

BEFORE THE
STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

**In the Matter of the Application of : Verizon
New Jersey Inc. For Approval :
(i) of a New Plan for an Alternative Form :
of Regulation and (ii) to Reclassify Multi- : BPU Docket No. TO01020095
line Rate Regulated Business Service as :
Competitive Services, and Compliance :
Filing :**

Direct Testimony
of

ROGER D. COLTON

On Behalf of the
New Jersey Division of the
Ratepayer Advocate

May 15, 2001

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. My name is Roger Colton. My address is 34 Warwick Road, Belmont, MA 02478.

3 **Q. FOR WHOM DO YOU WORK AND IN WHAT CAPACITY?**

4 A. I am a principal in the firm of Fisher, Sheehan & Colton, Public Finance and General
5 Economics (FSC). I provide technical assistance to a variety of state agencies, consumer
6 organizations and public utilities on rate and customer service issues involving telephone,
7 natural gas, electric and water/sewer utilities.

8 **Q. PLEASE DESCRIBE YOUR INVOLVEMENT WITH ISSUES CONCERNING**
9 **TELECOMMUNICATION ISSUES.**

10 A. I have been involved with telecommunications issues for over fifteen years. Most recently,
11 I have served as the consultant to the "consumer organizations" (including two
12 community-based organizations and the Ohio Office of Consumer Counsel) who sit on the
13 committee overseeing Ameritech Ohio's study of "non-telephone households" in its service
14 territory. I was a witness in the Ameritech Ohio/SBC merger proceeding before the
15 Public Utility Commission of Ohio (PUCO) for the Edgemont Neighborhood Association,
16 a Dayton-based community organization. In 1998, I was invited to speak at the annual
17 NARUC meeting (November 1998) on the impacts of telecommunications competition on
18 low-income and other hard-to-serve consumers. Over the past ten years, I have testified
19 before state regulatory commissions in Massachusetts, Rhode Island, Connecticut,
20 Pennsylvania, Colorado and California, and have engaged in research supported by
21 regulatory commissions (or NASUCA offices) in Florida, Michigan and California on

1 issues involving telecommunication needs. A brief description of my telecommunications
2 work is included as Schedule RDC-1.

3 **Q. HAVE YOU TESTIFIED BEFORE THE NEW JERSEY BOARD OF PUBLIC**
4 **UTILITIES BEFORE?**

5 A. Yes. I have testified before the Board in a variety of cases involving low-income
6 telecommunications and energy issues.

7 **Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY TODAY.**

8 A. The purpose of my testimony is to consider the universal service impacts of Verizon-New
9 Jersey's (VNJ) proposed Modified Plan for an Alternative Form of Regulation. More
10 specifically, after an introduction, my testimony is divided into the following parts:

- 11
- 12 1. *Part One* will review the extent to which VNJ's analysis of "affordability" of service
13 comports with the statutory criteria.
 - 14 2. *Part Two* advances three conditions which I recommend be placed upon any regulatory
15 approval of VNJ's proposals in this proceeding. In particular, I recommend that for all the
16 reasons explained throughout my testimony, the Board require VNJ to fund its low-
17 income Lifeline program to allow low-income consumers to gain the full extent of federal
18 assistance for local phone service; to extend and expand its Access New Jersey funding for
19 the state's schools and libraries; and to create a High Cost Fund to promote competition in

1 high cost wire centers. The basis for each recommendation is explained in more detail
2 below.

3 **Q. ARE YOUR UNIVERSAL SERVICE RECOMMENDATIONS CONSISTENT**
4 **WITH EXISTING FEDERAL LAW?**

5 A. Yes. While federal law does not mandate what I recommend, the underlying policy and
6 recommendations are consistent. Section 101 of the Telecommunications Act of 1996, for
7 example, provides that "elementary and secondary schools and classrooms. . .and libraries
8 should have access to advanced telecommunication services." The Act emphasizes
9 connecting classrooms, not merely schools. Moreover, the 1996 Telecommunications Act
10 explicitly authorizes both a low-income universal service program and a high cost support
11 fund.

12 **PART 1: VNJ'S CONSIDERATION OF AFFORDABILITY.**

13 **Q. PLEASE SUMMARIZE VERIZON'S TESTIMONY REGARDING THE**
14 **AFFORDABILITY OF RESIDENTIAL TELEPHONE SERVICE.**

15 A. Verizon witnesses Harold West and William Taylor compare flat rate residential service to
16 per capita income in New Jersey. They conclude that "a high per capita income coupled
17 with a very low RBES rate makes the affordability of telephone service in New Jersey a
18 reality." (West/Taylor Direct, at 10). They argue:

19 . . .since the inception of Verizon NJ's PAR, telephone service in New
20 Jersey has become considerably *more* affordable. (emphasis in original). If
21 Verizon NJ's rates for basic telephone service had kept pace with the

1 growth in per capita income, i.e., if those rates had been maintained at the
2 level of 0.69% of per capita income, by 1999, Verizon NJ's highest RBES
3 rate including the SLC and Touch Tone would be set at \$20.50.

4 (West/Taylor Direct, at 12).

5 Mr. West and Dr. Taylor finally contend that VNJ's participation in the federal Link-Up
6 America and Lifeline Service programs meets its obligations to ensure the affordability of
7 service to low-income customers. (West/Taylor Direct, at 12-13). They state that the
8 Company's proposed "enhancements" to Lifeline and Link-Up "will further ensure the
9 affordability of protected telephone services." (West/Taylor Direct, at 13).

10 **Q. HOW SHOULD THE BOARD DEFINE "AFFORDABLE SERVICE" FOR**
11 **PURPOSES OF APPLYING THE STATUTORY CRITERIA?**

12 A. The term "affordable service" should be considered a term of art. As such, the term
13 "affordable service" should be defined in the same way the Federal Communications
14 Commission (FCC) defined the term in its May 1997 "universal service" order to
15 implement the Telecommunications Act of 1996. The FCC decided that the concept of
16 "affordability" includes both an "absolute" ("to have enough or the means for") and a
17 "relative" ("to bear the cost of without serious detriment") component. According to the
18 FCC, "both the absolute and relative components must be considered in making the
19 affordability determination required under the statute." (In the Matter of Federal-State

1 Joint Board on Universal Service, FCC Docket No. 96-45, FCC 97-157 (May 7, 1997), at
2 paragraphs 109, *et seq.*)

3 **Q. DOES VERIZON USE AN APPROPRIATE MODEL IN ASSESSING THE**
4 **AFFORDABILITY OF TELEPHONE SERVICE IN NEW JERSEY?**

5 A. No. Verizon's reliance on per capita income is inappropriate for two reasons. First, per
6 capita income is an average income taking into account all persons of all incomes. It does
7 not consider persons or households that deviate from the average. Second, per capita
8 income does not examine the economic unit that is purchasing telephone service. The
9 appropriate economic unit to consider is a household, not an individual.

10 **Q. WHY IS IT IMPORTANT TO DISTINGUISH BETWEEN AVERAGE INCOMES**
11 **AND THE INCOMES OF PEOPLE CONSIDERED TO BE "POOR"?**

12 A. The income of "poor" households falls far short of the average income in New Jersey.
13 Consider, for example, the year 2001, where the federal Poverty Level for a four-person
14 household is \$17,650, compared to the median household income (for a household of
15 four) of \$70,983. Schedule RDC-2 presents a comparison of annual Poverty Levels to
16 annual Median Incomes (New Jersey) for each year since 1996.

17 **Q. IS THERE A DIFFERENCE IN TELEPHONE PENETRATION RATES IN NEW**
18 **JERSEY BASED ON INCOME?**

1 A. Yes. The Federal Communications Commission periodically publishes a state-by-state
2 review of telephone penetration rates by income level. Holding incomes constant in 1984
3 dollars, the penetration rate for households with incomes of less than \$10,000 (1984\$)
4 was 88.9%, while the total statewide penetration rate was 94.9% in 1999. Schedule
5 RDC-3 presents each year for 1989 through 1999. Note, however, the significance of the
6 FCC's decision to hold incomes constant in 1984 dollars. The FCC states that a \$10,000
7 income (1984\$) is, in fact, \$16,082 in nominal dollars. This constant dollar income is thus
8 higher than 100% of the Year 2000 federal Poverty Level for 1-person, 2-person, and 3-
9 person households. The federal Poverty Levels by household size for the Year 2000 are
10 presented in Schedule RDC-4.

11 **Q. IS THERE ANY ANALYSIS BY NOMINAL INCOMES RATHER THAN**
12 **CONSTANT 1984 DOLLAR INCOMES?**

13 A. The FCC does not have a sufficient sample size to disaggregate telephone penetration
14 rates by income on a state-by-state basis. The FCC, however, does provide national
15 figures. Schedule RDC-5 presents those figures for 1989 through March 2000 for each
16 range of income below \$10,000. Note that there is a substantial difference in telephone
17 penetration rates even within the "below \$10,000" population. Very low-income
18 households have a penetration rate substantially below the penetration rate even for
19 households with incomes approaching \$10,000. The March 2000 data shows that the
20 penetration rate for households with incomes below \$5,000 was 80.3%, while the
21 penetration rate for households with incomes of \$7,500 - \$9,999 was 88.1%.

1 **Q. HOW MANY HOUSEHOLDS IN NEW JERSEY LIVE AT THESE LOWER**
2 **INCOME LEVELS?**

3 A. Schedule RDC-6 presents the number of households with incomes below \$5,000 by
4 county in New Jersey. While the most recent income data is from the 1990 Census, we
5 know that the number of households with these low-incomes continues to remain high in
6 New Jersey. Schedule RDC-7, for example, presents the number of New Jersey Low-
7 Income Home Energy Assistance Program (LIHEAP) recipients by income range for the
8 years 1990 through 1995 (the last year for which data is published). In 1995, nearly 50%
9 of the 186,000 LIHEAP recipients had incomes less than \$6,000.

10 **Q. PLEASE RESPOND TO THE VERIZON TESTIMONY REGARDING THE**
11 **AFFORDABILITY OF LOCAL VERIZON RATES OVER TIME.**

12 A. The testimony of West/Taylor argues that since Verizon's local rates have risen at a rate
13 slower than the increase in per capita income, Verizon local rates must be affordable.

