summarized on the chart attached hereto. We see that pre-65 and post-65 dispersions are minor when contrasted to their corresponding means.

Calculation of "Standard Error" of Average BLI's  
(Results)

Industry Group number:	(1)	(2)	(3)	(4)	(5)	(6)	Total
Number of Plans in GODMINS' database:	446	6	78	31	222	47	830
Number of Employees covered by such Plans:	11,129,686	94,893	1,472,589	1,884,054	3,549,719	780,402	18,911,343
Number of covered employees in economy (GAO):	11,602,872	562,891	8,853,209	3,962,734	10,431,800	3,040,556	38,454,062

Pre Age 65

Weighted mean BLI for group:	0.7232	0.7758	0.7974	0.4730	0.6721	0.5771	0.6898
Variance of BLI's in group:	0.049191	0.060456	0.041069	0.067315	0.040691	0.068032	
Variance of weighted mean for group:	0.000711	0.028462	0.002895	0.006361	0.000747	0.004062	
Variance adjusted for Finite Universe effect:	0.000029	0.024396	0.002419	0.003379	0.000494	0.003035	0.000227
				Dispersion of weighted mean:			0.015076
				Mean + 1 standard deviation:			0.7049
				Mean - 1 standard deviation:			0.6747

Post Age 65

Weighted mean BLI for group:	0.2340	0.0604	0.2643	0.0603	0.1926	0.1267	0.2008
Variance of BLI's in group:	0.019851	0.022000	0.011883	0.011052	0.015966	0.018178	
Variance of weighted mean for group:	0.000287	0.010357	0.000838	0.001044	0.000293	0.001085	
Variance adjusted for Finite Universe effect:	0.000012	0.008878	0.000700	0.000555	0.000555	0.000811	0.000065
				Dispersion of weighted mean:			0.000080
				Mean + 1 standard deviation:			0.2089
				Mean - 1 standard deviation:			0.1927

Appendix B

Average Age / Average Service for Mature Populations  
 Promulgated from Varying Turnover and Retirement Assumptions

Age of New Hires	Average Age								
	T2			T6			T10		
	RA 62	RA 63	RA 64	RA 62	RA 63	RA 64	RA 62	RA 63	RA 64
25	39.94	40.35	40.76	36.96	37.24	37.53	31.02	31.09	31.16
26	40.75	41.16	41.58	37.88	38.18	38.48	32.16	32.23	32.31
27	41.54	41.96	42.38	38.80	39.11	39.42	33.29	33.38	33.47
28	42.32	42.74	43.17	39.71	40.02	40.34	34.43	34.53	34.63
29	43.08	43.51	43.94	40.60	40.93	41.26	35.56	35.68	35.79
30	43.83	44.27	44.70	41.48	41.81	42.16	36.70	36.82	36.95
31	44.57	45.01	45.45	42.34	42.69	43.04	37.82	37.96	38.11
32	45.29	45.74	46.18	43.19	43.55	43.91	38.94	39.10	39.26
33	46.00	46.45	46.90	44.02	44.39	44.77	40.05	40.22	40.40
34	46.69	47.14	47.60	44.84	45.22	45.60	41.14	41.34	41.53
35	47.36	47.82	48.28	45.64	46.03	46.43	42.22	42.43	42.64

Age of New Hires	Average Service								
	T2			T6			T10		
	RA 62	RA 63	RA 64	RA 62	RA 63	RA 64	RA 62	RA 63	RA 64
25	14.94	15.35	15.76	11.96	12.24	12.53	6.02	6.09	6.16
26	14.75	15.16	15.58	11.88	12.18	12.48	6.16	6.23	6.31
27	14.54	14.96	15.38	11.80	12.11	12.42	6.29	6.38	6.47
28	14.32	14.74	15.17	11.71	12.02	12.34	6.43	6.53	6.63
29	14.08	14.51	14.94	11.60	11.93	12.26	6.56	6.68	6.79
30	13.83	14.27	14.70	11.48	11.81	12.16	6.70	6.82	6.95
31	13.57	14.01	14.45	11.34	11.69	12.04	6.82	6.96	7.11
32	13.29	13.74	14.18	11.19	11.55	11.91	6.94	7.10	7.26
33	13.00	13.45	13.90	11.02	11.39	11.77	7.05	7.22	7.40
34	12.69	13.14	13.60	10.84	11.22	11.60	7.14	7.34	7.53
35	12.36	12.82	13.28	10.64	11.03	11.43	7.22	7.43	7.64

Appendix C

Additional Sensitivity Analysis

Extreme Parameter Values Leading to Low Estimates  
of the Percentage of Additional SFAS 106 Costs  
to be Met from Other Sources

Additional SFAS 106 Costs of  
Average Employer with SFAS 106 Liabilities

Labor Supply Elasticity	<----- 2% ----->			<----- 3% ----->			<----- 5% ----->		
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
0.0	0.9	12.0	<u>87.1</u>	2.0	17.5	<u>80.5</u>	5.4	27.5	<u>67.1</u>
0.1	3.9	10.0	<u>86.1</u>	6.4	14.6	<u>79.0</u>	12.5	22.8	<u>64.7</u>
0.2	6.7	8.1	<u>85.2</u>	10.6	11.8	<u>77.6</u>	19.4	18.3	<u>62.3</u>
0.3	9.4	6.4	<u>84.2</u>	14.6	9.1	<u>76.3</u>	26.0	13.9	<u>60.1</u>

- (a) reflected in GNP-PI
- (b) financed by potential reduction in the wage
- (c) to be met from other sources

price elasticity of demand = 3.0  
share of labor costs in total cost in sector 1 = 0.78  
share of labor costs in total cost in sector 2 = 0.78  
initial fraction of labor employed in sector 2 = 0.4

Best Estimate Increases  
TELCO's Unrecovered SFAS 106 Costs

March 1993

By Randy Cosby

### **New Findings Prove Strength of Original Request**

More than 87% of the cost of adopting the SFAS 106 accounting procedure will not be recovered by local exchange carriers subject to federal price caps (Price Cap LECs) without exogenous treatment, according to a "best estimate" prepared by Godwins for the United States Telephone Association (USTA).

The best estimate, and an expanded sensitivity analysis showing 648 potential scenarios that could change the amount of SFAS 106 costs recovered by Price Cap LECs, were requested by the Federal Communications Commission. (See the FCC's Jan. 22, 1993 Order in CC Docket No. 92-101, paragraphs 63 and 64).

The best estimate shows that only 0.3% of the costs are reflected in the GNP price index and 12.3% might be recovered by a reduction in the wage rate and other macroeconomic adjustments, leaving more than 87.3% of the costs unrecovered.

The finding underscores the conservative nature of the Price Cap LECs' request for exogenous treatment made last year. In that request, which was based on a study by Godwins, exogenous treatment was sought for only 84.8% of the costs of SFAS 106 -- 2.5 percentage points less than the best estimate now clearly indicates is reasonable.

The earlier calculation estimated that 0.7% of the costs would be recovered in the price index and 14.5% might be recovered by a reduced wage rate.

Given the philosophy followed in the Godwins study, it should come as no surprise that the best estimate is higher than the original estimate cited in the study. The study generally used conservative values when setting parameters for the actuarial and macroeconomic analyses used to gauge the impact of SFAS 106 on TELCO, a composite company constructed to more easily quantify statistics compiled from the 11 Price Cap LECs.

At every juncture, Godwins used values that avoided giving unwarranted benefits to TELCO. The intent was to avoid potential claims of double-counting by erring in the direction least favorable to Price Cap LECs.

For example, in the macroeconomic model Godwins overstated the impact on GNP-PI by using a baseline value of price elasticity of demand that is almost certainly too high. When this value was reduced to a more likely level for computation of the best estimate of recovery, it reduced the amount of costs TELCO would recover through the GNP-PI and other macroeconomic effects.

A similar result occurred when Godwins overstated a value for labor supply elasticity which, like price elasticity of demand, is among several economic parameters used to determine how much of SFAS 106 costs will be recovered through the GNP-PI.

The study's conservative bent also is shown in the actuarial analysis by use of a 3% figure to quantify the direct impact of SFAS 106 on labor costs for the portion of the economy that includes businesses providing post-retirement benefits. The best estimate places this value at 2.5%, fully a half-percent lower than

the conservative estimate.

It is with a firm belief in the Godwins study, and with steadfast support for the actuarial and macroeconomic analyses on which the study is based, that the 84.8% estimate used by the Price Cap LECs in their filings last year, is reaffirmed.

### **Conservative Estimate Is Built On Sound Foundation**

The conservative estimate developed by Godwins in this study is built on a firm foundation composed of an actuarial analysis, as well as a macroeconomic analysis that uses parameters derived from the actuarial study.

Using extensive demographic, economic and benefit program data collected from 11 Price Cap LECs, the actuarial analysis constructs TELCO, a composite company that closely reflects the entire industry's characteristics.

When compared to the average employer in the economy, the effects of SFAS 106 on TELCO's costs are disproportionately higher due to a combination of factors. Its work force stays on the job longer, retires earlier, has a higher ratio of retired-to-active workers and has a higher proportion of covered workers.

The situation is offset somewhat by the fact that TELCO's labor costs are a lower percentage of total costs than of the average employer in the GNP.

Given these circumstances, the average employer in the economy will experience only 28.3 percent of the cost increase from SFAS

106 that will hit TELCO.

Among the steps taken to obtain the results:

- \* A comparison of TELCO's benefits program to a "national average" benefit program developed through the use of a database of provisions of retiree medical plans sponsored by 830 private-sector companies employing 19 million workers, which is well over half of all covered employees in the United States.

- \* Adjustments for differences in programs and other factors, such as the average age of employees, length of service, retirement patterns, number of retirees and current level of pre-funding of benefits.

The actuarial analysis also utilizes a number of factors to develop a formula that quantifies the direct impact of SFAS 106 on labor costs for the portion of the economy that includes businesses providing post-retirement benefits. The best estimate places this value at 2.5%, fully half a percentage point lower than the 3% conservative estimate used in the Godwins study.

Through its examination of the impact of SFAS 106 costs on the economy as a whole, the macroeconomic analysis divides the 95.8 million private-sector workers in the national economy into two groups. They are:

- \* Sector 1: An estimated 65.1 million workers who have no post-retirement plan covered by SFAS 106 rules; and

- \* Sector 2, an estimated 30.7 million workers eligible for some type of retirement plan, the cost of which ultimately will be

reflected in SFAS 106 costs.

The macroeconomic model also finds that only 2.3% of the average employer's additional costs resulting from SFAS 106 is passed through to the GNP price index. Consequently, TELCO stands to recover only .7% through the GNP-PI because the actuarial analysis finds the price index will reflect only 28.3% of the additional costs incurred by the average Price Cap LEC due to SFAS 106.

Although it first appears that this means 99.3% of TELCO's additional costs are unrecoverable, the macroeconomic analysis determines that the national wage rate might be 0.93% lower than it would have been in the absence of SFAS 106.

Consequently, if TELCO can achieve a similar reduction in its wage rate, another 14.5% of SFAS 106 costs could be recovered, lowering its total unrecovered costs to the conservative estimate of 84.8% that is being sought for exogenous treatment.

### **Some Outcomes Are Not Realistically Conceivable**

As explained in the original Godwins study, the macroeconomic model for determining how much of the SFAS 106 costs are unrecoverable can, by adjusting the values of its parameters, be used to obtain numerous possible outcomes.

Godwins attempted to display the sensitivity of the results in

its original study by showing an extremely wide range of possible outcomes--as well as the conservative estimate believed to be a reasonable basis for exogenous treatment.

However, the Commission subsequently requested, and now has been provided, all 648 estimates, as well as an overall best estimate.

This list shows all outcomes associated with all "possible" parameter values. But it must be understood that results at either end of the spectrum are based on extreme values and simply are not realistically conceivable.

That is the case with at least three of the parameter values which show more than 40% of costs being recovered through GNP-PI and macroeconomic adjustments. This occurs because any attempt to display every combination of parameter values requires some of those values to be set at levels needed simply to fill out the "grid" of possibilities.

For example, the outcomes in question are based on unrealistic values for:

-- Price elasticity of demand. The flawed combinations of parameters use a value of 3.0, which is much too high to be plausible. The baseline calculation purposely uses a value of 1.5 that is too high in order to guard against the possibility of understating the impact of SFAS 106 on GNP-PI. The true value almost surely is less than 1.0.

-- The direct impact of SFAS 106 on labor costs in sector 2,

the segment of the economy encompassing covered workers. The 4.5% value applied here is much too high, as evidenced by the 2.5% value used to develop the best estimate and the 3% value used in Godwins original conservative estimate.

The foregoing is why all of the combinations of parameter values that show less than 60% of additional SFAS 106 costs being recovered without exogenous treatment simply are not worthy of consideration.

UNITED STATES TELEPHONE ASSOCIATION  
ANALYSIS OF IMPACT OF SFAS 106 COSTS ON GNP-PI  
ADDITIONAL SENSITIVITY ANALYSIS

March 31, 1993

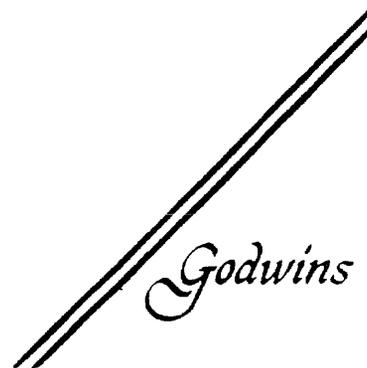
The logo for Godwins, featuring two parallel diagonal lines that intersect the word "Godwins" written in a cursive script.

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BACKGROUND

Over the last eighteen months Godwins has been working with the United States Telephone Association to analyze the impact of SFAS 106 costs on the GNP-PI and, in particular, to determine what portion of the increase in costs experienced by the Price Cap LECs due to SFAS 106 will, in fact, not be reflected in the GNP-PI or any other macroeconomic effect.

In February, 1992 we issued the results of our analysis, indicating that approximately 85% of the LECs' additional costs would not be reflected in the GNP-PI or recovered through other macroeconomic effects. In July 1992 we issued a supplemental report responding to objections and questions regarding our initial report. Since that time, the FCC issued an order denying exogenous treatment for any SFAS 106 costs for the Price Cap LECs. After reviewing the order and discussing it with the Commission's staff, the USTA has concluded that the FCC may not have fully appreciated the conservative nature of our study, nor the relevance and importance of the sensitivity analysis included in the original report. As a result, the USTA has asked Godwins to produce this supplemental report, which more fully describes the fundamental conservatism of our approach and presents the results of a newly expanded sensitivity analysis.

Respectfully submitted,



Peter J. Neuwirth, F.S.A., M.A.A.A.



Andrew B. Abel, Ph.D.

## INTRODUCTION

The fundamental results of the initial Godwins study were derived by the use of a macroeconomic model, as described beginning on page 26 of Godwins' February, 1992 report. This model takes as input six basic parameters. In choosing the values for those six parameters we utilized the best available information. When there was a great deal of information available we chose as accurate a value as possible for the given parameter. When such information was lacking we were conservative and chose a value which would, if anything, overstate the impact of SFAS 106 on GNP-PI.

In its recent order, the FCC challenged two aspects of the Godwins study. First, in comparing the analysis performed by our firm with one performed by NERA, the FCC expressed concern that the studies relied upon different assumptions regarding the impact of SFAS 106 on companies' pricing decisions. Secondly, the FCC expressed concern that our results might be unreliable due to the wide variety of possible parameter input value combinations which might be applicable.

Section I of this report addresses the first issue raised by the FCC, while Sections II and III address the FCC's second concern. Specifically, Section I demonstrates that while the basic underlying assumptions as to pricing behavior may differ between the Godwins and NERA studies, the approach chosen by Godwins is, in fact, more conservative than that used by NERA.

With respect to the FCC's second concern, we point out that Section IV of Godwins' original report described a sensitivity analysis that was performed in order to determine how much our results would change if we had chosen different values for the parameters. While we believe this should have been sufficient to address any concerns as to the reliability of our results, we have now expanded that sensitivity analysis considerably. Section II of this report examines the six parameters separately, and determines the range of realistic values for each. In Section III we calculate and report what the results of our study would have been, had we used any possible combination of values for the six parameters.

