

**REPORT OF THE
DEPARTMENT FOR THE DEAF AND HARD OF HEARING
AND THE STATE CORPORATION COMMISSION ON**

**THE OPERATION OF THE
VIRGINIA RELAY CENTER**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 42

**COMMONWEALTH OF VIRGINIA
RICHMOND
1995**



COMMONWEALTH of VIRGINIA

Office of the Governor

George Allen
Governor

Kay Coles James
Secretary of Health and Human Resources

February 8, 1995

To: The Honorable George Allen

and

The General Assembly of Virginia

The report contained herein is pursuant to Section 56-484.4 was passed by the 1990 General Assembly.

This report constitutes the response by the Virginia Department for the Deaf and Hard of Hearing and the State Corporation Commission to the directive to conduct a study of the operations of the Telecommunications Relay Service and issue a report to the Governor and the General Assembly prior to the 1995 Session of the General Assembly.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Kay Coles James", written over a horizontal line.

Kay Coles James
Secretary of Health and Human Resources

PREFACE

House Bill 928 (1990), passed by the General Assembly and signed by the Governor, enacted *Virginia Code* §56-484.5 which established a telecommunications relay service for the Commonwealth of Virginia. The bill further required that the Department for the Deaf and Hard of Hearing (VDDHH) and the State Corporation Commission (SCC) conduct a study of the service and report to the General Assembly and the Governor prior to the 1995 Session. The ensuing report was prepared by Bruce A. Sofinski of VDDHH and Alan Wickham of the SCC and incorporates information collected from the Telecommunications Relay Service Advisory Board as well as from the Virginia Relay Center management and staff.

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EXECUTIVE SUMMARY

The *Virginia Code* §56-484.5 authorizes the establishment of a telecommunications relay center in the Commonwealth. This service has been operated as the Virginia Relay Center (VRC) under contract with American Telephone and Telegraph (AT&T) since February 1, 1991 from a site in Norton, Virginia. Currently, the VRC relays an average of 90,000 calls per month. In addition the center handles at least some relay traffic for six other states. To provide this service, AT&T employs more than 170 individuals in the Norton area.

Since its inception, the VRC has continued to experience growth, both in the number of calls handled by the Center and in the technology available to enhance the service. In September 1994, Governor Allen announced the extension of the VRC contract through February 29, 1996.

The following recommendations, based primarily on consumer input and statistical analysis, are offered:

- 1) The Virginia Department for the Deaf and Hard of Hearing (VDDHH) and the State Corporation Commission (SCC), in conjunction with the VRC and consumers, should investigate current Voice Carryover (VCO) technology provided through the VRC and should provide recommendations for enhancing the quality of this vital feature. The investigation should include: methods to decrease set-up time; the provision of VCO in conjunction with ASCII (the communication code used by personal computers); a more seamless exchange (no obvious "switching" of equipment); and the provision of VCO that does not degrade the vocal quality of the speaker.
- 2) The VDDHH and the SCC, in conjunction with consumers, should provide input to and coordinate with the Federal Communications Commission (FCC) to establish standard nationwide "N-1-1" numbers for voice and text telephone access to the VRC. These numbers would replace the existing toll-free "800" access numbers for the VRC. ("N-1-1" is a term meaning 3-digit access like 9-1-1, for emergency, and 4-1-1, for directory assistance.)
- 3) Initially, the gubernatorially-appointed Telecommunications Relay Service (TRS) Advisory Board was invaluable to the establishment of the VRC. Over the past three years, the combination of technical expertise and identification of consumer service needs enabled the VDDHH and SCC to implement a quality service. However, as the Center has matured, the need for input from an advisory entity has shifted towards consumer input and away from specific technical expertise. Therefore, the VDDHH and SCC recommend that Code section 56-484.7.B. be reviewed by the Fall of 1995 to include increased consumer participation on the Board.

Statement of Purpose

The Virginia Relay Center (VRC) began operation on February 1, 1991. The following is a report and evaluation of the Center following its first three years of service to the Commonwealth of Virginia.

Establishment and Description of Service

The Virginia Relay Center (VRC) was established by the State Corporation Commission (SCC) with the concurrence of the Virginia Department for the Deaf and Hard of Hearing (VDDHH), as mandated by legislation passed by the 1990 Virginia General Assembly in Code Section 56-484.5. It is funded by a monthly 10-cent surcharge to all telephone access lines (business and residential) in the Commonwealth. In September 1990, the Commonwealth of Virginia awarded a contract to AT&T for the provision of telecommunications relay service (TRS) in Virginia as the result of a competitive bid process.

The VRC provides TRS, a form of message relay. Message relay provides the capability for real-time conversations between persons who use text telephones (TTYs/TDDs) and persons who use voice telephones. The Communications Assistant (CA) voices whatever the TTY/TDD user types to the voice telephone user and types the spoken message to the TTY/TDD user. Virginians can use the VRC to call intrastate, interstate and internationally (when English is used). The service is provided 24 hours a day, 365 days a year and the confidentiality of the call content is guaranteed by the contract and reinforced by legislation passed by the 1992 General Assembly in Section 8.01-44.3.

The site in Norton, Virginia (a former grocery store) was renovated with funds provided through localities and coordinated by the Virginia Coalfields Economic Development Authority in conjunction with the Department of Economic Development. This partnership included the efforts of the City of Norton and Wise County, in addition to other Southwest Virginia jurisdictions.