14 According to the Verizon testimony:

15 In 1985, New Jersey's per capita income was \$17,652. By 1999, that figure rose
16 to \$33,551, an increase of 101%. . .If Touch Tone and the federal subscriber line
17 charge (SLC) are included in the analysis, the rate for residential local service has
18 increased from \$10.18 in 1985 to \$13.54 today -- a 33% increase. Thus, despite
19 the increase in the SLC from 1985 to the present (\$1.00 to \$4.35), this basket of
20 local exchange services has increased in price one-third as fast as per capita income
21 during the same period. Clearly, New Jersey's residence local exchange rates
22 remain affordable.

1 (West/Taylor Direct, at 11). This testimony again inappropriately relies on an examination
2 of average income and, in so doing, misstates the trends in income in New Jersey and, as a
3 result, the trends in telephone affordability.

4 New Jersey is one of the states in this country where there is a widening income disparity
5 gap. And that gap has accelerated in the past 15 years. While average per capita income
6 may have increased since 1985, that does not mean that all households have benefitted
7 from the increase. From the time period 1988-1990 to 1996-1998, for example, New
8 Jersey was one of only 15 states where the bottom fifth grew poorer while the top fifth
9 grew richer. During that time span, the poorest fifth of New Jersey households had an
10 income growth of *minus* \$1,339 (-7.1%), while the top fifth saw their income grow by
11 \$13,639 (9.0%). It is not simply the poor where this disparity is growing, however.
12 During the same time period, the income of the middle fifth of households "grew" by
13 *minus* \$1,833 (-2.9%), compared to the growth of the top fifth by \$13,639 (9.0%). These
14 are not short-term trends. In New Jersey, from the late 1970s to the late 1990s, the
15 poorest fifth of households in the state experienced an inflation-adjusted income increase
16 of \$1,290 (8%), while the wealthiest fifth of households experienced an inflation-adjusted
17 income increase of \$111,300 (69%).

18 In sum, to argue, as Verizon witnesses West/Taylor do, that local Verizon service remains
19 "affordable" because average per capita income has increased since 1985 does not present
20 an accurate picture. At the least, it should be noted that while Verizon local rates,

1 according to West/Taylor, increased by 31%, the incomes of the poorest fifth of
2 households in New Jersey *decreased* by seven percent (7.1%) in that same time period.

3 **Q. WHY IS IT IMPORTANT TO CONSIDER THE DISPARITY IN INCOME**
4 **WHEN CONSIDERING THE AFFORDABILITY OF TELEPHONE SERVICE?**

5 A. Considerable experience, including research from New Jersey itself, teaches why
6 consumers lack telephone service. For example, Jorge Schement (Department of
7 Communications, Rutgers University) found in his 1996 report *Beyond Universal Service:*
8 *Characteristics of Americans without Telephones, 1980 - 1993:*

9 Telephone penetration directly correlates to income. Although income is
10 not the only contributing variable, staying above the poverty level
11 significantly increases a family's chance of maintaining telephone service.
12 The positive effect of income might be obvious, but it needs reiteration. In
13 households receiving income from interest, dividends, rents, or estates,
14 telephone penetration averaged between 97.3% and 98.7%. The income
15 threshold for telephone service seems to be about \$20,000. Households
16 with incomes above \$20,000 have telephone penetration at the national
17 average or above. But once a family fails to earn at least \$20,000, the rate
18 of telephone penetration drops off.

19 Schement, at 2-3. In light of the impact of low levels of income on telephone
20 subscribership, it makes no sense to examine per capita income, which averages in the very
21 high incomes that have seen such a considerable upward push in recent years. An
22 examination of the "affordability" of local telephone service should consider the
23 affordability of lower levels of income where price may make the difference between
24 having telephone service or not having it.

1 **Q. WHAT IS THE PREVALENCE OF LOW-INCOME HOUSEHOLDS IN NEW**
2 **JERSEY?**

3 A. Poverty is substantial in New Jersey despite the strong economy. In 1999, more than
4 630,000 New Jersey residents lived with incomes below the federal Poverty Level. This
5 represented nearly eight percent (7.8%) of all New Jersey residents. Moreover, looking
6 only at persons at or below 100% of the Poverty Level does not really fully describe the
7 extent of poverty in New Jersey. A more common indicator involves persons with incomes
8 of at or below 175% of Poverty. The distribution of New Jersey residents at various
9 levels of Poverty is presented in Schedule RDC-8.

10 **Q. PLEASE SUMMARIZE THIS SECTION OF YOUR TESTIMONY.**

11 A. One of the explicit statutory criteria VNJ must meet in its filing is to maintain and promote
12 the affordability of local telephone service. The Company has not met that obligation.
13 Not only has VNJ presented a flawed analysis of what represents "affordability," but the
14 documentation presented above demonstrates that VNJ has failed to maintain affordable
15 telephone service. In light of the information discussed above, I conclude that low-income
16 New Jersey residents do not have access to VNJ telephone service because of its
17 unaffordability. I conclude further that there are a substantial number of low-income New
18 Jersey residents who fall into this category of lacking service due to its unaffordability. I
19 conclude finally that the affordability of VNJ service has decreased during the 1990s.

20 **PART 2:**

1 **UNIVERSAL SERVICE CONDITIONS TO BE PLACED ON**
2 **THE VNJ MODIFIED ALTERNATIVE REGULATORY PLAN.**

3 **Q. WHAT IS THE PURPOSE OF THIS PART OF YOUR TESTIMONY?**

4 A. My testimony in this section proposes that the New Jersey Board of Public Utilities adopt
5 three affirmative measures to assist the Company in obtaining universal telephone service,
6 primarily within the low-income community. First, I propose that VNJ enhance its Lifeline
7 program to ensure that low-income consumers gain the full extent of the federal telephone
8 assistance. Second, I propose an extension and expansion of the VNJ Access New Jersey
9 plan for schools and libraries. Finally, I propose a High Cost Fund to promote competition
10 in areas where local costs exceed that of the statewide average cost.

11 ***A. Enhanced Lifeline Program.***

12 **1. Lifeline Funding.**

13 **Q. PLEASE EXPLAIN YOUR RECOMMENDATION WITH RESPECT TO A VNJ**
14 **LIFELINE PROGRAM.**

15 A. I propose that VNJ's Lifeline program be extended to allow New Jersey consumers to gain
16 an additional \$1.75 federal matching credit. This extension would consist of a VNJ
17 commitment of \$3.50 per month, which would then be matched on a 1:2 basis (up to
18 \$1.75) by the federal government. When combined with the existing Lifeline credit, New
19 Jersey's low-income customers would receive the full available Lifeline benefit of \$10.50
20 in reductions on their monthly charges for local telephone service.

1 **Q. WHO SHOULD BE ELIGIBLE FOR THE VNJ LIFELINE PROGRAM?**

2 A. All households living with annual incomes of at or below 175% of the federal Poverty
3 Level should be eligible for the VNJ Lifeline program.

4 **Q. HOW WOULD ELIGIBILITY BE DETERMINED FOR THE VNJ LIFELINE**
5 **PROGRAM?**

6 A. I propose to create two doors through which entry to a VNJ Lifeline Program may be
7 gained: (1) categorical eligibility for participants of certain means-tested public benefit
8 programs; and (2) a broader eligibility for households with annual incomes of at or below
9 175% of the federal Poverty Level.

10 **Q. PLEASE EXPLAIN THE PROCESS OF CATEGORICAL ELIGIBILITY.**

11 A. Low-income households who participate in the following public benefit programs should
12 categorically be permitted to participate in the VNJ Lifeline program: Food Stamps;
13 Temporary Aid to Needy Families (TANF); Medicaid; the Low-Income Home Energy
14 Assistance Program (LIHEAP); state or federal public housing; Section 8 assisted
15 housing; and Supplement Security Income (SSI).

16 **Q. HOW SHOULD CATEGORICALLY ELIGIBLE CUSTOMERS BE ENROLLED**
17 **IN LIFELINE?**

18 A. New Jersey should use the same automatic enrollment process adopted by utility
19 regulators in New York and Ohio. Regulators in both of those states have adopted

1 processes for their telephone lifeline programs, through which customers participating in
2 designated programs are automatically enrolled in the telephone lifeline program. In
3 directing expansion of this automatic approach to all telephone companies in 1996, the
4 New York Public Service Commission (PSC) stated that:

5 we support the automatic enrollment/removal programs for Lifeline service being
6 implemented by New York Telephone Company and Rochester Telephone, and we
7 will direct staff to pursue their expansion to other companies. This program
8 provides assistance to eligible consumers in an efficient manner and ensures that
9 only those who are eligible continue to receive assistance.^{\1\}

10 In addition, in extending a pilot program to become a permanent program for Ameritech's
11 "USA" Lifeline, the Ohio Commission explained:

12 The current pilot automatic enrollment program enrolls customers in qualifying
13 programs (Medicaid, Food Stamps, Ohio Works First, Disability Assistance) based
14 on data provided by the [Ohio Department of Human Services]. The current pilot
15 program is based on a file of eligible persons supplied by ODHS using social
16 security numbers as the validation field. Ameritech performs the automatic
17 enrollment process no less than once per quarter or within 30 days of receiving
18 updated information from ODHS. . In addition to the statewide extension of the
19 USA Plan 1 automatic enrollment program described above, Ameritech has also
20 agreed to conduct a USA Plan 1 automatic enrollment pilot in an NPA, to be
21 identified by Staff with input from the consumer groups supporting this
22 Stipulation, that includes additional qualifying USA programs (HEAP, E-HEAP,
23 or an equivalent successor program, Ohio Energy Credits, SSI, and Federal Public
24 Housing Assistance and Section 8) subject to the availability of the necessary data.
25 The pilot will be conducted in the same manner as the current 614 NPA automatic
26 enrollment pilot program.^{\2\}

\1\ New York PSC, Opinion and Order 96-13, Docket 96-13, I/M/O Issues Related to Continuing Provision of Universal Service and to Develop a Framework for the Transition to Competition in the Local Exchange Market, at 11, May 22, 1996.

\2\ Ohio PUC, Opinion and Order, at 7 - 8, In the Matter of the Application of Ameritech Ohio (Formerly known as the Ohio Bell Telephone Company) for Approval of an Alternative Form of Regulation, Case No. 93-487-TP-ALT, April 27, 2000.