SECTION I

DEMONSTRATION OF CONSERVATIVE NATURE OF GODWINS APPROACH RELATIVE TO NERA

In addition to the Godwins Study submitted by the USTA, a study performed by NERA was submitted to the FCC. In paragraph 62 of its order the FCC states that:

"While Godwins assumes that companies respond to their booked costs, NERA reasons that non-regulated companies set prices based on economic costs, which are better reflected in accrual accounting than pay-as-you-go. According to NERA, non-regulated firms thus have already reflected accrued OPEB costs in their prices, but regulated firms did not, because their prices have been based upon accounted-for costs plus profits."

It seems, therefore, that NERA argues that the introduction of SFAS 106 is merely an accounting change rather than a real change in firms' costs. For unregulated firms, any effect on costs due to OPEBs had already been factored into prices prior to the introduction of SFAS 106. However, firms with regulated prices who sponsor OPEBs had not been given the opportunity to seek recovery for these OPEB costs prior to the introduction of SFAS 106. These regulated firms are the only firms in the economy whose costs and prices may increase as a direct effect of SFAS 106 as these firms seek recovery for OPEBs from regulators.

In principle, the Godwins model could be applied to calculate the effect on GNP-PI under the NERA assumption that SFAS 106 would have a direct effect only on the prices of regulated firms offering OPEBs covered by SFAS 106. To apply the Godwins model, we would let sector 1 be the unregulated sector, plus those regulated firms that do not offer OPEBs covered by SFAS 106. Sector 2 would consist of that portion of the regulated sector of the economy which sponsors OPEBs covered by SFAS 106. We would need to know the values of the following parameters: (1) the share of labor cost in total cost in sector 1; (2) the share of labor cost in total cost in sector 2; (3) the share of employment in sector 2; and (4) the direct impact of SFAS 106 on labor costs in sector 2. To obtain the values of these parameters would require an economic analysis for the first three parameters and an actuarial analysis for the fourth parameter. It is far beyond the scope of our assignment to carry out the requisite analyses to obtain reliable values for these parameters. However, we have performed two sets of illustrative calculations that clearly demonstrate that the Godwins approach is, in fact, more conservative than NERA's, and had NERA's approach been used by us, a significantly higher percentage of the LECs' SFAS 106 costs would have been found to be unrecovered by GNP-PI increases or other macroeconomic effects.

While only rough approximations to the comprehensive analysis just described, these calculations again serve to underscore the conservative nature of our original study. To reiterate, any change in the underlying assumptions in the Godwins study to be more consistent with NERA's approach would result in a much larger percentage of TELCO's SFAS 106 costs remaining unrecovered.

Illustrative Calculations Part I: One way to describe the difference between the Godwins and NERA studies is that NERA assumes OPEBs were already completely factored into the prices of (unregulated) firms before the introduction of SFAS 106, whereas Godwins assumes that no additional OPEB costs were factored into the prices of firms prior to the introduction of SFAS 106. We can look for middle ground between these two polar cases by assuming that firms had already factored in a fraction  $x$  of the increase in accounting costs due to the introduction of SFAS 106. We will let  $x$  take on the values 0, 0.25, 0.50, 0.75, and 1.0. Using the conservative baseline value of 3.0% for the direct impact of SFAS 106 on labor costs for firms offering OPEBs, these values of  $x$  correspond to values of 3.0%, 2.25%, 1.50%, 0.75% and 0% for the direct impact of SFAS 106 on labor costs for firms in sector 2. Note that with  $x = 1$ , there will be no impact on GNP-PI and no other macroeconomic effects. On the other hand, with  $x = 0$ , we will obtain the baseline results of the Godwins study.

Illustrative Calculations Part II: As stated above, under the NERA assumptions, sector 2 in the Godwins macroeconomic model should correspond to the set of regulated firms in the United States that offer OPEBs covered by SFAS 106. Clearly, the employment in these firms accounts for less than 32% of private sector employment, which is the share of private sector employees who work for firms that offer OPEBs covered by SFAS 106. We do not know exactly how much smaller than 32%, so we try various values. Specifically, we run the baseline calculations of the Godwins model except that we allow the share of private sector employment in sector 2 to be a fraction  $y$  of 32%, where  $y = 0.25, 0.50, 0.75$ , and 1.0. Thus, we let the share of private sector employment in sector 2 be 8%, 16%, 24%, and 32%. Of course, using a value of 32% is identical to the baseline calculations in the Godwins report.

The results of both of the above sets of illustrative calculations are shown in Exhibit 1 on the next page.

EXHIBIT 1

Results of Illustrative Calculations

	direct impact of SFAS 106 on labor costs in sector 2	share of private employment in sector 2	(a)	(b)	(c)
Godwins baseline:	3.00%	0.32	0.7%	14.5%	84.8%
Part I:					
	0.75%	0.32	0.04%	3.77%	96.19%
	1.50%	0.32	0.17%	7.44%	92.38%
	2.25%	0.32	0.39%	11.03%	88.58%
Part II:					
	3.0%	0.24	0.57%	10.88%	88.55%
	3.0%	0.16	0.42%	7.24%	92.34%
	3.0%	0.08	0.23%	3.61%	96.16%

percentage of additional SFAS 106 costs:

(a) reflected in GNP-PI

financed by potential wage reduction and other macroeconomic adjustments

(c) to be met from other sources

Values of other parameters (same as baseline values used in the original Godwins study):

price elasticity of demand = 1.5

share of labor cost in total cost, sector 1 = 0.64

share of labor cost in total cost, sector 2 = 0.64

labor supply elasticity = 0.0

## SECTION II

## DETERMINATION OF RANGE OF VALUES FOR INPUT PARAMETERS

In this Section we examine the development of each of the six parameters that serve as input to our macroeconomic model, and determine a basis for the expanded sensitivity analysis. The results of this analysis are described in Section III.

1. Increase in Labor Costs Due to SFAS 106

The most important input to the macroeconomic model is the impact of SFAS 106 on labor costs in the sector of the economy that provides post-retirement benefits (sector 2). In our original report we determined this value to be 3.18%. As discussed in the report, the derivation of this value required us to make certain estimates and assumptions of both a demographic and economic nature. Our approach in making those estimates was to try to be as accurate as possible when there was sufficient data to make an informed estimate, but to be conservative (i.e. overstate the impact of SFAS 106) when only limited information was available. We believe that this approach has resulted in a value which is, if anything, higher than the actual impact that SFAS 106 will have on sector 2 and hence on GNP-PI.

In spite of the above, there is no doubt that a range of possible values exists within which the true impact of SFAS 106 will lie. In our original report we prepared a sensitivity analysis that encompassed a range from 2% to 5%. That range was based on only limited quantitative analysis, but it was our opinion that the range was more than sufficient to account for any uncertainty in our baseline determination. We have now taken a closer look at that analysis and concluded that a more precisely determined range of possible values runs from 2.13% to 4.47%. Furthermore, we have looked again at the development of our baseline value, and concluded that if we had taken a "best estimate" approach on all assumptions and estimates, we would have estimated that the impact of SFAS 106 on the labor costs in sector 2 would have been 2.54%, rather than 3.18%. The remainder of this section describes how each of the end points of the range, as well as the "best estimate" value, were determined.

As noted on page 38 of our original report, the baseline value of the direct impact of SFAS 106 on sector 2 was determined by taking the impact on TELCO's labor costs (6.3%) and multiplying this value by adjustment factors (3), (4), (5), (6) and (8), described on pages 8 and 9 of the original report. These factors are as follows.

- (3) BLI Ratio = .5850
- (4) Demographic Adjustment = .5438
- (5) Current Retiree Adjustment = .9287
- (6) Pre-Funding Adjustment = 1.313
- (8) Per Unit Labor Cost Adjustment = 1.3062

$$6.3\% \times .5850 \times .5438 \times .9287 \times 1.313 \times 1.3062 = 3.18\%$$

It is clear from what is shown above that the range of possible variation around the 3.18% baseline value can be determined by looking at what value results, when each of the adjustments is determined by using either the most conservative or the least conservative possible assumptions. We have determined these extreme values for each of the five relevant adjustments, as well as noting where a "best estimate" value would differ from the baseline values shown in our report.

BLI Ratio - In calculating GNP BLI and TELCO BLI, and therefore the BLI ratio, there were two areas of uncertainty. With respect to the calculation of GNP BLI we utilized average BLIs by industry, and then utilized industry weightings derived from the GAO survey, to derive a final GNP BLI. We believe that this is the most accurate approach. The only other reasonable alternative approach would have been to utilize an aggregate employee weighted average based on our data base. As it happens this approach is slightly more conservative, and results in a BLI ratio of .5952. This can be viewed as the most conservative possible value for this factor, because the other area of uncertainty was with respect to the calculation of TELCO BLI, and there we took the most conservative approach rather than try to make a "best estimate". Specifically, in deciding how to weight the various plans sponsored by each Price Cap LEC, we decided to weight them based on employee counts. We believe this was a conservative approach because our GNP data base maintained only one set of plan provisions for each employer. If we had taken a best estimate approach and assumed that, where an employer had more than one plan, it was the more generous plan which was reported in the data base, then it would have been appropriate to utilize only the more generous plans in calculating the TELCO BLI. If we had taken this approach, the BLI ratio would have become .5478. Thus, with respect to the BLI ratio we find the following:

BLI Ratio (used in study)	.5850
BLI Ratio (most conservative)	.5952
BLI Ratio (best estimate)	.5478
BLI Ratio (least conservative)	.5478

Demographic Adjustment - We adjusted for the fact that TELCO will utilize lower rates of turnover and higher retirement rates at earlier ages than those used by other employers in determining SFAS 106 costs. We also included in this adjustment the basic demographic differences in current age and service between the TELCO population and the economy as a whole. As noted in the report, our approach to the turnover rates was a best estimate approach, for which there was solid evidence. (TELCO's demographics are themselves the result of lower turnover rates actually experienced by TELCO). A more conservative, but only marginally reasonable, approach would be to assume the same withdrawal patterns for both TELCO and GNP. There is no comparable benchmark to utilize as a least conservative approach.

The adjustment due to age and past service differences is also a best estimate approach, in that it relies on demographic data provided by the separate Price Cap LECs, averaged into a single composite TELCO census, having an average age of 41.6 with average past service of 16.6 years. Recognizing that arithmetic averages are not the same as plan weighted averages, we could have taken a more conservative approach and assumed that the TELCO population was actually one year younger and had one year less past service. This one year change is more than sufficient to take account of any differences between arithmetic and plan weighted averages. Obviously, the plan weighted average age and service for TELCO might be higher than 41.6 and 16.6, so a least conservative estimate would be to utilize 42.6 and 17.6 for TELCO's average age and service.

A degree of uncertainty is also present in our adjustment due to earlier retirement among TELCO employees. This uncertainty arises in the determination of a national average retirement age assumption. We believe our use of age 63 was a conservative assumption in that the limited data on the subject (Gerontologist Vol. 28, No. 4) seems to indicate a national average retirement age between 63.5 and 64. Furthermore, if, as expected, employers in the GNP tend to be aggressive (i.e., optimistic) in setting assumptions for accruing post-retirement liability, a less conservative and, in fact, best estimate approach would be to utilize an age 64 assumption.

Based on the above considerations we would then derive the following possible values for the Demographic Adjustment:

Demographic Adjustment (used in study) = .5438  
(GNP retirement = 63)  
(TELCO turnover < GNP turnover)  
(Age = 41.6 Service = 16.6)

Demographic Adjustment (most conservative) = .7522  
(GNP retirement = 63)  
(TELCO turnover = GNP turnover)  
(Age = 40.6 Service = 15.6)

Demographic Adjustment (best estimate) = .4936  
(GNP retirement = 64)  
(TELCO turnover < GNP turnover)  
(Age = 41.6 Service = 16.6)

Demographic Adjustment (least conservative) = .4706  
(GNP retirement = 64)  
(TELCO turnover < GNP turnover)  
(Age = 42.6 Service = 17.6)

Current Retiree Adjustment - The calculation of this adjustment was predicated on an average claim rate per retiree for the GNP of \$1,802 and a ratio of retirees to covered actives of .1726. The claim rate was derived by taking the 1990 rate of \$1,514, as reported in the Hewitt Associates Survey of Retiree Medical Benefits, and increasing it by 19% for medical trend inflation. This 19% is consistent with the results of Godwins Inc.'s annual survey of insurance

carrier trend rates. The ratio of retirees to covered actives was derived from the GAO study. While these represent "best estimates", both parameters could vary in either direction. We have therefore calculated a more conservative value, assuming national per retiree costs increased 25% to \$1,892, and that the actual ratio of retirees to actives has increased to .2 (from .1726); and a less conservative value, assuming national per retiree costs increased 13% between 1990 and 1991, and that the ratio of covered retirees to actives decreased to .15.

Also inherent in this Adjustment is the assumption that the demography of the current TELCO retirees is identical to that of the GNP retirees. In fact, this is likely to be a somewhat conservative assumption because TELCO employees generally retire at younger ages than the national average, and thus the liabilities for TELCO will tend to be higher on this account than for the retirees in the national economy. A better assumption would therefore be to assume that retirees at TELCO were somewhat younger than those in the GNP, and hence generated a SFAS 106 cost per \$1 of retiree claim cost that was 5% more than that for the GNP. A most conservative approach would be to assume that TELCO retirees are somewhat older and generated 10% less SFAS 106 cost per \$1 of retiree claims, and a least conservative approach would assume 20% greater SFAS 106 cost per \$1 of retiree claims than the GNP. When combined with the range of BLI ratios and Demographic Adjustments previously determined, this then results in the following values for the Current Retiree Adjustment:<sup>1</sup>

Current Retiree Adjustment (used in study) - .9287  
(Trend - 19%)  
(Retiree/active - .1726)  
(TELCO retirees - GNP retirees)

Current Retiree Adjustment (most conservative) - .9232  
(Trend - 25%)  
(Retiree/active - .2)  
(TELCO retirees older than GNP)

Current Retiree Adjustment (best estimate) - .9455  
(Trend - 19%)  
(Retiree/active - .1726)  
(TELCO retirees younger than GNP)

Current Retiree Adjustment (least conservative) - .9076  
(Trend - 13%)  
(Retiree/active - .15)  
(TELCO retirees much younger than GNP)

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1 Note that the development of the range of estimates for this adjustment is not independent of previously developed ranges. Thus some of the values for this adjustment may appear "out of order".

Pre-Funding Adjustment - This adjustment looked at the effect of TELCO's existing pre-funding of post-retirement medical benefits as compared with no pre-funding. By doing this we made the most conservative assumption possible, i.e., that there is no pre-funding in the GNP. We have now recalculated this adjustment, making the more reasonable assumption that there is pre-funding in the GNP to the extent that assets equal to one year's claims have accumulated, and that annual contributions to such funds amount to claims plus 10%. We have also made the same calculation under the less conservative assumption of two years' claims accumulated and additional contributions of 20% of claims.

As a result we now have the following values

Pre-funding Adjustment (used in study) - 1.313  
Pre-funding Adjustment (most conservative) - 1.313  
Pre-funding Adjustment (best estimate) - 1.205  
Pre-funding Adjustment (least conservative) - 1.106

Per Unit Labor Cost Adjustment - In calculating Per Unit Labor Cost Adjustment, allocated compensation and headcount were used. No sensitivity analysis was performed on this Adjustment because of the validity of the data used and the straightforward nature of the calculation. Therefore for purposes of this analysis:

Per Unit Labor Cost Adjustment (used in study) - 1.3062  
Per Unit Labor Cost Adjustment (most conservative) - 1.3062  
Per Unit Labor Cost Adjustment (best estimate) - 1.3062  
Per Unit Labor Cost Adjustment (least conservative) - 1.3062

Input to the Macroeconomic Model - Combining the results of the analysis described above, we find that the range of possible values for the increase in labor costs for the sector of the economy that provides post-retirement benefits encompasses the following values:

Baseline (used in study) -  $6.3\% \times .5850 \times .5438 \times .9287 \times 1.313 \times 1.3062 = 3.18\%$   
Most Conservative -  $6.3\% \times .5952 \times .7522 \times .9232 \times 1.313 \times 1.3062 = 4.47\%$   
Best Estimate -  $6.3\% \times .5478 \times .4936 \times .9455 \times 1.205 \times 1.3062 = 2.54\%$   
Least Conservative -  $6.3\% \times .5478 \times .4706 \times .9076 \times 1.106 \times 1.3062 = 2.13\%$

## 2. Other Parameters

In addition to the direct impact of SFAS 106 on labor costs in sector 2, the macroeconomic model uses input values for five other parameters. For the sensitivity analysis of each of these five parameters, we use the same values as in the original Godwins Report, as discussed below. However, the current sensitivity analysis is much more extensive than in the original report. Specifically, the current sensitivity analysis examines all possible combinations of the parameter input values.