1 **Q. WHY DO YOU SUPPORT CATEGORICAL ELIGIBILITY ALONG WITH**
2 **AUTOMATIC ENROLLMENT?**

3 A. At least three reasons support a categorical eligibility determination:

- 4 1. There is no reason for VNJ to engage in the time and expense of certifying income
5 for a population whose income is already certified by existing public benefits
6 programs;
- 7 2. Requiring low-income households to apply to their local utility, and lay out their
8 household income to an institution (VNJ) that frequently stands in the role as a
9 creditor, will make the program inherently self-limiting; and
- 10 3. The very act of requiring a "sign-up process" limits program participation,
11 irrespective of the type of program offered (and by whom). To the extent that
12 such processes can be minimized, participation rates will be maximized.

13 **Q. IS THIS USE OF CATEGORICAL ELIGIBILITY AN ACCEPTED MECHANISM**
14 **FOR ENROLLING PERSONS IN PUBLIC ASSISTANCE PROGRAMS?**

15 A. Yes. Categorical eligibility is commonly referred to as "adjunctive eligibility." Adjunctive
16 eligibility has, for example, been adopted to link SSI with Medicaid. Federal law now
17 authorizes that enrollment in SSI will automatically establish a person's eligibility for
18 Medicaid. In addition, the federal WIC program uses adjunctive eligibility. In 1989,
19 Congress authorized WIC agencies to begin to accept an applicant's documented
20 participation in Medicaid, Food Stamps and AFDC (now known as TANF) as evidence of

1 income eligibility for WIC. Today, fully two-thirds of WIC participants are enrolled
2 through the adjunctive eligibility process.¹³¹

3 **Q. WHAT IS THE SECOND MECHANISM THAT SHOULD BE USED FOR**
4 **ENROLLMENT IN THE LIFELINE PROGRAM?**

5 A. Not all low-income households participate in a means-tested benefits program. To limit
6 entry into the Lifeline program exclusively to the use of automatic enrollment would
7 exclude these households. Households who live with annual incomes of at or below 175%
8 of the federal Poverty Level should be allowed to participate in Lifeline upon a self-
9 certification of their incomes to VNJ.

10 **Q. WHY IS THERE A NEED TO HAVE AN ELIGIBILITY CRITERION BROADER**
11 **THAN PARTICIPATION IN PUBLIC ASSISTANCE PROGRAMS?**

12 A. The number and proportion of persons receiving public assistance is decreasing today,
13 completely unrelated to the decrease in poverty. A 1999 Urban Institute study found that
14 the typical wage of parents leaving welfare work for \$6.61 an hour. At that wage level,
15 many families with a working parent would remain poor. In addition, the data indicate
16 that fewer low-income families are receiving food stamps today. In 1994, roughly 88
17 percent of poor children received food stamps. By 1998, that figure had fallen to 72
18 percent.

¹³¹ U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis and Evaluation, *Study of WIC Participant and Program Characteristics 1996: Final Report*, at 47.

1 **Q. IS THERE A SPECIFIC POPULATION THAT WOULD PARTICULARLY**
2 **BENEFIT FROM AN INCOME-BASED ELIGIBILITY (RATHER THAN**
3 **EXCLUSIVE RELIANCE ON CATEGORICAL ELIGIBILITY)?**

4 A. Yes. The working poor will be one population that categorical eligibility will likely
5 exclude from participation in needed telecommunication lifeline programs. Working poor
6 families, for example, typically do not receive welfare cash assistance, and only about one-
7 third of working poor families participate in the food stamp program. There are two
8 primary reasons this is true. The first is that many low-income families are not eligible for
9 assistance. In the typical state, eligibility for cash welfare ends when earnings reach just
10 70 percent of the poverty level. In addition, in some programs, ownership of even a
11 modestly priced automobile makes families ineligible for assistance, even if the car is
12 needed to get to and from work.

13 **Q. WHAT DO YOU CONCLUDE?**

14 A. Considering the relatively low rate of participation in public assistance programs by low-
15 income working families, and the recent dramatic declines in participation, lifeline
16 eligibility rules that restrict access to families receiving some form of public assistance are
17 outdated and inappropriate.

18 **Q. WHAT IS YOUR ESTIMATE OF THE TOTAL ELIGIBLE POPULATION?**

19 A. The three year average Poverty rate for New Jersey for the years 1997 - 1999 was 8.5%.
20 Assuming that the relationship between the number of households at 101 - 175% of

Poverty remains relatively constant over time, this yields an estimated 15.5% of the total population that lives with annual incomes of at or below 175% of the federal Poverty Level. New Jersey had 2,956,576 households in 1999. In 1999, New Jersey thus had an estimated 513,000 households living at or below 175% of the federal Poverty Level. Assuming a telephone penetration rate of 88%, roughly 451,000 of these low-income households will have telephone service.

Q. WILL ALL ELIGIBLE HOUSEHOLDS ACTUALLY PARTICIPATE IN A TELEPHONE LIFELINE PROGRAM?

A. No. The categorical eligibility process proposed for the Lifeline program will yield a somewhat higher participation rate than would processes that are initiated by a customer first contacting the company. It is not unreasonable to expect two-thirds of all low-income households to enter the Lifeline program. This participation rate would yield 302,000 telephone Lifeline participants statewide.

Q. WHAT IS THE ANNUAL COST OF YOUR PROPOSED LIFELINE PROGRAM?

A. Given an additional credit of \$3.50 per customer per month, the annual statewide cost would be as follows:

Participants	Cost/Month	Months/Year	Annual Cost
302,000	\$3.50	12	\$12,684,000

I have adjusted this downward to account for the fact that VNJ serves roughly 96% of New Jersey's residential customers. The total VNJ cost would thus be \$12.2 million.

1 **Q. WHAT SERVICES WOULD THIS FUND SUPPORT?**

2 A. Support for low income customers should be based on the following criteria for Universal

3 Service:

4 • Single party, voice-grade access line, with defined levels of usage;

5 • Touch-tone service;

6 • Access to emergency services, operator services, interexchange service, and
7 directory assistance;

8 • Toll blocking and toll limitations for low-income consumers; and

9 • A white page listing.

10 This definition is generally consistent with definitions of Universal Service previously
11 approved by the BPU. It is also not inconsistent with the definition of universal service
12 adopted by the FCC in its Report and Order of May 1997.

13 **2. Lifeline Structure.**

14 **Q. ASIDE FROM YOUR FUNDING RECOMMENDATIONS, DO YOU HAVE**
15 **RECOMMENDATIONS ON HOW THE VERIZON LIFELINE PROGRAM**
16 **SHOULD OPERATE?**

17 A. Yes. The Verizon lifeline program should be based on the Ohio Plan which the Company,
18 as a condition of its FCC merger approval, committed to presenting to state regulators.

19 **Q. PLEASE EXPLAIN THE LIFELINE PROPOSAL THAT VNJ HAS FILED WITH**
20 **THE BOARD PURSUANT TO ITS FCC MERGER APPROVAL.**

1 A. The VNJ Lifeline filing is to fulfill conditions the FCC adopted in approving the Bell
2 Atlantic/GTE Corporation merger. One of those merger conditions was for Verizon to
3 file a new stand-alone Lifeline plan comparable to the Ohio USA lifeline plan set forth in
4 Ameritech Ohio's Alternative Regulatory Plan in the areas of subscriber eligibility,
5 discounts and eligible service. On July 5, 2000, VNJ submitted an "offer to file a new
6 tariff" pursuant to the FCC conditions. I have appended a copy of that July 5, 2000 filing
7 as Attachment A. In addition, to further explain the Lifeline filing, I have appended as
8 Attachment B the VNJ responses to the Staff Data Requests SR-26 through SR-31
9 (Docket No. TO99120934), and the VNJ response to Ratepayer Advocate Data Request
10 RPA-109 from the current proceeding

11 **Q. DO YOU ENDORSE ADOPTION OF THE VNJ LIFELINE PROPOSAL AS**
12 **ADEQUATELY ADDRESSING THE LIFELINE ISSUES YOU PRESENT**
13 **ABOVE?**

14 A. Yes. Approval of the VNJ filing, with modifications as discussed below, would be an
15 appropriate resolution of the low-income Lifeline issues which I raise in my direct filing.

16 **Q. DO YOU HAVE CONCERNS ABOUT THE VNJ FILING?**

17 A. Yes. Attachment 1 to the July 5, 2000 filing provides that customer may self-verify, on
18 company-provided forms, their eligibility for the program. In addition, the Company
19 provides that it "will make available where on-line access can be negotiated with state

1 agencies" the on-line verification of eligibility. The Company further states that it will
2 provide a toll-free telephone number and fax number for inquiries and "receipt of
3 documentation." This enrollment process proposed by VNJ does not fully reflect the
4 enrollment practices adopted as part of the Ameritech Ohio USA program. As I noted
5 above, the Ameritech Ohio USA program incorporates a categorical eligibility procedure.
6 The Public Utility Commission of Ohio (PUCO) order extending the automatic enrollment
7 process to become statewide and permanent explains the process as follows:

8 The current pilot automatic enrollment program enrolls customers in qualifying
9 programs (Medicaid, Food Stamps, Ohio Works First, Disability Assistance) based
10 on data provided by the [Ohio Department of Human Services]. The current pilot
11 program is based on a file of eligible persons supplied by ODHS using social
12 security numbers as the validation field. Ameritech performs the automatic
13 enrollment process no less than once per quarter or within 30 days of receiving
14 updated information from ODHS.^{4\}

15 For all of the reasons I outline above, and because the FCC merger condition required
16 VNJ's program to reflect the Ameritech Ohio USA plan, I urge the Board to adopt the
17 categorical eligibility process as used in the Ameritech-Ohio USA program.

18 **Q. GIVEN THE CATEGORICAL ELIGIBILITY PROCESS WHICH YOU**
19 **RECOMMEND, ARE THERE ENROLLMENT ISSUES THAT SHOULD BE**
20 **ADDRESSED WITHIN THE DESIGN OF THE VNJ LIFELINE PROGRAM?**

\4\ Ohio PUC, Opinion and Order, at 7 - 8, In the Matter of the Application of Ameritech Ohio (Formerly known as the Ohio Bell Telephone Company) for Approval of an Alternative Form of Regulation, Case No. 93-487-TP-ALT, April 27, 2000.