Two of the parameters are production function parameters: the share of labor cost in total cost for sector 1, and the share of labor cost in total cost for sector 2. The baseline value of each of these parameters was chosen to be 0.64, which matches the share of labor cost in total cost for the economy as a whole.<sup>2</sup> For the economy as a whole, the share of labor cost in total cost is remarkably constant over time. Nevertheless, the sensitivity analysis explored the effects of rather large variations in the share of labor cost in total cost for individual sectors. The range of variation was chosen to be symmetric around 0.64 and to allow the share of labor cost in total cost to be as low as 0.50 for each sector. Thus, including the baseline value, the three values used for this parameter in each sector are 0.50, 0.64, and 0.78.<sup>3</sup>

One of the input parameters is the share of labor employed in sector 2 (the sector which provides OPEBs subject to SFAS 106). The GAO survey cited in the original Godwins Report indicated that 30.7 million out of 95.8 million (32.0% of 95.8 million) private sector employees are eligible to receive post-retirement health benefits subject to SFAS 106. Thus, the baseline value for this parameter was chosen to be 0.32. The GAO calculated that due to possible sampling error there was a 5% probability that the figure of 30.7 million could be either higher than 37.5 million (39.1% of 95.8 million) or lower than 23.9 million (24.9% of 95.8 million). Thus, including the baseline value, the three values used for this parameter are 0.24, 0.32, and 0.40.

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- 2 Labor income is computed as total compensation of employees plus two-thirds of total proprietors' income with inventory valuation and capital consumption adjustment. Using data on these components of labor income from Table B-22 of the 1993 *Economic Report of the President*, and data on GDP and GNP from Table B-20 of the 1993 *Economic Report of the President*, we obtain the following results for labor cost as a share of output:

labor cost	1987	1988	1989	1990	1991
as a share of GDP:	64.0%	64.0%	63.5%	64.0%	64.0%
as a share of GNP:	63.9%	63.9%	63.3%	63.8%	63.8%

- 3 As explained in some detail on page 17, the share of labor cost in total cost in the overall economy will not equal 0.64 (except for coincidence) when the share of labor cost in total cost takes on a value other than 0.64 in one or both sectors. Exhibit 3 reports the results of sensitivity analyses that vary the share of labor cost in total cost in each sector while maintaining an overall share of labor cost in total cost equal to 0.64.

Another input parameter is the price elasticity of demand for goods in each sector. Estimates of price elasticities of demand for various goods typically find elasticities to be about 1.0 or smaller,<sup>4</sup> and had we adopted a best estimate approach this is the value we would have used. Furthermore, broader categories of goods tend to have smaller price elasticities than do narrower categories of goods. The two categories of goods used in the macroeconomic model are extremely broad: one category accounts for about 2/3 of private sector output and the other category accounts for about 1/3 of private sector output. The price elasticities of demand for these two categories of goods are almost surely less than 1.0. Nevertheless, to guard against the possibility of understating the effect on GNP-PI of the introduction of SFAS 106, we purposely used values of the price elasticity of demand that are almost surely too high. Specifically, the baseline calculation uses a value of 1.5 for the price elasticity of demand. In addition to this baseline value, the sensitivity analysis considers a price elasticity of demand of 3.0. This value is too high to be plausible and its inclusion in the sensitivity analysis should be regarded simply as an exercise to show the sensitivity of the model's results to changes in the price elasticity of demand.

Finally, the model uses an input value for the wage elasticity of labor supply. The appropriate concept to be used here is a long-run labor supply elasticity rather than a short-run labor supply elasticity. The long-run elasticity is appropriate because the introduction of SFAS 106 represents a permanent change in the cost of labor for firms offering post-retirement health benefits covered by SFAS 106. Furthermore, the model is set up to focus on the long-run equilibrium after all adjustments have taken place. The importance of the distinction between long-run and short-run labor supply elasticities is that long-run labor supply elasticities tend to be smaller than short-run labor supply elasticities. Indeed, the long-run labor supply elasticity is probably even slightly negative. However, to guard against understating the impact on GNP-PI of the introduction of SFAS 106, the baseline calculation uses a value of 0.0 for the labor supply elasticity, which probably slightly overstates the true value of this elasticity. The sensitivity analysis explores the influence of this parameter on the model's results by examining labor supply elasticities of 0.1, 0.2, and 0.3 in addition to the baseline value of 0.0.

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4 See, for example, Michael Parkin, *Economics*, Addison Wesley Publishing, 1993, Second Edition. Table 5.3 on page 109 lists price elasticities of demand for 20 industries in the United States. The elasticities range from 0.32 for coal to 1.52 for metals. Twelve of the elasticities are smaller than 1.0 and eight are larger than 1.0. The median price elasticity in the table is 0.9.

The table below summarizes the different values of each of the six input parameters to the macroeconomic model:

	<u>Range of Values for Sensitivity Analysis</u>	<u>Best Estimate Values</u>
Direct impact of SFAS 106 on labor cost in sector 2:	2.0%, 3.0%, 4.5%	2.5%
Labor share in total cost, sector 1: <sup>5</sup>	0.50, 0.64, 0.78	0.64
Labor share in total cost, sector 2: <sup>5</sup>	0.50, 0.64, 0.78	0.64
Fraction of labor employed in sector 2:	0.24, 0.32, 0.40	0.32
Price elasticity of demand:	1.5, 3.0	1.0
Labor supply elasticity:	0.0, 0.1, 0.2, 0.3	0.0

The total number of possible combinations of parameter values in the sensitivity analysis is found by multiplying the number of values of each parameter. This multiplication (3 x 3 x 3 x 3 x 2 x 4) yields 648 combinations of values. The current sensitivity analysis examines all of these combinations.

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<sup>5</sup> See Footnote 3 on page 11.

### SECTION III

#### SUMMARY OF THE RESULTS OF SENSITIVITY ANALYSIS

The purpose of this section is to describe the results obtained when the "best estimate" parameters, as well as the remainder of the 648 combinations of parameter values described in the previous Section, are input to the macroeconomic model.

##### Best Estimate Results

When the best estimate values are input to the macroeconomic model, we find that only 0.3% of the increase in the LECs' costs due to SFAS 106 are recovered through the GNP-PI, while an additional 12.3% might be recovered through additional macroeconomic effects. Thus, under this scenario 87.3% of the increase remains unrecovered. This compares with our prior baseline result of 84.8% of the cost increase being unrecovered.

##### Results of Comprehensive Sensitivity Analysis

As noted earlier, we input all 648 combinations of parameter values into our macroeconomic model and tabulated the results. These results are enumerated in Exhibit 2, which begins on page 19 of this Section.

One new technical issue arose during the sensitivity analysis, when we varied the share of labor cost in total cost in sectors 1 and 2. When the share of labor cost in total cost is different in sector 1 than in sector 2, the equilibrium rental cost of capital in the model (the variable "r" in equation (A19) in Appendix C of the Godwins Report) changes. If the rental cost of capital decreases, then the LECs benefit from this decrease just as they benefit from the reduction in the equilibrium wage rate. However, if the rental cost of capital increases, then this increase in rental cost tends to offset the benefit to the LECs of the reduction in the wage rate. In some cases, the effect of the change in the rental cost can more than offset the reduction in the wage rate, thus leading to a negative value reported in column (B) [percentage of TELCO's additional SFAS 106 costs financed by potential reduction in relative wage and other macroeconomic effects]. This consideration of the effect of the rental cost did not arise in the discussion of the baseline calculation because both sectors had the same share of labor cost in total cost, and thus the rental cost of capital did not change in the baseline calculation.

##### Discussion of Extreme Values

In the sensitivity analysis reported in Appendix C of the July 1992 Supplemental Report, the lowest value for the share of additional SFAS 106 costs to be met from other sources was 60.1%. In the current sensitivity analysis which examines all 648 combinations of parameter values, some of the combinations of parameter values lead to values below 60.1% for the share of additional SFAS 106 costs to

be met from other sources. Below we explain why some of the combinations of parameter values lead to values below 60.1% and why these low values should be completely ignored.

Question 1: Why do some combinations of parameter values in the current sensitivity analysis lead to a result lower than 60.1%?

As stated in the July 1992 Supplemental Report, there are 648 combinations of parameter values. At the time of writing that report, we did not have the program available to analyze all of these combinations in an expeditious manner, so we had to choose a subset of those combinations to examine. Our choice of parameter values was guided by looking at the effects of changing one parameter at a time. As stated in the July 1992 Supplemental Report (p. 31), "Four of the parameters were each set at the value that led to the largest increase in GNP-PI when the parameters were varied one at a time. (Price elasticity of demand = 3.0; share of labor costs in total cost, sector 1 = 0.78; share of labor costs in total cost, sector 2 = 0.78; initial fraction of labor force employed in sector 2 = 0.4.)" We then examined all possible combinations of the remaining two parameters (four values of the labor supply elasticity, and three values of the direct impact of SFAS 106 on labor costs in sector 2). As it turned out, among these 12 combinations, the lowest value of the percentage of additional SFAS 106 costs to be met from other sources (60.1% in column (C)) was obtained when the labor supply elasticity and the direct impact of SFAS 106 on labor costs in sector 2 were each set at the values that led to the largest increase in GNP-PI when the parameters were varied one at a time (labor supply elasticity = 0.3, and direct impact of SFAS 106 on labor costs in sector 2 = 5%).

Subsequent to the completion of the July 1992 Supplemental Report, we developed a computer program to examine several hundred parameter combinations expeditiously. We used this program to examine all 648 combinations of parameters in the original Godwins report and in the July 1992 Supplemental Report. This analysis revealed that the combination of parameters leading to 60.1% for column (C) is indeed the combination of parameter values that produces the largest effect on GNP-PI [reported in column (A)]. Specifically, that combination of parameter values produced a value of 26.0% for the percentage of incremental SFAS 106 costs reflected in GNP-PI [column (A)], and this value of 26.0% was the highest value among all 648 combinations. However, as it turned out, the combination of parameter values that yields the highest value in column (A) does not locate the combination that yields the lowest value in column (C). The reason is that column (C) is calculated as

$$\text{column (C)} = 100\% - \text{column (A)} - \text{column (B)}$$

where column (B) is the percentage of additional SFAS 106 costs financed by a potential reduction in the wage rate and other macroeconomic effects (including any change in the rental cost of capital).

The smallest value in column (C) corresponds to the highest value of [column (A) + column (B)]. As it turned out, the sensitivity analysis in the July 1992 Supplemental Report successfully located the highest value of column (A) among all 648 combinations but did not locate the highest value of [column (A) + column (B)]. Specifically, the earlier sensitivity analysis did not include some combinations of parameter values that lead to a relatively large reduction in the wage rate and/or the rental cost of capital, thereby leading to relatively large values of column (B).

To sum up, because the sensitivity analysis in the July 1992 Supplemental Report did not examine all 648 combinations of parameter values, it did not locate the lowest value of (C). The current sensitivity analysis examines all 648 combinations of parameter values.

**Question 2:** Why should we completely ignore those combinations of parameter values that lead to values smaller than 60.1% for the percentage of additional SFAS 106 costs to be met from other sources [column (C)]?

The current sensitivity analysis examines a complete set of 648 combinations of parameter values. Ten of these combinations lead to values in column (C) smaller than 60.1%. All ten of these parameter combinations have the following characteristics:

1. The price elasticity of demand is 3.0. As discussed on page 12, the price elasticities of demand for sectors 1 and 2 are almost surely less than 1.0. A value of 1.5 for the price elasticity of demand was used in the baseline calculation to guard against understating the impact of SFAS 106 on GNP-PI. The value of 3.0 used in the sensitivity analysis is too high to be plausible, and we recommend ignoring calculations that use a value of 3.0 for the price elasticity of demand.
2. The direct impact of SFAS 106 on labor costs in sector 2 is 4.5%, which is an upper bound on the true value of this parameter according to the sensitivity analysis of the actuarial study. In fact, this value is well beyond both the best estimate of 2.5% and the more conservative baseline value of 3.0%.
3. The share of labor cost in total cost is 0.78 in sector 1 and less than 0.78 (either 0.64 or 0.50) in sector 2 (the sector that provides OPEBs subject to SFAS 106). However, we are very

confident that for the economy as a whole the share of labor cost in total cost is 0.64.<sup>6</sup> When the share of labor cost in total cost is set equal to 0.64 in both sectors, then the overall share of labor cost in total cost is 0.64, which matches the actual data. But when the share of labor cost in total cost is not set equal to 0.64 in both sectors, the overall share of labor cost in total cost does not equal 0.64, except by coincidence.

### Additional Sensitivity Analysis

Having noted that the share of labor cost in total cost is 0.64 in the U.S. economy (comment #3 directly above), we performed an additional sensitivity analysis that takes account of this fact. In the model, the overall share of labor cost in total cost depends on the share of labor cost in total cost in each sector, as well as on the share of employment in sector 2 (the sector that provides OPEBs subject to SFAS 106). Rather than allowing the share of labor cost in total cost in sector 1, the share of labor cost in total cost in sector 2, and the share of employment in sector 2 to be varied independently of each other, the additional sensitivity analysis requires that these three parameters be varied in a way such that the share of labor cost in total cost for the whole economy is 0.64. Specifically, the share of labor cost in total cost in sector 2 is allowed to take on the values 0.5, 0.64 and 0.78; and the share of employment in sector 2 is allowed to take on the values 0.24, 0.32 and 0.40. For each of these combinations of parameter values, the share of labor cost in total cost in sector 1 is chosen so that in the overall economy the share of labor cost in total cost is 0.64. This additional sensitivity analysis has 216 combinations of parameter values (there are only 1/3 as many combinations because the share of labor cost in total cost in sector 1 is no longer varied independently of the share of labor cost in total cost in sector 2 and the share of employment in sector 2). The results of these runs are shown in Exhibit 3, beginning on page 34.

In this new sensitivity analysis, there were four (4) combinations of parameter values for which the percentage of additional SFAS 106 costs to be met from other sources [column (C)] is less than 60.1%. All four (4) of these parameter combinations have the following characteristics:

1. The price elasticity of demand equals 3.0. As explained above, this value of the price elasticity of demand is just too high to be believed and we should ignore these combinations of parameter values.

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6 See Footnote 2 on page 11

2. The direct impact of SFAS 106 on labor costs in sector 2 is 4.5%, which is an upper bound on the true value of this parameter according to the sensitivity analysis of the actuarial study. As noted earlier this value is much higher than either the best estimate value or the conservative baseline value used in the original study.
3. The share of employment in sector 2 is 0.4. According to the GAO study cited in the original Godwins study, the probability is greater than 97.5% that the true value of this parameter is less than 0.4.

In summary, many of the combinations of parameters, including all of the combinations that yield less than 60.1% in column (C), are simply not worthy of consideration.

USTA

EXHIBIT

Inputs:

- (1) Percentage Increase in Labor Cost in Sector of Economy Subject to SFAS 106
- (2) Share of Employment in Sector Subject to SFAS 106
- (3) Labor Cost as a Share of Total Cost in Sector Subject to SFAS 106
- (4) Labor Cost as a Share of Total Cost in Sector Not Subject to SFAS 106
- (5) Labor Supply Elasticity for U.S. Economy
- (6) Price Elasticity of Demand in each Sector

Results:

Percentage of Telco's Additional SFAS 106 Costs -

- (A) Reflected in GNP-PI
- (B) Financed by Potential Reductions in National Average Wage Rate and Other Macroeconomic Effects
- (C) To be Met by Other Sources

(1)	(2)	(3) Labor Cost as % Total Cost		(4)	(5)	(6)	(A) (B) (C) % of Increm. SFAS 106 Costs		
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources	
2%	24%	50%	50%	0	1.5	0.2%	7.4%	92.4%	
2%	24%	50%	50%	0.1	1.5	1.3%	6.4%	92.3%	
2%	24%	50%	50%	0.2	1.5	2.3%	5.5%	92.2%	
2%	24%	50%	50%	0.3	1.5	3.2%	4.7%	92.1%	
2%	24%	50%	50%	0	3	0.3%	7.3%	92.4%	
2%	24%	50%	50%	0.1	3	1.4%	6.3%	92.3%	
2%	24%	50%	50%	0.2	3	2.4%	5.4%	92.2%	
2%	24%	50%	50%	0.3	3	3.3%	4.6%	92.1%	
2%	24%	50%	64%	0	1.5	0.2%	7.9%	91.8%	
2%	24%	50%	64%	0.1	1.5	1.5%	6.9%	91.6%	
2%	24%	50%	64%	0.2	1.5	2.7%	6.0%	91.3%	
2%	24%	50%	64%	0.3	1.5	3.8%	5.1%	91.1%	
2%	24%	50%	64%	0	3	0.4%	9.4%	90.2%	
2%	24%	50%	64%	0.1	3	1.4%	8.6%	90.0%	
2%	24%	50%	64%	0.2	3	2.4%	7.8%	89.8%	
2%	24%	50%	64%	0.3	3	3.3%	7.1%	89.6%	
2%	24%	50%	78%	0	1.5	0.3%	9.3%	90.4%	
2%	24%	50%	78%	0.1	1.5	1.7%	8.3%	90.1%	
2%	24%	50%	78%	0.2	1.5	3.0%	7.3%	89.7%	
2%	24%	50%	78%	0.3	1.5	4.2%	6.4%	89.4%	
2%	24%	50%	78%	0	3	0.4%	14.2%	85.4%	
2%	24%	50%	78%	0.1	3	1.4%	13.4%	85.2%	
2%	24%	50%	78%	0.2	3	2.3%	12.7%	85.0%	
2%	24%	50%	78%	0.3	3	3.2%	12.0%	84.8%	
2%	24%	64%	50%	0	1.5	0.2%	7.1%	92.7%	

(1)	(2)	(3)		(4)	(5)	(6)	(A)	(B)	(C)
		Labor Cost					* of Increm. SFAS 106 Costs		
* Chg.	Empl.	as %	Total Cost						
Labor Cost	Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast. Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources	
2%	24%	64%	50%	0.1	1.5	1.4%	6.0%	92.5%	
2%	24%	64%	50%	0.2	1.5	2.6%	5.0%	92.4%	
2%	24%	64%	50%	0.3	1.5	3.6%	4.1%	92.2%	
2%	24%	64%	50%	0	3	0.4%	6.0%	93.6%	
2%	24%	64%	50%	0.1	3	1.8%	4.8%	93.4%	
2%	24%	64%	50%	0.2	3	3.1%	3.7%	93.2%	
2%	24%	64%	50%	0.3	3	4.3%	2.6%	93.1%	
2%	24%	64%	64%	0	1.5	0.3%	7.4%	92.4%	
2%	24%	64%	64%	0.1	1.5	1.7%	6.3%	92.0%	
2%	24%	64%	64%	0.2	1.5	3.1%	5.3%	91.7%	
2%	24%	64%	64%	0.3	1.5	4.3%	4.3%	91.4%	
2%	24%	64%	64%	0	3	0.5%	7.2%	92.3%	
2%	24%	64%	64%	0.1	3	1.9%	6.1%	92.0%	
2%	24%	64%	64%	0.2	3	3.2%	5.1%	91.6%	
2%	24%	64%	64%	0.3	3	4.5%	4.2%	91.3%	
2%	24%	64%	78%	0	1.5	0.3%	8.8%	90.9%	
2%	24%	64%	78%	0.1	1.5	1.9%	7.7%	90.4%	
2%	24%	64%	78%	0.2	1.5	3.4%	6.6%	90.0%	
2%	24%	64%	78%	0.3	1.5	4.9%	5.6%	89.5%	
2%	24%	64%	78%	0	3	0.5%	12.7%	86.8%	
2%	24%	64%	78%	0.1	3	1.9%	11.7%	86.4%	
2%	24%	64%	78%	0.2	3	3.1%	10.8%	86.0%	
2%	24%	64%	78%	0.3	3	4.4%	10.0%	85.7%	
2%	24%	78%	50%	0	1.5	0.2%	6.6%	93.1%	
2%	24%	78%	50%	0.1	1.5	1.6%	5.5%	92.9%	
2%	24%	78%	50%	0.2	1.5	2.8%	4.4%	92.7%	
2%	24%	78%	50%	0.3	1.5	4.0%	3.5%	92.5%	
2%	24%	78%	50%	0	3	0.4%	4.5%	95.1%	
2%	24%	78%	50%	0.1	3	2.1%	3.0%	94.9%	
2%	24%	78%	50%	0.2	3	3.7%	1.7%	94.6%	
2%	24%	78%	50%	0.3	3	5.1%	0.4%	94.4%	
2%	24%	78%	64%	0	1.5	0.3%	6.5%	93.2%	
2%	24%	78%	64%	0.1	1.5	1.9%	5.3%	92.8%	
2%	24%	78%	64%	0.2	1.5	3.4%	4.2%	92.4%	
2%	24%	78%	64%	0.3	1.5	4.8%	3.2%	92.0%	
2%	24%	78%	64%	0	3	0.5%	3.7%	95.7%	
2%	24%	78%	64%	0.1	3	2.4%	2.4%	95.3%	
2%	24%	78%	64%	0.2	3	4.1%	1.1%	94.8%	
2%	24%	78%	64%	0.3	3	5.7%	-0.1%	94.4%	
2%	24%	78%	78%	0	1.5	0.4%	7.3%	92.3%	
2%	24%	78%	78%	0.1	1.5	2.1%	6.2%	91.7%	
2%	24%	78%	78%	0.2	1.5	3.9%	5.0%	91.1%	
2%	24%	78%	78%	0.3	1.5	5.5%	3.9%	90.6%	
2%	24%	78%	78%	0	3	0.7%	7.1%	92.2%	
2%	24%	78%	78%	0.1	3	2.4%	6.0%	91.6%	
2%	24%	78%	78%	0.2	3	4.1%	4.8%	91.0%	
2%	24%	78%	78%	0.3	3	5.8%	3.7%	90.5%	

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast. Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
2%	32%	50%	50%	0	1.5	0.2%	9.9%	89.9%
2%	32%	50%	50%	0.1	1.5	1.7%	8.6%	89.8%
2%	32%	50%	50%	0.2	1.5	3.1%	7.3%	89.6%
2%	32%	50%	50%	0.3	1.5	4.3%	6.2%	89.5%
2%	32%	50%	50%	0	3	0.4%	9.7%	89.9%
2%	32%	50%	50%	0.1	3	1.8%	8.4%	89.7%
2%	32%	50%	50%	0.2	3	3.2%	7.2%	89.6%
2%	32%	50%	50%	0.3	3	4.4%	6.1%	89.5%
2%	32%	50%	64%	0	1.5	0.3%	10.5%	89.3%
2%	32%	50%	64%	0.1	1.5	1.9%	9.1%	88.9%
2%	32%	50%	64%	0.2	1.5	3.5%	7.9%	88.6%
2%	32%	50%	64%	0.3	1.5	4.9%	6.7%	88.3%
2%	32%	50%	64%	0	3	0.4%	12.1%	87.5%
2%	32%	50%	64%	0.1	3	1.9%	10.9%	87.2%
2%	32%	50%	64%	0.2	3	3.2%	9.8%	87.0%
2%	32%	50%	64%	0.3	3	4.4%	8.8%	86.7%
2%	32%	50%	78%	0	1.5	0.3%	11.8%	87.9%
2%	32%	50%	78%	0.1	1.5	2.1%	10.4%	87.5%
2%	32%	50%	78%	0.2	1.5	3.8%	9.1%	87.0%
2%	32%	50%	78%	0.3	1.5	5.4%	7.9%	86.6%
2%	32%	50%	78%	0	3	0.5%	16.6%	82.9%
2%	32%	50%	78%	0.1	3	1.8%	15.6%	82.6%
2%	32%	50%	78%	0.2	3	3.1%	14.6%	82.4%
2%	32%	50%	78%	0.3	3	4.3%	13.6%	82.1%
2%	32%	64%	50%	0	1.5	0.2%	9.5%	90.3%
2%	32%	64%	50%	0.1	1.5	1.9%	8.0%	90.0%
2%	32%	64%	50%	0.2	1.5	3.5%	6.7%	89.8%
2%	32%	64%	50%	0.3	1.5	4.9%	5.5%	89.6%
2%	32%	64%	50%	0	3	0.4%	8.1%	91.5%
2%	32%	64%	50%	0.1	3	2.3%	6.5%	91.2%
2%	32%	64%	50%	0.2	3	4.1%	5.0%	90.9%
2%	32%	64%	50%	0.3	3	5.7%	3.6%	90.7%
2%	32%	64%	64%	0	1.5	0.3%	9.8%	89.8%
2%	32%	64%	64%	0.1	1.5	2.2%	8.4%	89.4%
2%	32%	64%	64%	0.2	1.5	4.0%	7.0%	88.9%
2%	32%	64%	64%	0.3	1.5	5.7%	5.8%	88.5%
2%	32%	64%	64%	0	3	0.6%	9.7%	89.8%
2%	32%	64%	64%	0.1	3	2.5%	8.2%	89.3%
2%	32%	64%	64%	0.2	3	4.3%	6.9%	88.9%
2%	32%	64%	64%	0.3	3	5.9%	5.6%	88.5%
2%	32%	64%	78%	0	1.5	0.4%	11.4%	88.3%
2%	32%	64%	78%	0.1	1.5	2.5%	9.9%	87.6%
2%	32%	64%	78%	0.2	1.5	4.5%	8.5%	87.0%
2%	32%	64%	78%	0.3	1.5	6.4%	7.2%	86.4%
2%	32%	64%	78%	0	3	0.6%	15.6%	83.7%
2%	32%	64%	78%	0.1	3	2.4%	14.4%	83.2%
2%	32%	64%	78%	0.2	3	4.1%	13.1%	82.7%

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
2%	32%	64%	78%	0.3	3	5.8%	12.0%	82.2%
2%	32%	78%	50%	0	1.5	0.3%	8.8%	90.9%
2%	32%	78%	50%	0.1	1.5	2.1%	7.3%	90.6%
2%	32%	78%	50%	0.2	1.5	3.8%	5.9%	90.3%
2%	32%	78%	50%	0.3	1.5	5.4%	4.6%	90.0%
2%	32%	78%	50%	0	3	0.5%	6.0%	93.6%
2%	32%	78%	50%	0.1	3	2.7%	4.1%	93.2%
2%	32%	78%	50%	0.2	3	4.8%	2.3%	92.9%
2%	32%	78%	50%	0.3	3	6.8%	0.6%	92.6%
2%	32%	78%	64%	0	1.5	0.4%	8.7%	91.0%
2%	32%	78%	64%	0.1	1.5	2.5%	7.1%	90.4%
2%	32%	78%	64%	0.2	1.5	4.5%	5.7%	89.8%
2%	32%	78%	64%	0.3	1.5	6.4%	4.3%	89.3%
2%	32%	78%	64%	0	3	0.6%	5.2%	94.1%
2%	32%	78%	64%	0.1	3	3.1%	3.4%	93.5%
2%	32%	78%	64%	0.2	3	5.3%	1.8%	92.9%
2%	32%	78%	64%	0.3	3	7.5%	0.2%	92.3%
2%	32%	78%	78%	0	1.5	0.4%	9.8%	89.8%
2%	32%	78%	78%	0.1	1.5	2.8%	8.2%	89.0%
2%	32%	78%	78%	0.2	1.5	5.1%	6.7%	88.2%
2%	32%	78%	78%	0.3	1.5	7.3%	5.2%	87.5%
2%	32%	78%	78%	0	3	0.8%	9.6%	89.6%
2%	32%	78%	78%	0.1	3	3.2%	8.0%	88.9%
2%	32%	78%	78%	0.2	3	5.4%	6.5%	88.1%
2%	32%	78%	78%	0.3	3	7.6%	5.0%	87.4%
2%	40%	50%	50%	0	1.5	0.2%	12.4%	87.4%
2%	40%	50%	50%	0.1	1.5	2.1%	10.7%	87.2%
2%	40%	50%	50%	0.2	1.5	3.8%	9.2%	87.0%
2%	40%	50%	50%	0.3	1.5	5.3%	7.8%	86.9%
2%	40%	50%	50%	0	3	0.4%	12.2%	87.4%
2%	40%	50%	50%	0.1	3	2.3%	10.6%	87.2%
2%	40%	50%	50%	0.2	3	3.9%	9.1%	87.0%
2%	40%	50%	50%	0.3	3	5.5%	7.7%	86.8%
2%	40%	50%	64%	0	1.5	0.3%	13.0%	86.8%
2%	40%	50%	64%	0.1	1.5	2.3%	11.3%	86.4%
2%	40%	50%	64%	0.2	1.5	4.3%	9.7%	86.0%
2%	40%	50%	64%	0.3	1.5	6.0%	8.3%	85.7%
2%	40%	50%	64%	0	3	0.5%	14.6%	85.0%
2%	40%	50%	64%	0.1	3	2.3%	13.1%	84.6%
2%	40%	50%	64%	0.2	3	3.9%	11.7%	84.3%
2%	40%	50%	64%	0.3	3	5.5%	10.5%	84.1%
2%	40%	50%	78%	0	1.5	0.3%	14.2%	85.5%
2%	40%	50%	78%	0.1	1.5	2.5%	12.5%	85.0%
2%	40%	50%	78%	0.2	1.5	4.6%	10.9%	84.5%
2%	40%	50%	78%	0.3	1.5	6.5%	9.4%	84.1%
2%	40%	50%	78%	0	3	0.5%	18.7%	80.8%
2%	40%	50%	78%	0.1	3	2.2%	17.3%	80.5%

1)	(2)	(3)	(4)	(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Labor Cost as % Total Cost		Labor Supply Elast	Price Elast. Demand	% of Increm. SFAS 106 Costs		
		Subj to FAS 106	Not Subj			Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
2%	40%	50%	78%	0.2	3	3.8%	16.0%	80.1%
2%	40%	50%	78%	0.3	3	5.3%	14.8%	79.9%
2%	40%	64%	50%	0	1.5	0.3%	11.9%	87.9%
2%	40%	64%	50%	0.1	1.5	2.4%	10.1%	87.5%
2%	40%	64%	50%	0.2	1.5	4.4%	8.4%	87.2%
2%	40%	64%	50%	0.3	1.5	6.2%	6.9%	86.9%
2%	40%	64%	50%	0	3	0.5%	10.2%	89.3%
2%	40%	64%	50%	0.1	3	2.9%	8.2%	88.9%
2%	40%	64%	50%	0.2	3	5.0%	6.4%	88.6%
2%	40%	64%	50%	0.3	3	7.1%	4.7%	88.2%
2%	40%	64%	64%	0	1.5	0.3%	12.3%	87.3%
2%	40%	64%	64%	0.1	1.5	2.8%	10.5%	86.7%
2%	40%	64%	64%	0.2	1.5	5.0%	8.8%	86.2%
2%	40%	64%	64%	0.3	1.5	7.1%	7.2%	85.7%
2%	40%	64%	64%	0	3	0.6%	12.1%	87.3%
2%	40%	64%	64%	0.1	3	3.0%	10.3%	86.7%
2%	40%	64%	64%	0.2	3	5.3%	8.6%	86.1%
2%	40%	64%	64%	0.3	3	7.4%	7.0%	85.6%
2%	40%	64%	78%	0	1.5	0.4%	13.9%	85.7%
2%	40%	64%	78%	0.1	1.5	3.0%	12.1%	84.9%
2%	40%	64%	78%	0.2	1.5	5.5%	10.3%	84.2%
2%	40%	64%	78%	0.3	1.5	7.8%	8.7%	83.5%
2%	40%	64%	78%	0	3	0.7%	18.2%	81.1%
2%	40%	64%	78%	0.1	3	3.0%	16.6%	80.4%
2%	40%	64%	78%	0.2	3	5.1%	15.1%	79.8%
2%	40%	64%	78%	0.3	3	7.2%	13.6%	79.2%
2%	40%	78%	50%	0	1.5	0.3%	11.1%	88.6%
2%	40%	78%	50%	0.1	1.5	2.7%	9.1%	88.2%
2%	40%	78%	50%	0.2	1.5	4.9%	7.4%	87.8%
2%	40%	78%	50%	0.3	1.5	6.9%	5.7%	87.4%
2%	40%	78%	50%	0	3	0.5%	7.5%	92.0%
2%	40%	78%	50%	0.1	3	3.4%	5.1%	91.5%
2%	40%	78%	50%	0.2	3	6.0%	2.9%	91.1%
2%	40%	78%	50%	0.3	3	8.5%	0.9%	90.6%
2%	40%	78%	64%	0	1.5	0.4%	11.0%	88.6%
2%	40%	78%	64%	0.1	1.5	3.1%	9.0%	87.9%
2%	40%	78%	64%	0.2	1.5	5.7%	7.2%	87.2%
2%	40%	78%	64%	0.3	1.5	8.1%	5.4%	86.5%
2%	40%	78%	64%	0	3	0.7%	6.9%	92.4%
2%	40%	78%	64%	0.1	3	3.7%	4.7%	91.6%
2%	40%	78%	64%	0.2	3	6.6%	2.6%	90.8%
2%	40%	78%	64%	0.3	3	9.3%	0.6%	90.1%
2%	40%	78%	78%	0	1.5	0.5%	12.3%	87.3%
2%	40%	78%	78%	0.1	1.5	3.5%	10.3%	86.2%
2%	40%	78%	78%	0.2	1.5	6.3%	8.4%	85.3%
2%	40%	78%	78%	0.3	1.5	9.1%	6.6%	84.4%
2%	40%	78%	78%	0	3	0.9%	12.0%	87.1%