1 A. Yes. One important aspect of program enrollment is the time from the first contact which
2 a potential enrollee has with the Company to the time that customer is enrolled in the
3 program. The longer that time period extends, the less likely it is that the customer will
4 stick with it and be successful in obtaining telephone service at rates offered under the
5 Lifeline program. A performance goal of limiting the time period from the date of first
6 contact to the date of enrollment to no more than ten working days should be adopted.

7 Moreover, the Ameritech-Ohio USA program has documented substantial problems with
8 the implementation of the program regulation which states that USA participants may not
9 subscribe to additional vertical services. The problem which emerged relates to the fact
10 that company personnel are paid incentives to sell vertical services. Unless VNJ personnel
11 are paid incentives to enroll Lifeline customers at least equal to the incentives paid for the
12 sale of vertical services, there is an incentive for customer service contacts to focus on the
13 sale of services that would disqualify low-income consumers from participating in the
14 Lifeline program. VNJ should adopt the Ameritech-Ohio procedure through which
15 Lifeline enrollment incentive payments are made equal to those incentives paid for the sale
16 of vertical services.

17 **Q. IS THERE ANY OTHER OPERATIONAL ASPECT OF THE AMERITECH-**
18 **OHIO LIFELINE THAT IS PARTICULARLY IMPORTANT TO IMPLEMENT?**

19 A. Yes. As indicated by Attachment 1 (page 2 of 2), the Ameritech-Ohio Lifeline plan
20 consists not only of eligibility, discounts and an articulation of eligible services, but of

1 operational characteristics as well. In Ohio, the Ameritech-Ohio Lifeline program is
2 overseen by an Advisory Committee. The Advisory Committee is comprised of company,
3 consumer, and low-income representatives (the PUCO sits on the Committee in an
4 advisory capacity). The Advisory Committee is charged with evaluating the success of the
5 USA program and with assessing the number of eligible customers that participate. The
6 Committee is further charged with providing advice to the Company on issues such as
7 (amongst others):

- 8 Ë Promotional, educational and training programs relating to USA;
- 9 Ë Adequate notice to non-flat-rate customers as to the availability of flat rate
10 services and whether the customer may be "better off" by switching;
- 11 Ë Enrollment procedures; and
- 12 Ë A benchmark for evaluating the success of USA and its enrollment.

13 The Ameritech-Ohio Committee was originally designed to meet three times a year, but
14 can meet as often as it deems necessary.

15 In Ohio, the Ameritech-Ohio USA Advisory Committee has played a critical role in
16 ensuring the proper implementation of the USA program. I have found with other
17 utilities, as well, that such advisory committees help the company to appropriately
18 implement program designs. In addition, such committees play an important watchdog
19 role over program implementation. The creation of the Advisory Committee was a critical
20 element in the implementation of the Ameritech-Ohio USA program. Such a committee
21 should be constituted in New Jersey as well.

1 **Q. PLEASE EXPLAIN YOUR NEXT CONCERN?**

2 A. The VNJ filing requires that a customer "must be *currently participating* in one of the
3 identified programs in order for that customer to participate in the Lifeline program. The
4 "current participation" test severely limits the use of programs such as the Low-Income
5 Home Energy Assistance Program (LIHEAP) as the basis for establishing automatic
6 eligibility. The use of the phrase "current participation" carries with it the necessary
7 implication that households participate in such programs over a period of time. The Low-
8 Income Home Energy Assistance Program (LIHEAP), a seasonal program providing
9 winter heating assistance, is not such a program. When a household is found to be eligible
10 for LIHEAP, the household receives a one-time winter heating assistance grant. LIHEAP
11 does not even operate for the full twelve months of a year. A LIHEAP recipient,
12 therefore, could not be "currently participating" in LIHEAP for a full program year. As a
13 result, under the VNJ eligibility criteria, a household would not be eligible to receive
14 Lifeline benefits year-round. Adoption of the "currently participating" requirement would
15 effectively emasculate the usefulness of LIHEAP as a means to determine eligibility.

16 Because of these problems with the VNJ eligibility criteria, I propose that, rather than
17 adopting the "currently participating" eligibility requirement, the Board determine that
18 customers will be eligible for Lifeline assistance if they have participated in any one of the
19 listed programs within the previous 12 months. The categorical eligibility process
20 explained above will allow the company to make periodic redeterminations of eligibility.

1 Persons not re-enrolled in that fashion can be provided the opportunity to annually self-
2 certify their eligibility.

3 **Q. PLEASE EXPLAIN THE NEXT ASPECT OF THE VNJ FILING ABOUT WHICH**
4 **YOU HAVE CONCERNS.**

5 A. Yes. The July 5, 2000 filing proposes that the VNJ Lifeline program be effective for 36
6 months following the effective date of the tariff. No reason was provided for this
7 limitation. In contrast, my testimony above provides a firm foundation for the ongoing
8 implementation of a Lifeline program. The Lifeline program should be made a permanent
9 program. The affordability problems which I document above will not be solved, or
10 eliminated, within a three year time period. In addition, as I discussed in detail above, the
11 need of all households to gain access to the telecommunications network in order to fully
12 participate in the social, civic and economic structure of our nation will increase, not
13 decrease, in future years. The need which has been documented is not one that will be
14 adequately addressed by a three year program. A VNJ low-income Lifeline program
15 should be adopted as a permanent program.

16 **Q. IS THERE A FINAL ASPECT OF THE VNJ LIFELINE FILING ABOUT WHICH**
17 **YOU HAVE CONCERN?**

18 A. Yes. One operational aspect of the Ameritech-Ohio USA program is the ongoing
19 monitoring of the effectiveness of the program. Indeed, as I describe in detail above, the
20 Advisory Committee that was constituted as part of the Ameritech-Ohio USA program

1 was charged, amongst other things, with helping to develop and implement periodic
2 evaluation protocols for the program. VNJ has not proposed similar evaluation efforts. I
3 recommend that such evaluations occur.

4 In particular, I recommend that VNJ be required to file annual reports with the Board and
5 the Ratepayer Advocate assessing:

- 6 Ë The effectiveness of VNJ consumer education and outreach activities for its
7 Lifeline program;
- 8 Ë Program enrollment goals, whether those goals have been achieved, and what
9 modified or additional effort is needed to achieve appropriate enrollment goals;
- 10 Ë The impacts of the Lifeline program on the affordability of local telephone service;
- 11 Ë The impacts of the Lifeline program on the achievement of universal telephone
12 service; and
- 13 Ë What additional or modified efforts are needed should implementation of the
14 Lifeline program not achieve substantial improvement in universal service.

15 I would note that I agree with the Federal Communications Commission that an evaluation
16 of telephone penetration rates, disaggregated by income levels and other relevant socio-
17 economic and demographic characteristics, is one important mechanism to use in
18 measuring universal service but is certainly not the exclusive mechanism to use.

19 The FCC said in defining its universal service mechanisms:

1 we will continue actively to monitor subscribership across a wide variety of income
2 levels and demographic groups and encourage states to do likewise. The
3 Commission currently uses Census Bureau data to publish reports that illustrate
4 subscribership trends among households, including subscribership by state, as well
5 as nationwide subscribership rates by categories including income level, race, and
6 age of household members, and household size. We find that any response to a
7 decline in subscribership revealed by our analysis of the relevant data should be
8 tailored to those who need assistance to stay connected to the network.

9 The FCC continued to state:

10 We also agree with the Joint Board and commenters, however, that subscribership
11 levels are not dispositive of the issue of whether rates are affordable. For example,
12 we agree with the view that subscribership levels do not reveal whether consumers
13 are spending a disproportionate amount of income on telecommunications
14 services. As the Joint Board concluded, subscribership levels do not address the
15 second component of affordability, namely, whether paying the rates charged for
16 services imposes a hardship for those who subscribe. Accordingly, we conclude, as
17 discussed further below, that the Commission and states should use subscribership
18 levels, in conjunction with rate levels and certain other non-rate factors, to identify
19 those areas in which the services designated for support may not be affordable.
20 (footnotes omitted).⁵¹

21 As can be seen, annual reports on the activities engaged in pursuant to the Lifeline
22 program, and the outcomes generated by the Lifeline program, is a critical component of
23 Lifeline that has not been advanced by VNJ.

24 ***B. Schools and Libraries Fund.***

25 **Q. WHAT IS THE PURPOSE OF THIS PORTION OF YOUR TESTIMONY?**

26 A. The purpose of this part of my testimony is to consider whether there is a need to extend
27 VNJ's commitment to the states's schools and libraries through an extension and expansion

⁵¹ In the Matter of Federal-State Joint Board on Universal Service, Docket No. 96-45 Report and Order, at para. 109 *et seq.* (May 7, 1997).

1 of the Access New Jersey initiative. I find in this part of my testimony that New Jersey's
2 schools and libraries have a substantial need for assistance in helping to bring a connection
3 to the Internet to their communities. I find further that existing federal funding will not be
4 sufficient to help New Jersey's schools and libraries meet this need. I find finally that VNJ
5 can play a critical role in filling the gap in the existing need for New Jersey's schools and
6 libraries, and that the cost of helping to fill that gap is reasonable. Based on these
7 findings, this part of my testimony recommends that: (1) VNJ extend its commitment to
8 Access New Jersey, and (2) VNJ expand the services assisted through Access New Jersey
9 to include new technologies that are necessary to gain high speed Internet access.

10 **Q. PLEASE EXPLAIN THE REASON WHY THE BOARD SHOULD BE**
11 **CONCERNED WITH WHETHER PUBLIC LIBRARIES ARE CONNECTED TO**
12 **THE INTERNET.**

13 A. Public libraries are a place to offer effective public Internet access, particularly for persons
14 who do not have the ability to connect to the Internet through a home telephone. The U.S.
15 National Commission on Libraries and Information Science (NCLIS), a permanent
16 independent agency of the federal government, sponsored a 1998 national survey of 2,500
17 public library outlets.^{6\} NCLIS stated:

18 The Commission is concerned that public libraries offer advanced
19 telecommunications and information services that benefit local communities. Just
20 as they have offered open access to recorded knowledge since the earliest days of
21 our nation's history, public libraries have a vital role in assuring that advanced

^{6\} An "outlet" is either a main or a branch library.