(1)	(2)	(3)	(4)	(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Labor Cost as % Total Cost		Labor Supply Elast.	Price Elast. Demand	* of Increm. SFAS 106 Costs		
		Subj to FAS 106	Not Subj			Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
2%	40%	78%	78%	0.1	3	3.9%	10.0%	86.1%
2%	40%	78%	78%	0.2	3	6.7%	8.1%	85.2%
2%	40%	78%	78%	0.3	3	9.4%	6.3%	84.2%
3%	24%	50%	50%	0	1.5	0.4%	10.9%	88.7%
3%	24%	50%	50%	0.1	1.5	2.1%	9.5%	88.5%
3%	24%	50%	50%	0.2	1.5	3.6%	8.1%	88.3%
3%	24%	50%	50%	0.3	1.5	4.9%	6.9%	88.2%
3%	24%	50%	50%	0	3	0.7%	10.7%	88.6%
3%	24%	50%	50%	0.1	3	2.3%	9.2%	88.5%
3%	24%	50%	50%	0.2	3	3.8%	7.9%	88.3%
3%	24%	50%	50%	0.3	3	5.2%	6.7%	88.2%
3%	24%	50%	64%	0	1.5	0.5%	11.7%	87.8%
3%	24%	50%	64%	0.1	1.5	2.4%	10.2%	87.4%
3%	24%	50%	64%	0.2	1.5	4.2%	8.8%	87.0%
3%	24%	50%	64%	0.3	1.5	5.8%	7.5%	86.7%
3%	24%	50%	64%	0	3	0.8%	13.9%	85.3%
3%	24%	50%	64%	0.1	3	2.4%	12.6%	85.0%
3%	24%	50%	64%	0.2	3	3.9%	11.4%	84.7%
3%	24%	50%	64%	0.3	3	5.2%	10.3%	84.4%
3%	24%	50%	78%	0	1.5	0.6%	13.8%	85.7%
3%	24%	50%	78%	0.1	1.5	2.6%	12.3%	85.1%
3%	24%	50%	78%	0.2	1.5	4.6%	10.8%	84.6%
3%	24%	50%	78%	0.3	1.5	6.5%	9.4%	84.1%
3%	24%	50%	78%	0	3	0.9%	21.0%	78.2%
3%	24%	50%	78%	0.1	3	2.3%	19.8%	77.8%
3%	24%	50%	78%	0.2	3	3.7%	18.8%	77.5%
3%	24%	50%	78%	0.3	3	5.0%	17.8%	77.2%
3%	24%	64%	50%	0	1.5	0.5%	10.4%	89.1%
3%	24%	64%	50%	0.1	1.5	2.3%	8.9%	88.8%
3%	24%	64%	50%	0.2	1.5	4.0%	7.4%	88.6%
3%	24%	64%	50%	0.3	1.5	5.6%	6.1%	88.4%
3%	24%	64%	50%	0	3	0.8%	8.8%	90.4%
3%	24%	64%	50%	0.1	3	2.9%	7.0%	90.1%
3%	24%	64%	50%	0.2	3	4.8%	5.3%	89.9%
3%	24%	64%	50%	0.3	3	6.6%	3.8%	89.6%
3%	24%	64%	64%	0	1.5	0.6%	10.9%	88.5%
3%	24%	64%	64%	0.1	1.5	2.7%	9.3%	88.0%
3%	24%	64%	64%	0.2	1.5	4.7%	7.7%	87.5%
3%	24%	64%	64%	0.3	1.5	6.6%	6.3%	87.1%
3%	24%	64%	64%	0	3	1.1%	10.5%	88.4%
3%	24%	64%	64%	0.1	3	3.2%	8.9%	87.9%
3%	24%	64%	64%	0.2	3	5.2%	7.4%	87.4%
3%	24%	64%	64%	0.3	3	7.0%	6.0%	87.0%
3%	24%	64%	78%	0	1.5	0.7%	13.0%	86.4%
3%	24%	64%	78%	0.1	1.5	3.1%	11.3%	85.6%
3%	24%	64%	78%	0.2	1.5	5.3%	9.7%	84.9%
3%	24%	64%	78%	0.3	1.5	7.5%	8.3%	84.2%

(1)	(2)	(3)	(4)	(5)	(6)	(A)	(B)	(C)
		Labor Cost				% of Increm. SFAS 106 Costs		
		as % Total Cost						
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast. Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
3%	24%	64%	78%	0	3	1.2%	18.6%	80.2%
3%	24%	64%	78%	0.1	3	3.2%	17.2%	79.6%
3%	24%	64%	78%	0.2	3	5.1%	15.9%	79.0%
3%	24%	64%	78%	0.3	3	6.9%	14.7%	78.5%
3%	24%	78%	50%	0	1.5	0.5%	9.8%	89.7%
3%	24%	78%	50%	0.1	1.5	2.5%	8.1%	89.4%
3%	24%	78%	50%	0.2	1.5	4.4%	6.5%	89.1%
3%	24%	78%	50%	0.3	1.5	6.1%	5.1%	88.8%
3%	24%	78%	50%	0	3	0.9%	6.5%	92.7%
3%	24%	78%	50%	0.1	3	3.4%	4.3%	92.3%
3%	24%	78%	50%	0.2	3	5.7%	2.3%	91.9%
3%	24%	78%	50%	0.3	3	7.9%	0.5%	91.6%
3%	24%	78%	64%	0	1.5	0.7%	9.5%	89.8%
3%	24%	78%	64%	0.1	1.5	3.0%	7.8%	89.2%
3%	24%	78%	64%	0.2	1.5	5.3%	6.1%	88.6%
3%	24%	78%	64%	0.3	1.5	7.4%	4.6%	88.0%
3%	24%	78%	64%	0	3	1.2%	5.3%	93.5%
3%	24%	78%	64%	0.1	3	3.9%	3.3%	92.8%
3%	24%	78%	64%	0.2	3	6.4%	1.4%	92.2%
3%	24%	78%	64%	0.3	3	8.8%	-0.3%	91.5%
3%	24%	78%	78%	0	1.5	0.8%	10.8%	88.4%
3%	24%	78%	78%	0.1	1.5	3.5%	9.0%	87.5%
3%	24%	78%	78%	0.2	1.5	6.0%	7.3%	86.7%
3%	24%	78%	78%	0.3	1.5	8.5%	5.7%	85.8%
3%	24%	78%	78%	0	3	1.5%	10.3%	88.2%
3%	24%	78%	78%	0.1	3	4.1%	8.6%	87.3%
3%	24%	78%	78%	0.2	3	6.6%	6.9%	86.4%
3%	24%	78%	78%	0.3	3	9.0%	5.3%	85.6%
3%	32%	50%	50%	0	1.5	0.5%	14.6%	84.9%
3%	32%	50%	50%	0.1	1.5	2.7%	12.6%	84.7%
3%	32%	50%	50%	0.2	1.5	4.7%	10.8%	84.5%
3%	32%	50%	50%	0.3	1.5	6.5%	9.2%	84.3%
3%	32%	50%	50%	0	3	0.8%	14.3%	84.9%
3%	32%	50%	50%	0.1	3	3.0%	12.3%	84.6%
3%	32%	50%	50%	0.2	3	5.0%	10.6%	84.4%
3%	32%	50%	50%	0.3	3	6.8%	8.9%	84.2%
3%	32%	50%	64%	0	1.5	0.6%	15.5%	83.9%
3%	32%	50%	64%	0.1	1.5	3.1%	13.5%	83.4%
3%	32%	50%	64%	0.2	1.5	5.4%	11.6%	83.0%
3%	32%	50%	64%	0.3	1.5	7.5%	9.9%	82.6%
3%	32%	50%	64%	0	3	1.0%	17.8%	81.3%
3%	32%	50%	64%	0.1	3	3.1%	16.0%	80.9%
3%	32%	50%	64%	0.2	3	5.1%	14.5%	80.5%
3%	32%	50%	64%	0.3	3	6.9%	13.0%	80.1%
3%	32%	50%	78%	0	1.5	0.7%	17.5%	81.9%
3%	32%	50%	78%	0.1	1.5	3.4%	15.4%	81.2%
3%	32%	50%	78%	0.2	1.5	5.9%	13.5%	80.6%

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
3%	32%	50%	78%	0.3	1.5	8.3%	11.7%	80.0%
3%	32%	50%	78%	0	3	1.0%	24.6%	74.4%
3%	32%	50%	78%	0.1	3	3.0%	23.0%	74.0%
3%	32%	50%	78%	0.2	3	4.9%	21.5%	73.6%
3%	32%	50%	78%	0.3	3	6.7%	20.1%	73.2%
3%	32%	64%	50%	0	1.5	0.6%	14.0%	85.5%
3%	32%	64%	50%	0.1	1.5	3.1%	11.8%	85.1%
3%	32%	64%	50%	0.2	1.5	5.4%	9.9%	84.8%
3%	32%	64%	50%	0.3	1.5	7.5%	8.1%	84.4%
3%	32%	64%	50%	0	3	1.0%	11.8%	87.2%
3%	32%	64%	50%	0.1	3	3.8%	9.4%	86.8%
3%	32%	64%	50%	0.2	3	6.4%	7.2%	86.4%
3%	32%	64%	50%	0.3	3	8.7%	5.2%	86.1%
3%	32%	64%	64%	0	1.5	0.7%	14.5%	84.8%
3%	32%	64%	64%	0.1	1.5	3.6%	12.4%	84.1%
3%	32%	64%	64%	0.2	1.5	6.2%	10.4%	83.4%
3%	32%	64%	64%	0.3	1.5	8.8%	8.5%	82.8%
3%	32%	64%	64%	0	3	1.3%	14.1%	84.6%
3%	32%	64%	64%	0.1	3	4.1%	12.0%	83.9%
3%	32%	64%	64%	0.2	3	6.7%	10.0%	83.3%
3%	32%	64%	64%	0.3	3	9.2%	8.1%	82.7%
3%	32%	64%	78%	0	1.5	0.8%	16.8%	82.4%
3%	32%	64%	78%	0.1	1.5	4.0%	14.6%	81.4%
3%	32%	64%	78%	0.2	1.5	6.9%	12.6%	80.5%
3%	32%	64%	78%	0.3	1.5	9.8%	10.6%	79.6%
3%	32%	64%	78%	0	3	1.4%	23.0%	75.6%
3%	32%	64%	78%	0.1	3	4.1%	21.1%	74.8%
3%	32%	64%	78%	0.2	3	6.6%	19.3%	74.1%
3%	32%	64%	78%	0.3	3	9.0%	17.6%	73.4%
3%	32%	78%	50%	0	1.5	0.6%	13.0%	86.3%
3%	32%	78%	50%	0.1	1.5	3.4%	10.8%	85.9%
3%	32%	78%	50%	0.2	1.5	5.9%	8.7%	85.4%
3%	32%	78%	50%	0.3	1.5	8.3%	6.7%	85.0%
3%	32%	78%	50%	0	3	1.0%	8.6%	90.3%
3%	32%	78%	50%	0.1	3	4.4%	5.8%	89.8%
3%	32%	78%	50%	0.2	3	7.6%	3.2%	89.3%
3%	32%	78%	50%	0.3	3	10.5%	0.7%	88.8%
3%	32%	78%	64%	0	1.5	0.8%	12.8%	86.4%
3%	32%	78%	64%	0.1	1.5	4.0%	10.5%	85.5%
3%	32%	78%	64%	0.2	1.5	7.0%	8.3%	84.7%
3%	32%	78%	64%	0.3	1.5	9.9%	6.2%	83.9%
3%	32%	78%	64%	0	3	1.4%	7.5%	91.1%
3%	32%	78%	64%	0.1	3	5.0%	4.8%	90.1%
3%	32%	78%	64%	0.2	3	8.4%	2.3%	89.2%
3%	32%	78%	64%	0.3	3	11.6%	-0.0%	88.4%
3%	32%	78%	78%	0	1.5	0.9%	14.4%	84.6%
3%	32%	78%	78%	0.1	1.5	4.5%	12.1%	83.4%

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast. Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
3%	32%	78%	78%	0.2	1.5	7.9%	9.8%	82.3%
3%	32%	78%	78%	0.3	1.5	11.2%	7.7%	81.2%
3%	32%	78%	78%	0	3	1.8%	13.9%	84.3%
3%	32%	78%	78%	0.1	3	5.3%	11.6%	83.1%
3%	32%	78%	78%	0.2	3	8.7%	9.3%	82.0%
3%	32%	78%	78%	0.3	3	11.9%	7.2%	80.9%
3%	40%	50%	50%	0	1.5	0.5%	18.3%	81.2%
3%	40%	50%	50%	0.1	1.5	3.3%	15.8%	80.9%
3%	40%	50%	50%	0.2	1.5	5.8%	13.6%	80.6%
3%	40%	50%	50%	0.3	1.5	8.1%	11.5%	80.4%
3%	40%	50%	50%	0	3	0.9%	17.9%	81.1%
3%	40%	50%	50%	0.1	3	3.7%	15.5%	80.8%
3%	40%	50%	50%	0.2	3	6.1%	13.3%	80.6%
3%	40%	50%	50%	0.3	3	8.4%	11.3%	80.3%
3%	40%	50%	64%	0	1.5	0.6%	19.2%	80.2%
3%	40%	50%	64%	0.1	1.5	3.7%	16.7%	79.6%
3%	40%	50%	64%	0.2	1.5	6.5%	14.4%	79.1%
3%	40%	50%	64%	0.3	1.5	9.2%	12.2%	78.6%
3%	40%	50%	64%	0	3	1.1%	21.4%	77.5%
3%	40%	50%	64%	0.1	3	3.7%	19.3%	77.0%
3%	40%	50%	64%	0.2	3	6.2%	17.2%	76.6%
3%	40%	50%	64%	0.3	3	8.5%	15.4%	76.2%
3%	40%	50%	78%	0	1.5	0.7%	21.0%	78.3%
3%	40%	50%	78%	0.1	1.5	4.0%	18.4%	77.6%
3%	40%	50%	78%	0.2	1.5	7.1%	16.1%	76.8%
3%	40%	50%	78%	0.3	1.5	10.0%	13.9%	76.2%
3%	40%	50%	78%	0	3	1.1%	27.6%	71.3%
3%	40%	50%	78%	0.1	3	3.6%	25.6%	70.8%
3%	40%	50%	78%	0.2	3	6.0%	23.7%	70.3%
3%	40%	50%	78%	0.3	3	8.3%	21.9%	69.9%
3%	40%	64%	50%	0	1.5	0.6%	17.5%	81.9%
3%	40%	64%	50%	0.1	1.5	3.8%	14.9%	81.3%
3%	40%	64%	50%	0.2	1.5	6.7%	12.4%	80.9%
3%	40%	64%	50%	0.3	1.5	9.4%	10.2%	80.4%
3%	40%	64%	50%	0	3	1.1%	15.0%	83.9%
3%	40%	64%	50%	0.1	3	4.6%	12.0%	83.4%
3%	40%	64%	50%	0.2	3	7.9%	9.3%	82.9%
3%	40%	64%	50%	0.3	3	10.8%	6.8%	82.4%
3%	40%	64%	64%	0	1.5	0.8%	18.2%	81.0%
3%	40%	64%	64%	0.1	1.5	4.4%	15.5%	80.1%
3%	40%	64%	64%	0.2	1.5	7.7%	13.0%	79.3%
3%	40%	64%	64%	0.3	1.5	10.9%	10.6%	78.5%
3%	40%	64%	64%	0	3	1.4%	17.7%	80.9%
3%	40%	64%	64%	0.1	3	4.9%	15.1%	80.0%
3%	40%	64%	64%	0.2	3	8.3%	12.6%	79.2%
3%	40%	64%	64%	0.3	3	11.4%	10.2%	78.4%
3%	40%	64%	78%	0	1.5	0.9%	20.6%	78.6%