1 information services are universally available to all segments of the population on
2 an equitable basis.^{\7\}

3 NCLIS cited previous studies which "identify geographic and demographic groups that lag
4 with respect to Internet access and emphasize the need for schools, libraries, and
5 community-based access centers (CACs) to provide access to computers and the Internet
6 for those who otherwise lack such access."^{\8\} These studies further show, NCLIS
7 continued, "the value that access to computers and the Internet from more than one
8 location (e.g., home, work, school, and library) can have in developing information
9 technology skills and encouraging the use of those skills." NCLIS then reaffirmed the
10 need to ensure that libraries can be used as points of Internet access for the community:

11 . . .the public library already serves as an important public point of Internet
12 presence and access, which suggests that the library might play a role in bridging
13 the gaps in Internet access which other researchers have identified. . .the public
14 library represents the first choice among a number of other locations as a public
15 point of Internet access outside of home, school, and work. . .44.7% of [persons]
16 who used the Internet from a location other than home, work, or school used the
17 Internet from a public library.^{\9\}

18 **Q. PLEASE EXPLAIN THE REASON WHY THE BOARD SHOULD BE**
19 **CONCERNED WITH WHETHER PUBLIC SCHOOLS ARE CONNECTED TO**
20 **THE INTERNET.**

\7\ Moving Toward More Effective Public Internet Access: The 1998 National Survey of Public Library Outlet Internet Connectivity, National Commission on Libraries and Information Science, Washington, D.C., at cover letter.

\8\ *Id.* at 4.

\9\ *Id.*

1 A. The State of New Jersey had adopted the policy that its educational system should
2 represent a technology-rich environment. The New Jersey Department of Education has
3 promulgated a "vision and benchmarks" for educational technology in New Jersey. These
4 benchmarks include, but are not limited to:

- 5 1. Educational technology will be fully infused into the schools' curriculum and
6 instruction. . For example, computers will be fully integrated into all classrooms
7 for instructional purposes, rather than maintained solely in a computer laboratory
8 environment.
- 9 2. All classrooms will have fast and reliable Internet access.
- 10 3. All districts, schools and classrooms will be connected to high-speed voice, video
11 and data networks.
- 12 4. All school buildings will have the equipment and infrastructure necessary to
13 provide distance learning opportunities for all students.
- 14 5. All school districts will have the equipment necessary to access satellite
15 transmissions.
- 16 6. All school construction projects (new and retrofitting) will include a backbone
17 distribution system, communications outlets in each room, and wiring closets in
18 each school thus enabling schools to establish the infrastructure for a technology-
19 rich environment.^{\10\}

20 According to the New Jersey Department of Education, what the state should strive for is
21 that "computers and technology are viewed as a "routine tool" for teaching and
22 learning."^{\11\} With the Abbott school districts in particular, the Department of Education
23 has promulgated regulations stating that "educational technology shall be infused in all

\10\ New Jersey Department of Education, Educational Technology
in NJ, Vision and Benchmarks by 2002.

\11\ New Jersey Department of Education, New Jersey Core
Curriculum Content Standards, Integration of Technology in
the Classroom.

1 aspects of curriculum and instruction.^{\12\} The Department of Education's vision is that
2 New Jersey schools not simply teach about technology, but teach with it.

3 **Q. WHY IS INTERNET ACCESS THROUGH SCHOOLS AND LIBRARIES A**
4 **UNIVERSAL SERVICE ISSUE?**

5 A. The U.S. Commerce Department's National Telecommunications and Information
6 Administration (NTIA) periodically assesses the impacts of telephone and computer
7 penetration rates throughout the country. In its 1998 publication "Falling Through the
8 Net II: New Data on the Digital Divide," NTIA examined the "persisting digital divide"
9 and created a profile of "the least connected." NTIA found that "the digital divide
10 between certain groups of Americans has increased between 1994 and 1997 so that there
11 is now an even greater disparity in penetration levels among some groups. There is a
12 widening gap, for example, between those at upper and lower income levels." According
13 to NTIA, the "least connected" include:

- 14 Ë Those living in rural areas at the lowest income levels;
- 15 Ë Rural and central city non-Hispanic minorities;
- 16 Ë Single-parent, female-headed households;

17 NTIA concluded, and I concur:

18 . . .significant segments of the population still remain unconnected by
19 telephone and/or computer. The above data demonstrate that there are still
20 pockets of "have nots" among the low-income, minorities, and the young,
21 particularly in rural areas and central cities. Policymakers should continue
22 to focus on connecting these populations so that they too can communicate

\12\ See e.g., N.J.A.C. §§6A:24-2.2, 4.1, 4.2, 6.1.

1 by telephone or computer. These populations are amongst those, for
2 example, that could most use electronic services to find jobs, housing, or
3 other services. Because it may take time before these groups become
4 connected at home, it is still essential that schools, libraries, and other
5 community access centers (CACs) provide computer access in order to
6 connection significant portions of our population.

7 As can be seen, the substantial lack of telephone service within New Jersey's low-income
8 community becomes an even greater barrier to full participation in the social and economic
9 world in today's electronic age. The digital divide identified by NTIA, and the lack of
10 telecommunications service identified by my testimony above, both provide a strong policy
11 basis for the schools and libraries support mechanisms I recommend below.

12 **Q. HOW DO NEW JERSEY SCHOOLS CURRENTLY PERFORM WITH RESPECT**
13 **TO TECHNOLOGY AND INTERNET ACCESS?**

14 A. Care must be taken in defining the existing level of Internet access in New Jersey. For
15 example, according to the Department of Education's 2000 New Jersey public school
16 technology survey, 98.1% of all schools statewide in New Jersey are "connected" to the
17 Internet (Question 11). What this means, however, is that there is at least one Internet
18 connection of any type in the school. The type and extent of Internet access may be quite
19 different. For example, while 98.1% of all *schools* have some type of Internet access, only
20 71.9% of all *classrooms* have Internet access (Q13); benchmark #2 above has thus not yet
21 been met. Moreover, only 57.0% of instructional computers are in New Jersey classrooms
22 (Q18); benchmark #1 above has thus not yet been met. Few New Jersey schools have high
23 speed internet access (Q11); benchmark #3 above has thus not yet been met. Moreover,

1 while two-thirds of all New Jersey schools report that they have "distance learning
2 capabilities," few have high speed distance learning capabilities (Q7); benchmark #4 above
3 has thus not yet been met. While more than 60% have such capabilities through the
4 Internet, fewer than 20% have interactive cable television capabilities (Q7). Schedule
5 RDC-9 presents a summary of relevant data from New Jersey's 2000 school technology
6 survey. It is important to note that four of the counties with the lowest rates of Internet
7 access are amongst the six lowest income counties in the state.

8 **Q. HOW DO NEW JERSEY LIBRARIES CURRENTLY PERFORM WITH**
9 **RESPECT TO TECHNOLOGY AND INTERNET ACCESS?**

10 A. The same degree of state-specific data does not exist for New Jersey libraries as exist for
11 New Jersey schools. What we do know, however, is that according to the 1998 national
12 survey of public library internet connectivity -- while a periodic survey is performed, the
13 1998 survey is the most recent one for which detailed analysis has been published; a
14 detailed analysis of the 2000 survey is not yet available -- while a substantial number of
15 public library outlets have Internet connectivity (83.6%), provide public internet access
16 (73.3%),^{\13\} and offer graphical Internet access (68.6%),^{\14\} 28.3% have only one graphic
17 workstation for public Internet access, and 14.3% have only two graphic workstations in a

\13\ The mere fact that a library is "connected" to the Internet does not mean that the public has access. Internet connectivity may be limited to staff use.

\14\ Graphical internet access refers to access such as that which users experience via the world wide web, with the availability of pictures, sound and even video.

1 library. Based on its annual national surveys, NCLIS offered several measures of whether
2 public libraries offer "effective Internet access," including:

- 3 E Whether there is public access;
- 4 E Whether there is graphical access;
- 5 E Whether access is at sufficient speed;
- 6 E Whether there are sufficient workstations; and
- 7 E Whether there is access within all library outlets, not merely within the library
8 system.^{\15\}

9 The universal service assistance provided to libraries in New Jersey should promote
10 effective Internet access using these benchmarks as guides.

11 **Q. WHY IS THIS NATIONAL DATA RELEVANT TO NEW JERSEY?**

12 A. The ability of libraries to serve the community in the same fashion that is discussed by
13 NCLIS is critical in New Jersey. As I discuss in detail above, there is a tremendous
14 telecommunications gap based on income. When annual incomes dip below the federal
15 Poverty Level, basic access to the telecommunications network becomes less in New
16 Jersey. When annual incomes fall below \$5,000 per year in New Jersey --and I showed
17 above that the prevalence of this low level of income has been substantial and steady for at
18 least the past ten years in New Jersey-- the rate of connection to the telecommunications
19 network drops dramatically.

\15\ As stated above, an "outlet" is either a main or a branch library.

1 **Q. WHY DO NEW JERSEY SCHOOLS AND LIBRARIES NEED FINANCIAL**
2 **ASSISTANCE IN CONNECTING TO THE INTERNET?**

3 A. Three reasons march readily forward about why New Jersey schools and libraries need
4 financial assistance. First, New Jersey's schools and libraries have unique characteristics
5 that impede their offering high speed Internet services. The age of buildings is one of the
6 primary limiting factors in the implementation of the infrastructure needed to offer high
7 speed Internet access. Older buildings present particular problems for retrofitting, since
8 most will not have dropped ceilings --present in newer facilities-- that facilitates the
9 installation of wiring.

10 **Q. IS THERE A SECOND PROBLEM PRESENTED BY THE AGE OF SCHOOL**
11 **BUILDINGS?**

12 A. Yes. The age of New Jersey schools and libraries creates financial problems beyond the
13 need to fund the wiring and hook-ups themselves. One of the primary problems with old
14 buildings involves the presence of asbestos. When there is a need to drill holes through
15 old walls for purposes of wiring, for example, there is a good chance that asbestos
16 removal and clean-up will become an issue. The costs of wiring old schools for classroom
17 access to the Internet thus becomes a financial burden. Connections in limited degrees, or
18 to a limited number of rooms, in a school or library do not provide appropriate access to
19 the Internet.