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
3%	40%	64%	78%	0.1	1.5	4.8%	17.8%	77.4%
3%	40%	64%	78%	0.2	1.5	8.5%	15.2%	76.3%
3%	40%	64%	78%	0.3	1.5	12.0%	12.8%	75.3%
3%	40%	64%	78%	0	3	1.6%	26.8%	71.6%
3%	40%	64%	78%	0.1	3	4.9%	24.4%	70.6%
3%	40%	64%	78%	0.2	3	8.1%	22.1%	69.7%
3%	40%	64%	78%	0.3	3	11.2%	20.0%	68.9%
3%	40%	78%	50%	0	1.5	0.7%	16.3%	83.0%
3%	40%	78%	50%	0.1	1.5	4.2%	13.5%	82.3%
3%	40%	78%	50%	0.2	1.5	7.5%	10.8%	81.7%
3%	40%	78%	50%	0.3	1.5	10.6%	8.3%	81.1%
3%	40%	78%	50%	0	3	1.1%	10.9%	88.0%
3%	40%	78%	50%	0.1	3	5.4%	7.4%	87.3%
3%	40%	78%	50%	0.2	3	9.3%	4.1%	86.6%
3%	40%	78%	50%	0.3	3	13.0%	1.0%	86.0%
3%	40%	78%	64%	0	1.5	0.9%	16.2%	83.0%
3%	40%	78%	64%	0.1	1.5	4.9%	13.2%	81.8%
3%	40%	78%	64%	0.2	1.5	8.8%	10.5%	80.7%
3%	40%	78%	64%	0.3	1.5	12.4%	7.9%	79.7%
3%	40%	78%	64%	0	3	1.6%	9.9%	88.5%
3%	40%	78%	64%	0.1	3	6.1%	6.7%	87.3%
3%	40%	78%	64%	0.2	3	10.3%	3.6%	86.1%
3%	40%	78%	64%	0.3	3	14.3%	0.6%	85.0%
3%	40%	78%	78%	0	1.5	1.0%	18.1%	80.9%
3%	40%	78%	78%	0.1	1.5	5.5%	15.2%	79.3%
3%	40%	78%	78%	0.2	1.5	9.8%	12.3%	77.9%
3%	40%	78%	78%	0.3	1.5	13.8%	9.6%	76.5%
3%	40%	78%	78%	0	3	2.0%	17.5%	80.5%
3%	40%	78%	78%	0.1	3	6.4%	14.6%	79.0%
3%	40%	78%	78%	0.2	3	10.6%	11.8%	77.6%
3%	40%	78%	78%	0.3	3	14.6%	9.1%	76.3%
4.5%	24%	50%	50%	0	1.5	0.9%	16.1%	83.1%
4.5%	24%	50%	50%	0.1	1.5	3.3%	13.9%	82.8%
4.5%	24%	50%	50%	0.2	1.5	5.6%	11.9%	82.6%
4.5%	24%	50%	50%	0.3	1.5	7.6%	10.1%	82.3%
4.5%	24%	50%	50%	0	3	1.5%	15.5%	83.0%
4.5%	24%	50%	50%	0.1	3	3.9%	13.3%	82.7%
4.5%	24%	50%	50%	0.2	3	6.1%	11.4%	82.5%
4.5%	24%	50%	50%	0.3	3	8.1%	9.6%	82.3%
4.5%	24%	50%	64%	0	1.5	1.1%	17.2%	81.7%
4.5%	24%	50%	64%	0.1	1.5	3.9%	15.0%	81.1%
4.5%	24%	50%	64%	0.2	1.5	6.5%	12.9%	80.5%
4.5%	24%	50%	64%	0.3	1.5	8.9%	11.0%	80.0%
4.5%	24%	50%	64%	0	3	1.8%	20.2%	78.0%
4.5%	24%	50%	64%	0.1	3	4.1%	18.3%	77.5%
4.5%	24%	50%	64%	0.2	3	6.3%	16.6%	77.1%
4.5%	24%	50%	64%	0.3	3	8.3%	15.0%	76.7%

(1)	(2)	(3)	(4)	(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Labor Cost as % Total Cost		Labor Supply Elast.	Price Elast. Demand	% of Increm. SFAS 106 Costs		
		Subj to FAS 106	Not Subj			Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
4.5%	24%	50%	78%	0	1.5	1.2%	20.3%	78.5%
4.5%	24%	50%	78%	0.1	1.5	4.3%	18.0%	77.7%
4.5%	24%	50%	78%	0.2	1.5	7.2%	15.8%	76.9%
4.5%	24%	50%	78%	0.3	1.5	10.0%	13.8%	76.2%
4.5%	24%	50%	78%	0	3	1.9%	30.7%	67.4%
4.5%	24%	50%	78%	0.1	3	4.1%	29.1%	66.9%
4.5%	24%	50%	78%	0.2	3	6.1%	27.5%	66.4%
4.5%	24%	50%	78%	0.3	3	8.0%	26.0%	66.0%
4.5%	24%	64%	50%	0	1.5	1.0%	15.3%	83.7%
4.5%	24%	64%	50%	0.1	1.5	3.8%	12.9%	83.3%
4.5%	24%	64%	50%	0.2	1.5	6.3%	10.8%	83.0%
4.5%	24%	64%	50%	0.3	1.5	8.6%	8.8%	82.6%
4.5%	24%	64%	50%	0	3	1.8%	12.6%	85.6%
4.5%	24%	64%	50%	0.1	3	4.9%	9.9%	85.2%
4.5%	24%	64%	50%	0.2	3	7.7%	7.5%	84.8%
4.5%	24%	64%	50%	0.3	3	10.3%	5.2%	84.4%
4.5%	24%	64%	64%	0	1.5	1.3%	15.9%	82.8%
4.5%	24%	64%	64%	0.1	1.5	4.5%	13.5%	82.0%
4.5%	24%	64%	64%	0.2	1.5	7.4%	11.3%	81.3%
4.5%	24%	64%	64%	0.3	1.5	10.2%	9.2%	80.6%
4.5%	24%	64%	64%	0	3	2.3%	15.1%	82.6%
4.5%	24%	64%	64%	0.1	3	5.4%	12.8%	81.8%
4.5%	24%	64%	64%	0.2	3	8.4%	10.6%	81.1%
4.5%	24%	64%	64%	0.3	3	11.1%	8.5%	80.4%
4.5%	24%	64%	78%	0	1.5	1.5%	19.0%	79.5%
4.5%	24%	64%	78%	0.1	1.5	5.0%	16.6%	78.4%
4.5%	24%	64%	78%	0.2	1.5	8.4%	14.2%	77.4%
4.5%	24%	64%	78%	0.3	1.5	11.6%	12.0%	76.4%
4.5%	24%	64%	78%	0	3	2.6%	27.1%	70.2%
4.5%	24%	64%	78%	0.1	3	5.6%	25.1%	69.4%
4.5%	24%	64%	78%	0.2	3	8.3%	23.2%	68.5%
4.5%	24%	64%	78%	0.3	3	11.0%	21.3%	67.7%
4.5%	24%	78%	50%	0	1.5	1.1%	14.3%	84.6%
4.5%	24%	78%	50%	0.1	1.5	4.1%	11.8%	84.1%
4.5%	24%	78%	50%	0.2	1.5	6.9%	9.5%	83.6%
4.5%	24%	78%	50%	0.3	1.5	9.4%	7.3%	83.2%
4.5%	24%	78%	50%	0	3	2.0%	9.1%	88.9%
4.5%	24%	78%	50%	0.1	3	5.7%	5.9%	88.4%
4.5%	24%	78%	50%	0.2	3	9.1%	3.0%	87.9%
4.5%	24%	78%	50%	0.3	3	12.3%	0.3%	87.4%
4.5%	24%	78%	64%	0	1.5	1.4%	13.9%	84.7%
4.5%	24%	78%	64%	0.1	1.5	5.0%	11.3%	83.7%
4.5%	24%	78%	64%	0.2	1.5	8.3%	8.9%	82.9%
4.5%	24%	78%	64%	0.3	1.5	11.4%	6.6%	82.0%
4.5%	24%	78%	64%	0	3	2.6%	7.3%	90.0%
4.5%	24%	78%	64%	0.1	3	6.6%	4.4%	89.0%
4.5%	24%	78%	64%	0.2	3	10.3%	1.6%	88.0%

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast. Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
4.5%	24%	78%	64%	0.3	3	13.9%	-1.0%	87.1%
4.5%	24%	78%	78%	0	1.5	1.7%	15.8%	82.5%
4.5%	24%	78%	78%	0.1	1.5	5.7%	13.1%	81.2%
4.5%	24%	78%	78%	0.2	1.5	9.5%	10.6%	79.9%
4.5%	24%	78%	78%	0.3	1.5	13.1%	8.2%	78.7%
4.5%	24%	78%	78%	0	3	3.3%	14.7%	82.0%
4.5%	24%	78%	78%	0.1	3	7.1%	12.2%	80.7%
4.5%	24%	78%	78%	0.2	3	10.9%	9.7%	79.4%
4.5%	24%	78%	78%	0.3	3	14.4%	7.4%	78.2%
4.5%	32%	50%	50%	0	1.5	1.0%	21.5%	77.5%
4.5%	32%	50%	50%	0.1	1.5	4.3%	18.5%	77.1%
4.5%	32%	50%	50%	0.2	1.5	7.3%	15.9%	76.8%
4.5%	32%	50%	50%	0.3	1.5	10.0%	13.5%	76.5%
4.5%	32%	50%	50%	0	3	1.8%	20.8%	77.4%
4.5%	32%	50%	50%	0.1	3	5.0%	17.9%	77.1%
4.5%	32%	50%	50%	0.2	3	8.0%	15.3%	76.7%
4.5%	32%	50%	50%	0.3	3	10.7%	12.9%	76.4%
4.5%	32%	50%	64%	0	1.5	1.3%	22.7%	76.0%
4.5%	32%	50%	64%	0.1	1.5	5.0%	19.8%	75.2%
4.5%	32%	50%	64%	0.2	1.5	8.4%	17.0%	74.6%
4.5%	32%	50%	64%	0.3	1.5	11.6%	14.5%	73.9%
4.5%	32%	50%	64%	0	3	2.2%	25.9%	72.0%
4.5%	32%	50%	64%	0.1	3	5.3%	23.4%	71.4%
4.5%	32%	50%	64%	0.2	3	8.2%	21.0%	70.8%
4.5%	32%	50%	64%	0.3	3	10.8%	18.9%	70.3%
4.5%	32%	50%	78%	0	1.5	1.4%	25.7%	72.9%
4.5%	32%	50%	78%	0.1	1.5	5.4%	22.7%	71.9%
4.5%	32%	50%	78%	0.2	1.5	9.2%	19.8%	70.9%
4.5%	32%	50%	78%	0.3	1.5	12.8%	17.2%	70.1%
4.5%	32%	50%	78%	0	3	2.2%	36.0%	61.7%
4.5%	32%	50%	78%	0.1	3	5.2%	33.7%	61.1%
4.5%	32%	50%	78%	0.2	3	7.9%	31.5%	60.5%
4.5%	32%	50%	78%	0.3	3	10.6%	29.5%	60.0%
4.5%	32%	64%	50%	0	1.5	1.2%	20.5%	78.3%
4.5%	32%	64%	50%	0.1	1.5	4.9%	17.3%	77.7%
4.5%	32%	64%	50%	0.2	1.5	8.4%	14.4%	77.2%
4.5%	32%	64%	50%	0.3	1.5	11.5%	11.8%	76.7%
4.5%	32%	64%	50%	0	3	2.1%	17.0%	80.8%
4.5%	32%	64%	50%	0.1	3	6.3%	13.5%	80.2%
4.5%	32%	64%	50%	0.2	3	10.1%	10.3%	79.6%
4.5%	32%	64%	50%	0.3	3	13.6%	7.3%	79.1%
4.5%	32%	64%	64%	0	1.5	1.5%	21.3%	77.2%
4.5%	32%	64%	64%	0.1	1.5	5.8%	18.1%	76.1%
4.5%	32%	64%	64%	0.2	1.5	9.8%	15.1%	75.1%
4.5%	32%	64%	64%	0.3	1.5	13.5%	12.3%	74.2%
4.5%	32%	64%	64%	0	3	2.8%	20.3%	76.9%
4.5%	32%	64%	64%	0.1	3	7.0%	17.2%	75.8%

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast Demand	Reflected in GNP-PI	Other Macroecon Effects	To be met by Other Sources
4.5%	32%	64%	64%	0.2	3	10.9%	14.3%	74.9%
4.5%	32%	64%	64%	0.3	3	14.5%	11.5%	73.9%
4.5%	32%	64%	78%	0	1.5	1.8%	24.7%	73.5%
4.5%	32%	64%	78%	0.1	1.5	6.4%	21.4%	72.1%
4.5%	32%	64%	78%	0.2	1.5	10.9%	18.4%	70.8%
4.5%	32%	64%	78%	0.3	1.5	15.1%	15.4%	69.5%
4.5%	32%	64%	78%	0	3	3.1%	33.6%	63.3%
4.5%	32%	64%	78%	0.1	3	7.1%	30.8%	62.2%
4.5%	32%	64%	78%	0.2	3	10.8%	28.1%	61.1%
4.5%	32%	64%	78%	0.3	3	14.4%	25.6%	60.0%
4.5%	32%	78%	50%	0	1.5	1.4%	19.1%	79.6%
4.5%	32%	78%	50%	0.1	1.5	5.5%	15.7%	78.8%
4.5%	32%	78%	50%	0.2	1.5	9.3%	12.6%	78.2%
4.5%	32%	78%	50%	0.3	1.5	12.8%	9.7%	77.5%
4.5%	32%	78%	50%	0	3	2.3%	12.2%	85.5%
4.5%	32%	78%	50%	0.1	3	7.3%	8.0%	84.7%
4.5%	32%	78%	50%	0.2	3	11.9%	4.2%	83.9%
4.5%	32%	78%	50%	0.3	3	16.2%	0.5%	83.2%
4.5%	32%	78%	64%	0	1.5	1.7%	18.7%	79.6%
4.5%	32%	78%	64%	0.1	1.5	6.5%	15.2%	78.3%
4.5%	32%	78%	64%	0.2	1.5	11.0%	12.0%	77.0%
4.5%	32%	78%	64%	0.3	1.5	15.2%	8.9%	75.9%
4.5%	32%	78%	64%	0	3	3.1%	10.4%	86.4%
4.5%	32%	78%	64%	0.1	3	8.5%	6.5%	85.0%
4.5%	32%	78%	64%	0.2	3	13.5%	2.9%	83.7%
4.5%	32%	78%	64%	0.3	3	18.2%	-0.6%	82.4%
4.5%	32%	78%	78%	0	1.5	2.1%	21.1%	76.8%
4.5%	32%	78%	78%	0.1	1.5	7.4%	17.6%	75.0%
4.5%	32%	78%	78%	0.2	1.5	12.4%	14.3%	73.3%
4.5%	32%	78%	78%	0.3	1.5	17.3%	11.0%	71.7%
4.5%	32%	78%	78%	0	3	3.9%	19.9%	76.2%
4.5%	32%	78%	78%	0.1	3	9.1%	16.4%	74.4%
4.5%	32%	78%	78%	0.2	3	14.1%	13.2%	72.8%
4.5%	32%	78%	78%	0.3	3	18.8%	10.0%	71.2%
4.5%	40%	50%	50%	0	1.5	1.2%	26.9%	72.0%
4.5%	40%	50%	50%	0.1	1.5	5.3%	23.2%	71.5%
4.5%	40%	50%	50%	0.2	1.5	9.0%	19.9%	71.1%
4.5%	40%	50%	50%	0.3	1.5	12.4%	16.9%	70.7%
4.5%	40%	50%	50%	0	3	2.0%	26.1%	71.9%
4.5%	40%	50%	50%	0.1	3	6.1%	22.5%	71.4%
4.5%	40%	50%	50%	0.2	3	9.7%	19.3%	71.0%
4.5%	40%	50%	50%	0.3	3	13.1%	16.3%	70.6%
4.5%	40%	50%	64%	0	1.5	1.4%	28.2%	70.4%
4.5%	40%	50%	64%	0.1	1.5	5.9%	24.5%	69.6%
4.5%	40%	50%	64%	0.2	1.5	10.2%	21.1%	68.8%
4.5%	40%	50%	64%	0.3	1.5	14.1%	17.9%	68.0%
4.5%	40%	50%	64%	0	3	2.4%	31.3%	66.3%

(1)	(2)	(3) Labor Cost as % Total Cost		(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
4.5%	40%	50%	64%	0.1	3	6.3%	28.1%	65.6%
4.5%	40%	50%	64%	0.2	3	9.9%	25.1%	65.0%
4.5%	40%	50%	64%	0.3	3	13.3%	22.4%	64.3%
4.5%	40%	50%	78%	0	1.5	1.6%	30.8%	67.6%
4.5%	40%	50%	78%	0.1	1.5	6.4%	27.1%	66.5%
4.5%	40%	50%	78%	0.2	1.5	11.0%	23.6%	65.4%
4.5%	40%	50%	78%	0.3	1.5	15.3%	20.3%	64.4%
4.5%	40%	50%	78%	0	3	2.5%	40.5%	57.0%
4.5%	40%	50%	78%	0.1	3	6.2%	37.5%	56.3%
4.5%	40%	50%	78%	0.2	3	9.7%	34.7%	55.6%
4.5%	40%	50%	78%	0.3	3	13.0%	32.1%	55.0%
4.5%	40%	64%	50%	0	1.5	1.4%	25.7%	72.9%
4.5%	40%	64%	50%	0.1	1.5	6.1%	21.8%	72.2%
4.5%	40%	64%	50%	0.2	1.5	10.4%	18.1%	71.4%
4.5%	40%	64%	50%	0.3	1.5	14.4%	14.8%	70.8%
4.5%	40%	64%	50%	0	3	2.4%	21.6%	76.0%
4.5%	40%	64%	50%	0.1	3	7.6%	17.3%	75.1%
4.5%	40%	64%	50%	0.2	3	12.4%	13.2%	74.4%
4.5%	40%	64%	50%	0.3	3	16.8%	9.5%	73.6%
4.5%	40%	64%	64%	0	1.5	1.7%	26.7%	71.6%
4.5%	40%	64%	64%	0.1	1.5	7.0%	22.7%	70.3%
4.5%	40%	64%	64%	0.2	1.5	12.0%	19.0%	69.0%
4.5%	40%	64%	64%	0.3	1.5	16.7%	15.5%	67.9%
4.5%	40%	64%	64%	0	3	3.1%	25.7%	71.3%
4.5%	40%	64%	64%	0.1	3	8.3%	21.7%	69.9%
4.5%	40%	64%	64%	0.2	3	13.2%	18.0%	68.7%
4.5%	40%	64%	64%	0.3	3	17.8%	14.6%	67.6%
4.5%	40%	64%	78%	0	1.5	1.9%	30.2%	67.9%
4.5%	40%	64%	78%	0.1	1.5	7.7%	26.1%	66.2%
4.5%	40%	64%	78%	0.2	1.5	13.2%	22.3%	64.5%
4.5%	40%	64%	78%	0.3	1.5	18.4%	18.6%	63.0%
4.5%	40%	64%	78%	0	3	3.5%	39.2%	57.4%
4.5%	40%	64%	78%	0.1	3	8.4%	35.6%	56.0%
4.5%	40%	64%	78%	0.2	3	13.1%	32.3%	54.6%
4.5%	40%	64%	78%	0.3	3	17.6%	29.1%	53.3%
4.5%	40%	78%	50%	0	1.5	1.5%	23.9%	74.6%
4.5%	40%	78%	50%	0.1	1.5	6.8%	19.7%	73.6%
4.5%	40%	78%	50%	0.2	1.5	11.7%	15.7%	72.6%
4.5%	40%	78%	50%	0.3	1.5	16.2%	12.1%	71.7%
4.5%	40%	78%	50%	0	3	2.5%	15.5%	82.0%
4.5%	40%	78%	50%	0.1	3	8.8%	10.3%	80.9%
4.5%	40%	78%	50%	0.2	3	14.7%	5.5%	79.9%
4.5%	40%	78%	50%	0.3	3	20.1%	0.9%	78.9%
4.5%	40%	78%	64%	0	1.5	1.9%	23.6%	74.4%
4.5%	40%	78%	64%	0.1	1.5	8.0%	19.3%	72.7%
4.5%	40%	78%	64%	0.2	1.5	13.7%	15.2%	71.1%
4.5%	40%	78%	64%	0.3	1.5	19.0%	11.4%	69.6%

(1)	(2)	(3)	(4)	(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Labor Cost as % Total Cost		Labor Supply Elast.	Price Elast Demand	% of Increm. SFAS 106 Costs		
		Subj to FAS 106	Not Subj			Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
4.5%	40%	78%	64%	0	3	3.5%	14.0%	82.5%
4.5%	40%	78%	64%	0.1	3	10.1%	9.1%	80.7%
4.5%	40%	78%	64%	0.2	3	16.4%	4.6%	79.0%
4.5%	40%	78%	64%	0.3	3	22.4%	0.3%	77.4%
4.5%	40%	78%	78%	0	1.5	2.3%	26.5%	71.2%
4.5%	40%	78%	78%	0.1	1.5	8.9%	22.1%	69.0%
4.5%	40%	78%	78%	0.2	1.5	15.2%	17.9%	66.8%
4.5%	40%	78%	78%	0.3	1.5	21.3%	13.9%	64.7%
4.5%	40%	78%	78%	0	3	4.4%	25.1%	70.5%
4.5%	40%	78%	78%	0.1	3	10.9%	20.8%	68.3%
4.5%	40%	78%	78%	0.2	3	17.1%	16.7%	66.2%
4.5%	40%	78%	78%	0.3	3	23.1%	12.8%	64.2%

EXHIBIT 3

Inputs:

- (1) Percentage increase in Labor Cost in Sector of Economy Subject to SFAS 106
- (2) Share of Employment in Sector Subject to SFAS 106
- (3) Labor Cost as a Share of Total Cost in Sector Subject to SFAS 106
- (4) Labor Cost as a Share of Total Cost in Sector Not Subject to SFAS 106
- (5) Labor Supply Elasticity for U.S. Economy
- (6) Price Elasticity of Demand in each Sector

Results:

- Percentage of Telco's Additional SFAS 106 Costs -
- (A) Reflected in GNP-PI
- (B) Financed by Potential Reductions in National Average Wage Rate and Other Macroeconomic Effects
- (C) To be Met by Other Sources

(1)	(2)	(3) Labor Cost as % Total Cost		(4)	(5)	(6)	(A) (B) (C) % of Increm. SFAS 106 Costs		
% Chg. Labor Cost	Empl. Subj to FAS 106	Subj to FAS 106	Not Subj	Labor Supply Elast.	Price Elast. Demand	Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources	
2%	24%	50%	70%	0	1.5	0.2%	8.4%	91.3%	
2%	24%	50%	70%	0.1	1.5	1.6%	7.4%	91.0%	
2%	24%	50%	70%	0.2	1.5	2.8%	6.5%	90.7%	
2%	24%	50%	70%	0.3	1.5	4.0%	5.6%	90.4%	
2%	24%	50%	70%	0	3	0.4%	11.2%	88.4%	
2%	24%	50%	70%	0.1	3	1.4%	10.4%	88.2%	
2%	24%	50%	70%	0.2	3	2.4%	9.7%	88.0%	
2%	24%	50%	70%	0.3	3	3.3%	9.0%	87.8%	
2%	24%	64%	64%	0	1.5	0.3%	7.4%	92.4%	
2%	24%	64%	64%	0.1	1.5	1.7%	6.3%	92.0%	
2%	24%	64%	64%	0.2	1.5	3.1%	5.3%	91.7%	
2%	24%	64%	64%	0.3	1.5	4.3%	4.3%	91.4%	
2%	24%	64%	64%	0	3	0.5%	7.2%	92.3%	
2%	24%	64%	64%	0.1	3	1.9%	6.1%	92.0%	
2%	24%	64%	64%	0.2	3	3.2%	5.1%	91.6%	
2%	24%	64%	64%	0.3	3	4.5%	4.2%	91.3%	
2%	24%	78%	61%	0	1.5	0.3%	6.5%	93.3%	
2%	24%	78%	61%	0.1	1.5	1.8%	5.3%	92.9%	
2%	24%	78%	61%	0.2	1.5	3.3%	4.2%	92.5%	
2%	24%	78%	61%	0.3	1.5	4.6%	3.2%	92.2%	
2%	24%	78%	61%	0	3	0.5%	3.7%	95.8%	
2%	24%	78%	61%	0.1	3	2.3%	2.3%	95.4%	
2%	24%	78%	61%	0.2	3	4.0%	1.0%	95.0%	
2%	24%	78%	61%	0.3	3	5.6%	-0.2%	94.6%	
2%	32%	50%	74%	0	1.5	0.3%	11.3%	88.4%	
2%	32%	50%	74%	0.1	1.5	2.1%	9.9%	88.0%	

(1)	(2)	(3)	(4)	(5)	(6)	(A)	(B)	(C) PAGE 45 OF 48
		Labor Cost				% of Increm. SFAS 106 Costs		
	%	as % Total Cost						
% Chg.	Empl.	Subj to	Not	Labor	Price	Reflected	Other	To be met
Labor	Subj to	FAS 106	Subj	Supply	Elast.	in	Macrocon.	by Other
Cost	FAS 106	FAS 106	Subj	Elast.	Demand	GNP-PI	Effects	Sources
2%	32%	50%	74%	0.2	1.5	3.7%	8.7%	87.6%
2%	32%	50%	74%	0.3	1.5	5.3%	7.5%	87.2%
2%	32%	50%	74%	0	3	0.5%	15.0%	84.5%
2%	32%	50%	74%	0.1	3	1.8%	14.0%	84.2%
2%	32%	50%	74%	0.2	3	3.1%	13.0%	83.9%
2%	32%	50%	74%	0.3	3	4.3%	12.0%	83.7%
2%	32%	64%	64%	0	1.5	0.3%	9.8%	89.8%
2%	32%	64%	64%	0.1	1.5	2.2%	8.4%	89.4%
2%	32%	64%	64%	0.2	1.5	4.0%	7.0%	88.9%
2%	32%	64%	64%	0.3	1.5	5.7%	5.8%	88.5%
2%	32%	64%	64%	0	3	0.6%	9.7%	89.8%
2%	32%	64%	64%	0.1	3	2.5%	8.2%	89.3%
2%	32%	64%	64%	0.2	3	4.3%	6.9%	88.9%
2%	32%	64%	64%	0.3	3	5.9%	5.6%	88.5%
2%	32%	78%	59%	0	1.5	0.3%	8.7%	91.0%
2%	32%	78%	59%	0.1	1.5	2.4%	7.1%	90.5%
2%	32%	78%	59%	0.2	1.5	4.3%	5.6%	90.1%
2%	32%	78%	59%	0.3	1.5	6.1%	4.3%	89.6%
2%	32%	78%	59%	0	3	0.6%	5.1%	94.3%
2%	32%	78%	59%	0.1	3	3.0%	3.3%	93.7%
2%	32%	78%	59%	0.2	3	5.2%	1.6%	93.2%
2%	32%	78%	59%	0.3	3	7.3%	-0.1%	92.7%
2%	40%	50%	79%	0	1.5	0.3%	14.2%	85.4%
2%	40%	50%	79%	0.1	1.5	2.5%	12.5%	84.9%
2%	40%	50%	79%	0.2	1.5	4.6%	10.9%	84.4%
2%	40%	50%	79%	0.3	1.5	6.6%	9.5%	84.0%
2%	40%	50%	79%	0	3	0.5%	18.9%	80.6%
2%	40%	50%	79%	0.1	3	2.2%	17.6%	80.2%
2%	40%	50%	79%	0.2	3	3.8%	16.3%	79.9%
2%	40%	50%	79%	0.3	3	5.3%	15.1%	79.6%
2%	40%	64%	64%	0	1.5	0.3%	12.3%	87.3%
2%	40%	64%	64%	0.1	1.5	2.8%	10.5%	86.7%
2%	40%	64%	64%	0.2	1.5	5.0%	8.8%	86.2%
2%	40%	64%	64%	0.3	1.5	7.1%	7.2%	85.7%
2%	40%	64%	64%	0	3	0.6%	12.1%	87.3%
2%	40%	64%	64%	0.1	3	3.0%	10.3%	86.7%
2%	40%	64%	64%	0.2	3	5.3%	8.6%	86.1%
2%	40%	64%	64%	0.3	3	7.4%	7.0%	85.6%
2%	40%	78%	57%	0	1.5	0.4%	10.9%	88.8%
2%	40%	78%	57%	0.1	1.5	2.9%	8.9%	88.1%
2%	40%	78%	57%	0.2	1.5	5.3%	7.1%	87.6%
2%	40%	78%	57%	0.3	1.5	7.6%	5.4%	87.0%
2%	40%	78%	57%	0	3	0.6%	6.8%	92.6%
2%	40%	78%	57%	0.1	3	3.6%	4.5%	92.0%
2%	40%	78%	57%	0.2	3	6.4%	2.3%	91.3%
2%	40%	78%	57%	0.3	3	9.0%	0.2%	90.8%
3%	24%	50%	70%	0	1.5	0.5%	12.5%	87.0%