1 **Q. IS THERE A THIRD PROBLEM PRESENTED BY THE AGE OF SCHOOL**
2 **BUILDINGS?**

3 A. Yes. The cost of the services, themselves, poses a barrier to connecting schools and
4 libraries to the Internet if schools and libraries are charged commercial rates for services.
5 Rates of \$500 and more will not allow schools or library systems to sustain multiple
6 connections in support of community access.

7 **Q. ARE THERE SIGNIFICANT NUMBERS OF NEW JERSEY SCHOOLS THAT**
8 **ARE SUFFICIENTLY OLD TO PRESENT TECHNOLOGY PROBLEMS?**

9 A. New Jersey has extremely old school buildings. As recently as 1997, it was reported that
10 forty-nine public school buildings in the State are one hundred years old or older. Seventy-
11 three percent of those century old buildings are located in the Abbott school districts.
12 Moreover, 41% of the *total* number of school buildings statewide are over fifty years old.
13 Again, in the Abbott districts, need is even greater, with 64% of the buildings being over
14 50 years old.

15 **Q. ARE THESE PROBLEMS ASSOCIATED WITH POVERTY?**

16 A. Yes. That's why they present a universal service issue to be considered through this
17 Verizon proceeding. Consider a selection of eight New Jersey school districts: Camden,
18 Jersey City, Newark, Paterson, Union City, Passaic, Elizabeth, Trenton and East Orange.
19 These eight school districts enroll 14.1% of all students in the state of New Jersey. In
20 contrast, they enroll 38.2% of all low-income students in New Jersey. On average, 79.7%

1 of the students in these school districts qualify for the free or reduced school lunch
2 program. Given this level of poverty, we know from my discussion above that the
3 households in which these students live are substantially less likely to have telephone
4 service in the home, let alone access to Internet service, let alone access to high speed
5 Internet service. Data on these eight school districts is presented in Schedule RDC-10.

6 **Q. ARE THERE BARRIERS TO THESE SCHOOLS IMPLEMENTING HIGH**
7 **TECHNOLOGY PROGRAMS?**

8 A. Yes. One of the primary barriers, as discussed above, is the age and condition of the
9 schools themselves. Sixty-three percent (63%) of all schools with 70% or more of their
10 students eligible for free or reduced school lunches report that the condition of certain
11 building features is less than adequate. Amongst these features are heating, ventilation
12 and air conditioning (HVAC) (35%), electric power (30%), and electric lighting (24%).
13 Not only do these conditions place technology programs at risk because of inadequate
14 physical facilities, they place technology programs at risk because of the competing capital
15 needs of the schools needing repairs, renovations or modernization.

16 **Q. IS IT THE ROLE OF VERIZON TO ADDRESS SUCH ITEMS AS THE**
17 **REMOVAL OF ASBESTOS OR THE REWIRING OF SCHOOL BUILDINGS OR**
18 **THE CAPITAL NEEDS THAT MIGHT COMPETE WITH HIGH**
19 **TECHNOLOGY PROGRAMS?**

1 A. Clearly not, and that's not what I am suggesting. It *is* Verizon's role, however, to help
2 financially support universal service telecommunications programs. The problems I
3 identify above may affect the type of Local Area Network to be put into place in a school
4 building, or the type of service to be put into place, or the extent to which the school can
5 afford to bring in sufficient phone lines to wire all classrooms to the Internet. These are
6 the types of issues that Verizon can address through an expanded ANJ program.

7 **Q. WHY DOESN'T THE FEDERAL UNIVERSAL SERVICE FUND ADDRESS THE**
8 **FINANCIAL BARRIERS TO ACCESS BY SCHOOLS AND LIBRARIES?**

9 A. Under the Telecommunications Act of 1996, the concept of universal service was
10 expanded to include an "E-Rate," or education rate, for schools and libraries. As part of
11 the E-Rate, all eligible schools and libraries will receive discounts of from 20 to 90 percent
12 on the lowest corresponding rates for telecommunications services, access and internal
13 connections provided by all telecommunications carriers.

14 The federal universal service funding for schools and libraries will not be adequate to meet
15 the needs that exist nationwide. Nationwide, several studies have estimated the costs of
16 obtaining access to technology resources in every classroom throughout the country to be
17 as high as \$109 billion for both initial investments and ongoing costs over a 10 year
18 period. The FCC has repeatedly made clear that there is no commitment through the
19 federal schools and libraries universal service fund to guarantee that every application for
20 E-Rate funding for discounted services to schools and libraries will be granted.

1 Overall, the E-Rate program has been substantially underfunded relative to demand. In
2 Year 1 of the program, the FCC funded only 25,785 of the more than 30,000 applications
3 received from schools and libraries requesting E-Rate discounts. Because of this excess
4 demand, the FCC decided not to fund applications from schools and libraries that were
5 eligible for discounts at levels less than 70 percent. By Year 3 of the program, funding
6 requests had increased to \$4.72 billion, twice the maximum \$2.25 billion that is available.
7 As a result, no funding request for internal connection discounts of less than 80% will be
8 funded, and funding requests for discounts of 81% to 90% are "uncertain."

9 **Q. ARE NEW JERSEY LIBRARIES ACCESSING THE FEDERAL FUNDING?**

10 A. Yes to a limited degree. New Jersey libraries have had some limited success in access E-
11 Rate funding. In the first year of the program (1998), 121 New Jersey libraries applied
12 and 81 were offered funding (66%). In the second year (1999), 116 applied and 68 were
13 offered funding (58%). New Jersey libraries were offered \$1,105,109 in 1998 and
14 \$1,243,169 in 1999. Merely because a library was offered funding, however, does not
15 mean that it accepted it. Given the relatively small amounts of money involved --the vast
16 majority of funding offers in New Jersey were for less than \$5,000-- the library may not
17 have been willing or able to accept the money. The paperwork to accept the money or to
18 document the costs may simply have been too onerous for the amount of money involved.

19 **Q. ARE NEW JERSEY SCHOOLS ACCESSING E-RATE FUNDING?**

1 A. New Jersey schools, too, have had some limited success in accessing E-Rate funding. New
2 Jersey schools and libraries received a combined total of \$61.3 million in funding in Year
3 One of the federal Universal Service Fund; \$41.2 million in funding in Year Two; and
4 \$42.2 million to date in Year 3. Most of this New Jersey funding went to schools. In Year
5 One of funding, New Jersey libraries received \$1,105,109 million in funding while, in Year
6 Two, libraries received \$1,243,169.

7 **Q. HOW WOULD YOUR PROPOSED EXTENSION AND EXPANSION OF**
8 **ACCESS NEW JERSEY INTERACT WITH THE FEDERAL SCHOOLS AND**
9 **LIBRARIES UNIVERSAL SERVICE FUND?**

10 A. To the extent that the needs of New Jersey schools and libraries are met from the federal
11 fund, the need for state funding is reduced. As I discuss in more detail above, however,
12 there is no assurance that New Jersey schools and libraries will receive adequate federal
13 funding.

14 **Q. PLEASE SUMMARIZE THE ACCESS NEW JERSEY FUND CURRENTLY**
15 **ADMINISTERED BY VNJ.**

16 A. Access New Jersey was established through agreement reached in April 1997 by the
17 Board of Public Utilities, VNJ and the Division of Ratepayer Advocate. Access New
18 Jersey is designed to link K-12 schools and libraries and provides about \$130 million in
19 savings over a four year period (1997 - 2001). Access New Jersey includes educational

1 discounts for telecommunications services, free customer service equipment, and network
2 development as follows:

3 E Educational discounts offered on a flat-rate basis, ranging from 31 to 72 percent
4 on services for ISDN, frame relay, SMDS, and ATM;

5 E A network for high-speed voice, video and data exchange for those schools and
6 libraries served by VNJ; and

7 E Equipment for items needed by schools and libraries to connect computers and
8 video equipment to the high-speed network.

9 **Q. WHAT DO YOU PROPOSE FOR THIS PROCEEDING?**

10 A. VNJ should be directed to extend and expand its Access New Jersey program. Existing
11 educational discounts should be maintained for services other than ATM. In addition, as
12 recommended by RPA witness Weiss, the discounts provided for ATM service should be
13 deepened. The educational discount program should be provided with no established
14 sunset date.

15 **Q. WHY ELIMINATE THE SUNSET DATE FOR EDUCATIONAL DISCOUNTS?**

16 A. As documented above, the educational discounts provide an essential link to universal
17 service. The distribution of poverty within New Jersey's schools demonstrates an ongoing
18 need for the educational discount to serve this function. Nearly 20% of all schools would
19 qualify for the 90% discount under the E-Rate criteria. More than 25% would qualify for
20 discounts of 80% or more under the E-Rate criteria. These levels of poverty, and the need

1 to provide universal service through schools and libraries, will not abate at the end of four
2 years or ten years. It is an ongoing need.

3 **Q. WHY SHOULD THE EDUCATIONAL DISCOUNTS BE DEEPENED FOR ATM?**

4 A. As established by RPA witness Weiss, the current high technology needs of New Jersey
5 schools and libraries is access to on-line video services. The best mechanism for providing
6 video is access at 1.5 Mbps. RPA witness Weiss reports that "by far, the most extensively
7 employed service is ATM at 1.5 Mbps." (Weiss, at 16). Schools, in particular, require 1.5
8 Mbps, since "picture quality depends on data delivered at constant bit rates." (Weiss, at
9 17). Despite the particular need for this service, the discounts offered through VNJ for
10 this service are the lowest discounts available.

11 **Q. WHAT DISCOUNTS SHOULD BE OFFERED FOR ATM SERVICE?**

12 A. In meeting the needs of New Jersey schools and libraries, VNJ discounts should mirror the
13 discounts provided through the federal E-Rate program. The FCC's current schools and
14 libraries discount matrix is set forth in RDC-11. As can be seen, the discount matrix has
15 two components to it. First, there is a determination of how "disadvantaged" a school
16 district is. This determination is based on the proportion of students who qualify for the
17 free and reduced school lunch program. Second, there is the depth of the discount. The
18 discount becomes greater as the extent of poverty in the school district deepens.

1 **Q. WHAT LEVEL OF DISCOUNT WOULD BE PROVIDED FOR ATM SERVICE**
2 **AT THESE DISCOUNT RATES?**

3 A. Using Census data on the number of enrolled students per "place," assuming one
4 classroom per each 21 students, and assuming discount levels based on the poverty level
5 of children aged 5 - 17 in each place, the discount needed simply to provide one 1.5 Mbps
6 circuit per school and library would equal roughly \$15 million per year.^{16\}

7 **Q. WHAT IF THE DEMAND FOR THE ATM DISCOUNT EXCEEDS THE**
8 **DISCOUNT DOLLARS YOU PROPOSE TO MAKE AVAILABLE?**

9 A. I recommend that requests for ANJ discounts be managed in the same way as requests for
10 federal E-Rate discounts are managed. Beginning with the most highly disadvantaged
11 school districts first, all requests for discounts should be satisfied. If dollars remain, the
12 next tier of schools is addressed. If insufficient dollars are left to serve all schools in a tier,
13 the requests from districts are satisfied according to their documented poverty levels (as
14 defined above). Only in this last sense does my proposal differ from the E-Rate
15 distribution.

16 **Q. WOULD YOU EXPECT THE DEMAND FOR ATM SERVICE TO OUTSTRIP**
17 **AVAILABLE DISCOUNT DOLLARS?**

^{16\} This assumes further that one of every five schools would desire more than one circuit.

1 A. No. Some schools will use federal E-Rate funding instead. Some schools will choose not
2 seek the discounts, instead using their own resources. Some schools will not use 1.5
3 Mbps ATM service. Some schools will not use one ATM circuit for each classroom.
4 Moreover, as I discuss throughout my testimony above, the purpose of the program is not
5 to reprice the service, but rather to ensure that communities where the existence of
6 technology in schools and libraries is essential to promote universal have the resources to
7 provide such technology.

8 **Q. HOW DO THESE DEEPENED ATM DISCOUNTS ADDRESS THE ISSUES YOU**
9 **HAVE IDENTIFIED ABOVE?**

10 A. By relieving schools and libraries of the need to commit resources to the
11 telecommunication service itself, the schools and libraries will free up those resources to
12 commit to other aspects of the provision of technology-based services. It will be a local
13 decision, however, about whether to devote those resources to staff training, to software
14 and content, to internal connections, or to other aspects of their respective technology
15 programs.

16 **Q. HOW WOULD LIBRARIES BECOME A PART OF YOUR PROPOSED ATM**
17 **DISCOUNT?**

18 A. Libraries could participate just as they do under the federal E-Rate. The poverty rate for
19 the library will be determined by the school district in which the library is located.
20 Otherwise, libraries would apply for discounts in the same fashion as schools do.

1 **Q. WHAT TOTAL DOLLARS DO YOU PROPOSE BE PROVIDED FOR THE ANJ**
2 **PROGRAM?**

3 A. The Board has previously determined that a \$40 million educational discount program is
4 reasonable. I propose that the annual dollar level of commitment be set at \$47 million per
5 year. The additional \$7 million represents the difference between a discount for ATM
6 lines at existing levels and the discount provided for ATM at my proposed levels.

7 **Q. PLEASE SUMMARIZE THE POLICY BASIS FOR YOUR PROPOSAL.**

8 A. New Jersey residents who do not have access to the Internet at their homes deserve the
9 right to fully participate in the social and economic world as it exists today. The need for
10 community access to the Internet through schools and libraries will only become greater.
11 The 1998 observation by the National Commission on Libraries and Information Science is
12 fundamentally true for New Jersey residents: "just as [libraries] have offered open access
13 to recorded knowledge since the earliest days of our nation's history, public libraries have
14 a vital role in assuring that advanced information services are universally available to all
15 segments of the population on an equitable basis." An extension and expansion of Access
16 New Jersey to fulfill this goal is appropriate.

17 ***C. High Cost Fund.***

18 **Q. WHAT IS THE PURPOSE OF A HIGH COST FUND?**

19 A. The position of the New Jersey Ratepayer Advocate has always been that the benefits of
20 competition will not exist in high cost areas without a system to ensure that competitors

1 are as interested in serving high cost, generally rural, areas as they are in serving the lower
2 cost areas of the state. In order for all of New Jersey to benefit from competition, it is
3 essential that telecommunications firms do not bypass the high cost areas of the State.

4 **Q. WHAT IS THE CRITERIA FOR PARTICIPATION IN THE HIGH COST FUND?**

5 A. The goal of the High Cost Fund is to provide an incentive for all service providers to serve
6 high cost areas in the State. Accordingly, those carriers serving residential and single line
7 business customers in the high cost wire centers should be eligible for support from the
8 High Cost Fund. In order to receive support payments, carriers must provide all of the
9 services included in the definition of Universal Service discussed above.

10 **Q. WHAT CRITERIA SHOULD THE BOARD USE TO DETERMINE WHICH**
11 **WIRE CENTERS ARE HIGH COST?**

12 A. The Ratepayer Advocate historically has recommended that for purposes of identifying
13 high cost areas, 50% of the local loop and related non-traffic sensitive costs should be
14 allocated to local exchange service. The Ratepayer Advocate's position has been based on
15 the proposition that no more than 50% of the local loop costs should be allocated to
16 exchange service, since the loop is a joint cost and is necessary for providing all
17 telecommunications services, including regional toll service, interLATA toll, interstate,
18 international and a variety of vertical services. Since a maximum of 50% of loop charges
19 is charged to exchange services, the Ratepayer Advocate recommends that only wire

1 centers with costs that are greater than two times the statewide average price for local
2 exchange service be eligible for support from the High Cost Fund.

3 **Q. WHAT IS THE STATEWIDE AVERAGE PRICE FOR LOCAL EXCHANGE**
4 **SERVICE THAT YOU UTILIZE IN YOUR ANALYSIS?**

5 A. I utilize a statewide average price for local exchange service of \$12.04. This includes
6 \$8.19 in basic local exchange rates minus a consumer credit of \$0.65 per line, plus \$3.50
7 for the subscriber line charge, plus a touch tone charge of \$1.00. Using the policy
8 articulated above, High Cost Fund support in this proceeding should be limited to those
9 VNJ wire centers which have costs exceeding two times this total, or \$24.08 per line.

10 **Q. HOW DID YOU DETERMINE WHICH WIRE CENTERS MEET THE**
11 **CRITERIA OUTLINED ABOVE?**

12 A. I have used the most recent cost information supplied by VNJ in my analysis.

13 **Q. PLEASE SUMMARIZE THE RESULTS OF YOUR ANALYSIS.**

14 A. My analysis finds that funding of \$11,987,925 would be required to provide High Cost
15 Support in residential and single line business customers in VNJ wire centers. The
16 average assistance per New Jersey telephone subscriber in a high cost VNJ wire center
17 would be \$2.08 per month.

1 **Q. HOW SHOULD THE ASSISTANCE PROVIDED THROUGH THE HIGH COST**
2 **FUND BE DISTRIBUTED TO TELECOMMUNICATION PROVIDERS?**

3 A. These amounts should be paid directly to the telecommunication providers actually
4 providing service in these high cost areas. Moreover, the participation in the High Cost
5 Fund should be portable. As customers in high cost wire centers change local exchange
6 providers, the payments from the High Cost Fund should similarly move from provider to
7 provider with the customer.

8 **Q. HOW SHOULD THE FUNDING FOR THE VNJ UNIVERSAL SERVICE FUND**
9 **BE OBTAINED?**

10 A. Funding for the Universal Service Fund should be obtained as a percentage of revenue
11 assessment on all telecommunication providers in New Jersey. VNJ should be assessed
12 only its fair share in this proceeding, based on both intrastate gross revenues and on
13 interstate gross revenues for telecommunications services originating or terminating in
14 New Jersey net of payments to other carriers.

15 **Q. HOW DOES YOUR PROPOSED ASSESSMENT MECHANISM COMPARE TO**
16 **THE FEDERAL HIGH COST SUPPORT FUND?**

17 A. The two mechanisms are consistent. In adopting its universal service order in May 1997,
18 the FCC decided to assess contributions on carriers' end-user telecommunications
19 revenues. As recently as March 14, 2001, the FCC reiterated: "specifically, the
20 Commission concluded that assessment based on end-user telecommunications revenue is

1 competitively neutral, easy to administer, and eliminates some economic distortions
2 associated with an assessment based on gross telecommunication revenues."

3 **Q. PLEASE SUMMARIZE THIS SECTION OF YOUR TESTIMONY.**

4 A. If New Jersey is truly going to move to the competitive provision of local telephone
5 service throughout the state, there is a need to provide financial support to high cost areas
6 of the state. This high cost support is designed to remove the disincentive for competitive
7 service providers to serve only those areas where costs are below the statewide average.
8 A fund to provide assistance to carriers who actually provide service in these high cost
9 areas can be developed at a reasonable cost.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 A. Yes it does.

Schedule RDC-1

Roger Colton is a partner in the firm Fisher, Sheehan and Colton, Public Finance and General Economics (FSC) of Belmont, Massachusetts. Roger is an attorney and an economist. He has worked on issues relating to low-income telecommunications needs and consumer protection for more than 15 years.

Roger routinely provides assistance to public officials regarding low-income telecommunications issues. He has testified in a variety of state regulatory commission cases on a variety of telecommunications issues. His clients have included: the Massachusetts Office of Attorney General (impacts of price increases on low-income phone penetration and service quality); Rhode Island Legal Services (consumer protections); the Connecticut Office of Consumer Counsel (credit and collection); the Pennsylvania Utility Law Project (universal service); the Colorado Office of Consumer Counsel (credit and collection); California TURN (AT&T deregulation); and Washington Utility and Transportation Commission (U.S. West deposit practices).

Colton has engaged in other work regarding relaxed regulation and alternative regulatory forms. He authored a three-part series on telecommunications regulation for the Florida Office of Public Counsel to help guide that state's legislative consideration of alternative regulation. Moreover, Colton authored the original comments of the national office of the American Association of Retired Persons (AARP) in the FCC "price cap" proceeding.