(1)	(2)	(3)		(4)	(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Labor Cost as % Total Cost		Not Subj	Labor Supply Elast.	Price Elast Demand	% of Increm. SFAS 106 Costs		
		Subj to FAS 106	Subj to FAS 106				Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
3%	24%	50%	70%	0.1	1.5	2.5%	11.0%	86.5%	
3%	24%	50%	70%	0.2	1.5	4.4%	9.5%	86.1%	
3%	24%	50%	70%	0.3	1.5	6.1%	8.2%	85.7%	
3%	24%	50%	70%	0	3	0.9%	16.5%	82.6%	
3%	24%	50%	70%	0.1	3	2.4%	15.3%	82.3%	
3%	24%	50%	70%	0.2	3	3.8%	14.2%	82.0%	
3%	24%	50%	70%	0.3	3	5.1%	13.2%	81.7%	
3%	24%	64%	64%	0	1.5	0.6%	10.9%	88.5%	
3%	24%	64%	64%	0.1	1.5	2.7%	9.3%	88.0%	
3%	24%	64%	64%	0.2	1.5	4.7%	7.7%	87.5%	
3%	24%	64%	64%	0.3	1.5	6.6%	6.3%	87.1%	
3%	24%	64%	64%	0	3	1.1%	10.5%	88.4%	
3%	24%	64%	64%	0.1	3	3.2%	8.9%	87.9%	
3%	24%	64%	64%	0.2	3	5.2%	7.4%	87.4%	
3%	24%	64%	64%	0.3	3	7.0%	6.0%	87.0%	
3%	24%	78%	61%	0	1.5	0.6%	9.5%	89.9%	
3%	24%	78%	61%	0.1	1.5	2.9%	7.8%	89.3%	
3%	24%	78%	61%	0.2	1.5	5.1%	6.1%	88.8%	
3%	24%	78%	61%	0.3	1.5	7.1%	4.6%	88.3%	
3%	24%	78%	61%	0	3	1.1%	5.2%	93.7%	
3%	24%	78%	61%	0.1	3	3.8%	3.2%	93.0%	
3%	24%	78%	61%	0.2	3	6.3%	1.3%	92.4%	
3%	24%	78%	61%	0.3	3	8.6%	-0.5%	91.9%	
3%	32%	50%	74%	0	1.5	0.6%	16.7%	82.6%	
3%	32%	50%	74%	0.1	1.5	3.3%	14.7%	82.0%	
3%	32%	50%	74%	0.2	1.5	5.8%	12.8%	81.4%	
3%	32%	50%	74%	0.3	1.5	8.1%	11.0%	80.9%	
3%	32%	50%	74%	0	3	1.0%	22.2%	76.8%	
3%	32%	50%	74%	0.1	3	3.0%	20.6%	76.4%	
3%	32%	50%	74%	0.2	3	4.9%	19.1%	76.0%	
3%	32%	50%	74%	0.3	3	6.7%	17.7%	75.6%	
3%	32%	64%	64%	0	1.5	0.7%	14.5%	84.8%	
3%	32%	64%	64%	0.1	1.5	3.6%	12.4%	84.1%	
3%	32%	64%	64%	0.2	1.5	6.2%	10.4%	83.4%	
3%	32%	64%	64%	0.3	1.5	8.8%	8.5%	82.8%	
3%	32%	64%	64%	0	3	1.3%	14.1%	84.6%	
3%	32%	64%	64%	0.1	3	4.1%	12.0%	83.9%	
3%	32%	64%	64%	0.2	3	6.7%	10.0%	83.3%	
3%	32%	64%	64%	0.3	3	9.2%	8.1%	82.7%	
3%	32%	78%	59%	0	1.5	0.7%	12.8%	86.5%	
3%	32%	78%	59%	0.1	1.5	3.8%	10.4%	85.8%	
3%	32%	78%	59%	0.2	1.5	6.7%	8.3%	85.1%	
3%	32%	78%	59%	0.3	1.5	9.3%	6.2%	84.4%	
3%	32%	78%	59%	0	3	1.3%	7.4%	91.4%	
3%	32%	78%	59%	0.1	3	4.8%	4.6%	90.5%	
3%	32%	78%	59%	0.2	3	8.2%	2.1%	89.8%	
3%	32%	78%	59%	0.3	3	11.3%	-0.3%	89.1%	

(1)	(2)	(3) Labor Cost as % Total Cost		(4)	(5)	(A)	(B)	(C)
Chg.	Empl.	Subj to	Not	Labor	Price	Reflected	Other	To be met
Labor	Subj to	FAS 106	Subj	Supply	Elast.	in	Macroecon.	by Other
Cost	FAS 106	FAS 106	Subj	Elast	Demand	GNP-PI	Effects	Sources
%	%	%	%	%	%	%	%	%
3%	40%	50%	79%	0	1.5	0.7%	21.1%	78.2%
3%	40%	50%	79%	0.1	1.5	4.0%	18.6%	77.4%
3%	40%	50%	79%	0.2	1.5	7.1%	16.2%	76.7%
3%	40%	50%	79%	0.3	1.5	10.0%	14.0%	76.0%
3%	40%	50%	79%	0	3	1.1%	28.0%	70.9%
3%	40%	50%	79%	0.1	3	3.6%	25.9%	70.4%
3%	40%	50%	79%	0.2	3	6.0%	24.0%	70.0%
3%	40%	50%	79%	0.3	3	8.3%	22.2%	69.5%
3%	40%	64%	64%	0	1.5	0.8%	18.2%	81.0%
3%	40%	64%	64%	0.1	1.5	4.4%	15.5%	80.1%
3%	40%	64%	64%	0.2	1.5	7.7%	13.0%	79.3%
3%	40%	64%	64%	0.3	1.5	10.9%	10.6%	78.5%
3%	40%	64%	64%	0	3	1.4%	17.7%	80.9%
3%	40%	64%	64%	0.1	3	4.9%	15.1%	80.0%
3%	40%	64%	64%	0.2	3	8.3%	12.6%	79.2%
3%	40%	64%	64%	0.3	3	11.4%	10.2%	78.4%
3%	40%	78%	57%	0	1.5	0.8%	16.1%	83.2%
3%	40%	78%	57%	0.1	1.5	4.6%	13.2%	82.2%
3%	40%	78%	57%	0.2	1.5	8.2%	10.5%	81.4%
3%	40%	78%	57%	0.3	1.5	11.5%	7.9%	80.5%
3%	40%	78%	57%	0	3	1.4%	9.7%	88.9%
3%	40%	78%	57%	0.1	3	5.8%	6.3%	87.9%
3%	40%	78%	57%	0.2	3	9.9%	3.1%	87.0%
3%	40%	78%	57%	0.3	3	13.8%	0.1%	86.1%
4.5%	24%	50%	70%	0	1.5	1.1%	18.3%	80.6%
4.5%	24%	50%	70%	0.1	1.5	4.1%	16.1%	79.8%
4.5%	24%	50%	70%	0.2	1.5	6.9%	14.0%	79.2%
4.5%	24%	50%	70%	0.3	1.5	9.4%	12.0%	78.6%
4.5%	24%	50%	70%	0	3	1.9%	24.1%	74.0%
4.5%	24%	50%	70%	0.1	3	4.1%	22.4%	73.5%
4.5%	24%	50%	70%	0.2	3	6.2%	20.8%	73.0%
4.5%	24%	50%	70%	0.3	3	8.2%	19.2%	72.6%
4.5%	24%	64%	64%	0	1.5	1.3%	15.9%	82.8%
4.5%	24%	64%	64%	0.1	1.5	4.5%	13.5%	82.0%
4.5%	24%	64%	64%	0.2	1.5	7.4%	11.3%	81.3%
4.5%	24%	64%	64%	0.3	1.5	10.2%	9.2%	80.6%
4.5%	24%	64%	64%	0	3	2.3%	15.1%	82.6%
4.5%	24%	64%	64%	0.1	3	5.4%	12.8%	81.8%
4.5%	24%	64%	64%	0.2	3	8.4%	10.6%	81.1%
4.5%	24%	64%	64%	0.3	3	11.1%	8.5%	80.4%
4.5%	24%	78%	61%	0	1.5	1.4%	13.8%	84.8%
4.5%	24%	78%	61%	0.1	1.5	4.8%	11.3%	84.0%
4.5%	24%	78%	61%	0.2	1.5	8.0%	8.9%	83.2%
4.5%	24%	78%	61%	0.3	1.5	11.0%	6.6%	82.4%
4.5%	24%	78%	61%	0	3	2.5%	7.2%	90.3%
4.5%	24%	78%	61%	0.1	3	6.4%	4.2%	89.4%
4.5%	24%	78%	61%	0.2	3	10.1%	1.4%	88.5%

(1)	(2)	(3)	(4)	(5)	(6)	(A)	(B)	(C)
% Chg. Labor Cost	Empl. Subj to FAS 106	Labor Cost as % Total Cost		Labor Supply Elast.	Price Elast Demand	% of Increm. SFAS 106 Costs		
		Subj to FAS 106	Not Subj			Reflected in GNP-PI	Other Macroecon. Effects	To be met by Other Sources
4.5%	24%	78%	61%	0.3	3	13.6%	-1.2%	87.7%
4.5%	32%	50%	74%	0	1.5	1.4%	24.6%	74.0%
4.5%	32%	50%	74%	0.1	1.5	5.3%	21.6%	73.1%
4.5%	32%	50%	74%	0.2	1.5	9.0%	18.8%	72.2%
4.5%	32%	50%	74%	0.3	1.5	12.4%	16.2%	71.4%
4.5%	32%	50%	74%	0	3	2.2%	32.5%	65.3%
4.5%	32%	50%	74%	0.1	3	5.2%	30.1%	64.6%
4.5%	32%	50%	74%	0.2	3	8.0%	27.9%	64.1%
4.5%	32%	50%	74%	0.3	3	10.6%	25.9%	63.5%
4.5%	32%	64%	64%	0	1.5	1.5%	21.3%	77.2%
4.5%	32%	64%	64%	0.1	1.5	5.8%	18.1%	76.1%
4.5%	32%	64%	64%	0.2	1.5	9.8%	15.1%	75.1%
4.5%	32%	64%	64%	0.3	1.5	13.5%	12.3%	74.2%
4.5%	32%	64%	64%	0	3	2.8%	20.3%	76.9%
4.5%	32%	64%	64%	0.1	3	7.0%	17.2%	75.8%
4.5%	32%	64%	64%	0.2	3	10.9%	14.3%	74.9%
4.5%	32%	64%	64%	0.3	3	14.5%	11.5%	73.9%
4.5%	32%	78%	59%	0	1.5	1.6%	18.6%	79.8%
4.5%	32%	78%	59%	0.1	1.5	6.2%	15.2%	78.7%
4.5%	32%	78%	59%	0.2	1.5	10.4%	12.0%	77.6%
4.5%	32%	78%	59%	0.3	1.5	14.4%	9.0%	76.6%
4.5%	32%	78%	59%	0	3	2.8%	10.3%	86.9%
4.5%	32%	78%	59%	0.1	3	8.1%	6.3%	85.6%
4.5%	32%	78%	59%	0.2	3	13.0%	2.5%	84.5%
4.5%	32%	78%	59%	0.3	3	17.6%	-1.1%	83.4%
4.5%	40%	50%	79%	0	1.5	1.6%	31.0%	67.4%
4.5%	40%	50%	79%	0.1	1.5	6.5%	27.3%	66.3%
4.5%	40%	50%	79%	0.2	1.5	11.0%	23.8%	65.2%
4.5%	40%	50%	79%	0.3	1.5	15.3%	20.5%	64.2%
4.5%	40%	50%	79%	0	3	2.5%	41.0%	56.5%
4.5%	40%	50%	79%	0.1	3	6.2%	38.0%	55.8%
4.5%	40%	50%	79%	0.2	3	9.7%	35.2%	55.1%
4.5%	40%	50%	79%	0.3	3	13.0%	32.6%	54.4%
4.5%	40%	64%	64%	0	1.5	1.7%	26.7%	71.6%
4.5%	40%	64%	64%	0.1	1.5	7.0%	22.7%	70.3%
4.5%	40%	64%	64%	0.2	1.5	12.0%	19.0%	69.0%
4.5%	40%	64%	64%	0.3	1.5	16.7%	15.5%	67.9%
4.5%	40%	64%	64%	0	3	3.1%	25.7%	71.3%
4.5%	40%	64%	64%	0.1	3	8.3%	21.7%	69.9%
4.5%	40%	64%	64%	0.2	3	13.2%	18.0%	68.7%
4.5%	40%	64%	64%	0.3	3	17.8%	14.6%	67.6%
4.5%	40%	78%	57%	0	1.5	1.7%	23.5%	74.8%
4.5%	40%	78%	57%	0.1	1.5	7.4%	19.2%	73.4%
4.5%	40%	78%	57%	0.2	1.5	12.7%	15.2%	72.1%
4.5%	40%	78%	57%	0.3	1.5	17.7%	11.4%	70.8%
4.5%	40%	78%	57%	0	3	3.0%	13.7%	83.3%
4.5%	40%	78%	57%	0.1	3	9.5%	8.7%	81.8%
4.5%	40%	78%	57%	0.2	3	15.7%	3.9%	80.4%
4.5%	40%	78%	57%	0.3	3	21.5%	-0.5%	79.0%

## **Appendix H.2**

**TOTAL NYNEX SFAS-112 BENEFITS MATRIX  
1993 IMPLEMENTATION**

Please note that these estimates do not include any severance accruals and are based on the current work force levels.

<b>Benefit Type</b>	<b>1992 Costs</b>	<b>Valuation Method</b>	<b>Projected SFAS 112 Costs</b>	<b>Incremental Costs</b>
ST Disability - Medical	(1A) 44,912,925	Avg. Cost X # Employees X Avg. Time Out	10,025,094 (1B)	417,653 (1C)
ST Disability - Salary	44,912,925	Avg. Salary X # Employees X Avg. Time Remain	48,042,152 (2A)	2,001,470 (2B)
LT Disability - Medical	2,770,876	Avg. Cost X # Employees X Avg Time Remain	22,166,112 (3)	19,395,236 (3)
LT Disability - Salary	2,933,853	Avg. Salary X # Employees X Avg. Time Remain	19,227,261 (4)	16,293,408 (4)
Workers Compensation	27,990,761	Based on Claims And Actuarial	148,280,985 (5)	120,290,224 (5)
Disability Pensions	9,070,958	Actuarial/ SFAS 87	39,868,100 (6)	30,797,142 (6)
Group Life	N/A	N/A	0 (7)	0 (7)
Accidental Dismemberment	N/A	N/A	0 (8)	0 (8)
<b>Total</b>	<b>\$87,679,373</b>		<b>\$287,609,704</b>	<b>\$189,195,133</b> *

\* This represents the liability that would be recorded upon implementation and shown as a change in accounting principle.

SFAS 112 BENEFITS EXPLANATIONS  
Total NYNEX - 1993

(A) Unable to specifically identify. Carrier does not track medical payments for employees on Short-term disability separately since they are still considered to be active employees.

(B) Calculated as Follows:

\$4,302 Avg Cost Per NYNEX Employee X 13,982 annual avg employees on ST Disability X 2 mos./12mos.

Avg. Time Out = \$10,025,094 Total Cost Per Year for NYNEX

The source of Avg. Medical Cost was provided by the NYNEX Benefits Dept. and the actual # of employees was provided by NAFPS.

(C) Calculated as Follows:

\$358.50 (\$4,302/12) monthly medical cost\* X 1,165 (13,982/12) # of employees on ST disability at any time = \$417,653

\*Only one month accrual is needed for SFAS 112, since one month is already accrued for.

(2A) Calculated as Follows:

13,982 avg. employees on ST disability x \$3,436 avg. salary cost for a NYNEX employee on ST Disability = \$48,042,152

Total Cost Per Year for NYNEX

(2B) Calculated as Follows:

\$1,718 (\$3,436/2 mos.) X 1,165 (13,982/12mos) # of employees are ST disability at any point in time = \$2,001,470

Avg. 1992 Salary Cost:

Total 1992 Cost/Number of Employees on ST disability in 1992

\$44,912,926/13,071 (These actual amounts were provided by NAFPS)

Avg Salary Cost During Disability Period = \$3,436

(3) Calculated as Follows:

Avg. Medical Cost Per Employee on LTD X # Employees on LTD X Avg. Time Remaining

\$7,783 X 356 X 7 years = \$19,395,236

The avg. medical cost per employee, # of employees on LTD and the avg. time remaining were provided by Blue Cross/Blue Shield, the administrator for the medical portion of LTD.

Medical inflation and the discount rate are assumed to be equal.

(4) Calculated as Follows:

1992 LT Disability Actually Paid X Avg Time Remaining

\$2,933,853 X 7 years = \$20,536,971

The 1992 disability actually paid and the avg. time remaining were provided by Prudential, the administrator of the salary portion of LTD.

Amount was then discounted at 8.5% resulting in a figure of \$16,293,408

(5) Total exposure for known claims based on internal review of files.

External actuarial calculation was performed, but is subject to change pending further review.

Discounted at 8 1/2% ( \$92,849,200 - NYT, \$20,271,024 - NET) (Estimate \$10.0M X .717 = \$7,170,000 all other subsidiaries)

(6) Employees who are currently receiving disability pensions must continue to

be paid out of operating funds, however, may be accounted for under SFAS 112

Future eligible employees will be covered under SFAS 87, and may be funded

with pension fund assets if approved by the BOD. Medical costs are included in SFAS 106.

(7) Will not result in any SFAS 112 Cost since amount is already accrued for as

part of the monthly group life insurance accrual.

(8) Currently only four employees have received this benefit, therefore, based

on materiality exclude from SFAS 112 Costs. Will be monitored on a going

forward basis.