Most recently, Roger testified before the Public Utilities Commission of Ohio in proceedings to consider the SBC/Ameritech merger. His testimony concerned the universal service implications of the merger. In addition, he testified before the Pennsylvania Public Utilities Commission in Bell Atlantic's "global" proceeding to consider local competition. His testimony concerned the potential expansion of the Bell Atlantic Lifeline program. Roger was invited to present a paper on the impact of local competition in the telecommunications industry at the 1998 annual NARUC conference in Orlando (November 1998). During the Year 2000, Roger is working for the "consumer parties" (Dayton Legal Aid, Cleveland's Edgemont Neighborhood Association, Ohio state Office of Consumer Counsel) to provide technical assistance with respect to Ameritech Ohio's study of "no phone" households.

Roger has written widely on telecommunications issues. His publications include:

- o Colton. (1993). "Consumer Information and Workable Competition in the Telecommunications Industry." *XXVII Journal of Economic Issues* 775.
- o Colton. (1990). "When the Phone Company is not the Phone Company: Credit Reporting in the Post-Divestiture Era." *24 Clearinghouse Review* 98.
- o Colton, *Just Like Them: The Impact of Telecommunications Competition on Low-Income and Other Hard-to-Serve Consumers*, presented to *National Meeting of the National Association of Regulatory Utility Commissions* (1998).
- o Colton, *Universal Residential Telephone Service: Needs and Strategies*, presented to the *105th National Meeting of the National Association of Regulatory Utility Commissioners* (1993).
- o Colton and Sable (1991). *A California Advocate's Guide to Telephone Customer Service Issues*. Prepared with funding from the California Telecommunications Education Trust Fund.
- o Colton. (1989). *Identifying Consumer Characteristics Which are Important to Determining the Existence of Workable Competition in the Interexchange Telecommunications Industry*. Prepared under contract to the Office of Public Counsel of the Florida Legislature.
- o Colton. (1989). *The Interexchange Telecommunications Industry: Should Regulation Depend on the Absence of Competition*. Prepared under contract to the Office of Public Counsel of the Florida Legislature.

- o Colton. (1989). *The Denial of Local Telephone Service for Nonpayment of Toll Bills: A Review and Assessment of Regulatory Litigation* (2d ed.).
- o Colton. (1988). *Customer Service Regulations for Residential Telephone Customers in the Post-Divestiture Era: A Study of Michigan Bell Telephone Company*. Prepared under contract to the Michigan Divestiture Research Fund.

In June 1994, the Pennsylvania Public Utilities Commission (PUC) found that Pennsylvania Bell Telephone Company (Penn Bell) had not achieved "universal service" despite that company's aggregate average residential penetration rate of more than 96 percent. Relying on Colton's testimony in the proceeding considering Penn Bell's request for alternative regulation, the PUC found that the low penetration rates amongst low-income households, as well as amongst minority households of all incomes, counselled that universal service did *not* exist. The Pennsylvania PUC adopted Colton's proposal for a Lifeline rate and a Universal Telephone Access Program (UTAP), a telephone-based checkoff program akin to an energy utility's "fuel fund."

Before testifying in the Penn Bell case, Colton testified in a Mississippi proceeding regarding Southwestern Bell's request for alternative regulation. Southwestern Bell, the PUC staff, the Attorney General's office, and low-income intervenors incorporated a telephone lifeline rate into a negotiated settlement of that proceeding.

Colton's proposals for promoting and protecting universal service in Massachusetts, presented in testimony on behalf of the state Attorney General's office, also resulted in a negotiated settlement in a 1992 New England Telephone case. Moreover, while not included in the case settlement, the Massachusetts Department of Public Utilities (DPU) commented favorably on Colton's proposed "quality of service" proposals relating to mechanisms for achieving universal service. Colton was later invited to present his quality of service proposals, as they relate to universal service, at a "universal service" panel at the 1993 annual national NARUC meeting in New York City.

Colton's testimony before the California PUC regarding AT&T's request for relaxed regulation did not result in Commission-directed remedies. While endorsing the substance of Colton's discussion of need, the California PUC recommended that Colton's price disclosure proposals be "considered" by AT&T, but declined to *direct* that they be implemented.

Schedule RDC-2

Median Household Income Compared to Federal Poverty Level New Jersey: Four Person Household		
	Median HH Income	Federal Poverty Level
2001	\$70,983	\$17,650
2000	\$67,335	\$17,050
1999	\$65,586	\$16,700
1998	\$61,409	\$16,450
1997	\$60,697	\$16,050
1996	\$57,916	\$15,600

SOURCE:

Median household income is published annually in the *Federal Register* by the U.S. Department of Housing and Urban Development.

The federal Poverty Level is published annually in the *Federal Register* by the U.S. Department of Health and Human Services.

Schedule RDC-3

Telephone Penetration Rates by Income (1984\$) New Jersey: 1989 - 1999			
Year	Penetration Rates		Nominal Income: \$10,000 (84\$)
	Total Population	< \$10,000 (84\$)	
1989	95.1%	86.8%	\$11,920
1990	95.5%	86.6%	\$12,514
1991	94.8%	83.5%	\$13,158
1992	94.9%	84.8%	\$13,578
1993	94.3%	83.2%	\$13,996
1994	94.0%	83.4%	\$14,347
1995	92.0%	81.9%	\$14,756
1996	92.4%	83.4%	\$15,175
1997	96.1%	88.6%	\$15,595
1998	95.7%	90.0%	\$15,809
1999	94.9%	88.9%	\$16,082

SOURCE:
Alexander Belinfante (March 2000). Telephone Penetration by Income by State, Federal Communications Commission: Washington D.C.

Schedule RDC-4

2001 Poverty Levels (48 contiguous states)						
	Number of Household Members					
	1	2	3	4	5	6
100% Poverty	\$8,590	\$11,610	\$14,630	\$17,650	\$20,670	\$23,690
SOURCE: 66 <i>Federal Register</i> 10695 - 10697 (February 16, 2001).						

Schedule RDC-5

Telephone Subscribership by Level of Household Income				
Year	Total Population	Income Ranges		
		Less than \$5,000	\$5,000 - \$7,499	\$7,500 - \$9,999
1989	93.1%	74.4%	83.7%	86.6%
1990	93.3%	75.4%	82.6%	86.9%
1991	93.4%	73.9%	82.9%	86.5%
1992	93.8%	72.0%	83.2%	87.5%
1993	94.2%	72.9%	84.0%	87.4%
1994	93.8%	76.1%	82.7%	87.3%
1995	93.9%	75.3%	82.8%	87.3%
1996	93.9%	75.6%	83.1%	87.2%
1997	93.9%	75.7%	82.8%	86.7%
1998	94.1%	77.2%	83.0%	87.4%
1999	94.2%	76.0%	82.9%	88.3%
2000 (March)	94.6%	80.3%	83.5%	88.1%

SOURCE:
Alexander Belinfante (June 2000). Telephone Subscribership in the United States (Data Through March 2000),
Federal Communications Commission: Washington D.C.

Schedule RDC-6

Number of Households with Incomes Below \$5,000 New Jersey: By County (1989 Census)	
County	No. Households with Incomes Below \$5,000
Atlantic	4,162
Bergen	7,723
Burlington	2,612
Camden	7,520
Cape May	1,586
Cumberland	2,861
Essex	19,891
Gloucester	2,451
Hudson	15,248
Hunterdon	621
Mercer	4,038
Middlesex	6,631
Monmouth	4,980
Morris	2,014
Ocean	5,146
Passaic	7,218
Salem	1,391
Somerset	1,259
Sussex	779
Union	6,655
Warren	991
Total State	105,777
SOURCE: U.S. Census Bureau, Summary Tape File 3A, http://www.census.gov .	

Schedule RDC-7

New Jersey LIHEAP Recipients by Income by Year: 1990 - 1995					
Year	Total LIHEAP Recipients	Percent of LIHEAP Recipients by Annual Income			
		Below \$2,000	\$2,000 - \$3,999	\$4,000 - \$5,999	Total Below \$6,000
1990	137,000	9.0%	16.0%	42.0%	67.0%
1991	147,086	8.9%	12.5%	34.5%	55.9%
1992	161,689	9.5%	12.2%	32.3%	54.0%
1993	164,071	9.3%	10.9%	31.1%	51.3%
1994	167,856	9.3%	10.4%	29.8%	49.5%
1995	164,918	9.2%	10.7%	28.7%	48.6%

SOURCE:
Annual LIHEAP Report to Congress (1995 Report last one published).

Schedule RDC-8

Distribution of Persons in New Jersey By Poverty Range		
	No. of Persons	Percent of Households
Under 50%	286,059	3.8%
50% - 74%	129,466	1.7%
75% - 99%	157,627	2.1%
100% - 124%	184,210	2.4%
125% - 149%	186,274	2.5%
150 - 174%	228,724	3.0%
Total below 175%	1,172,360	15.5%

SOURCE: Table 121, Summary Tape File 3A, 1990 U.S. Census.

Schedule RDC-9

School survey.

Schedule RDC-10

New Jersey Urban School Districts Total Enrollment and Free and Reduced School Lunch Recipients				
School District	County	Total Student Enrollment	No. School Lunch Students	Pct School Lunch Students
Camden	Camden	18,536	16,323	88.1%
Jersey City	Hudson	32,516	23,968	73.7%
Newark	Essex	43,609	35,863	82.2%
Paterson	Passaic	24,499	20,832	85.0%
Union City	Hudson	9,803	8,234	84.0%
Passaic	Passaic	10,282	8,485	83.0%
Elizabeth	Union	13,982	9,223	79.5%
Trenton	Mercer	11,970	9,316	77.8%
East Orange	Essex	11,386	8,410	73.9%
State		1,254,259	368,560	29.2%

Schedule RDC-11

Schools and Libraries Discount Matrix 47 C.F.R. §54.505(c)		
Schools and Libraries Discount Matrix	Discount Level	
How Disadvantaged?	Urban Discount	Rural Discount
Pct of students eligible for national school lunch program		
<1%	20%	25%
1-19%	40%	50%
20-34%	50%	60%
35-49%	60%	70%
50-74%	80%	80%
75-100%	90%	90%