This TRS program was approved under federal laws and regulations, including the Americans with Disabilities Act of 1990 (ADA), by letter from the Federal Communications Commission (FCC), dated July 8, 1993. (Appendix I) This FCC certification was effective July 26, 1993, and is valid for five years, subject to further extension upon the filing of an appropriate application. This action placed the Commonwealth in compliance with regulations promulgated by the FCC under Title IV of the ADA. The certification empowers VDDHH to oversee all complaint resolutions regarding TRS service provision in the Commonwealth.

Expansion and Economic Development

The VRC began operation to Virginia on February 1, 1991, with 67 Communications Assistants (CAs) and relayed 17,000 calls during the first month of operation. Training and recruitment for potential CAs continues through the Virginia Employment Commission, programs under the Job Training Partnership Act administered by the Governor's Employment and Training Department and AT&T.

In December 1991, the Commonwealth (VDDHH and SCC) took action to encourage continued economic development through the growth of the VRC as a provider of relay service to other

jurisdictions through a modification of the state contract with AT&T. This initiative included a contract extension through February 28, 1995. As a direct result of this action, by Spring 1992, service through the VRC began to increase dramatically.

During Spring 1992, the VRC began providing 24-hour relay service to the states of **Delaware** and **Montana**. In May 1992, the VRC began providing overnight service to **New Jersey** and overnight and weekend service to **Tennessee**. On October 13, 1992, the VRC relayed its one millionth call for Virginia residents.

Renovations to the VRC were completed in December 1992, doubling the call-handling capacity of the Center. The VRC currently handles calls 24 hours a day for five states: **Virginia**, **Delaware**, **Maine**, **Montana** and **Vermont**. The VRC also handles nights, weekends and holidays for **New Jersey** and weekends and holidays for **Tennessee**. The VRC relays more than 90,000 calls per month for Virginia (94,000 calls during August 1994), which is estimated to be approximately half of the total call volume handled by the Center on a normal basis.

While the service provided to states other than Virginia benefits the Commonwealth through increased employment opportunities, the cost of the service to these states is not subsidized by Virginians. Since opening, the VRC has more than doubled the number of CAs it employs to its current number of 171. More than 95% of these CAs have been hired locally from Southwest Virginia and employee turnover of full-time, permanent staff has been approximately 5% since its implementation.

While the increase of total call volume has been relatively constant throughout the history of the VRC, there have been occasional decreases in call volume. During mid-August 1993, the VRC released 73 term (temporary) employees who had been hired between April 12 and June 28, 1993 to provide temporary, 24-hour service to the states of **Pennsylvania** and **Washington**. This reduction was a natural downsizing effort as the traffic was returned to relay centers within these states.

Service Enhancement & Use

The VRC has experienced a 45% growth in the volume of calls over the past two years. During this time, the growth of intrastate calls has outpaced that of interstate calls and has increased from 78% to 82% of all calls handled. International calls have remained few, never exceeding 400 calls during a year.

Despite this growth, the VRC has maintained an answer rate of more than 99.5% of its calls in less than 60 seconds. In addition, the average answer time has decreased from an average of 1.56 seconds in 1993 to an average of .93 seconds through the first eight months of 1994. Also, less than .1% of calls receive a busy (or re-order) signal. These enhancements can be attributed to the continued improvement of relay technology.

The most recent technological enhancement, called SNAP (Special Needs Accessibility Platform), was implemented at the VRC on August 16, 1994. This new technology provides several advantages for the user, the CA and the Commonwealth, including: 1) the fact that the user dials the terminating telephone number, resulting in greater privacy for the consumer; 2) the need for only one computer terminal, increasing the efficiency of the CA; and 3) the reduction in call set-up time, resulting in a cost savings for the Commonwealth.

The next scheduled service enhancement is part of a plan to improve Voice Carryover (VCO). VCO provides a TTY/TDD caller who prefers to use his own voice with the opportunity to speak directly to the voice telephone user, instead of the CA relaying the message. The CA then types the hearing person's response to the TTY/TDD user.

Since the inception of the VRC, VDDHH has aggressively promoted the use of VCO, especially by elderly Virginians who are hard of hearing or became deaf later in life. VCO does not require the use of a TTY/TDD keyboard and is therefore much more conducive to restoring the use of the telephone by this population group. As a result, a person can use VCO by connecting a TTY/TDD in-line with a regular telephone.

The use of VCO has grown dramatically showing an increase of 850% during the last two years (from 376 calls per month in 1992 to 3,580 calls per month so far in 1994). When the service was first tracked in 1992, it accounted for less than 1% of all relay calls. VCO now accounts for more than 4% of all relay calls handled for the Commonwealth. This growth has highlighted the need for portable, low-cost equipment specifically for VCO.

In June 1993, acting on a resolution by the TRS Advisory Board to the Department, VDDHH began coordinating the development of a VCO phone. This piece of equipment is specifically designed for the person who either cannot or prefers not to use the keyboard of a TTY/TDD.

The major concern with the TTY/TDD-regular telephone in-line hook-up is that TTYs/TDDs were not made to be used in-line with regular telephones. As a result, rural customers often experience difficulties in using the in-line hook-up, including the reduction of volume on the phone line resulting in the receiving party not being able to clearly discern the voice of the VCO caller. An invitation for bid (IFB) for VCO phone equipment has already been coordinated by VDDHH and the Department of Information Technology. The resulting state contract will allow Virginians to obtain the equipment at a reduced cost through VDDHH's Technology Assistance Program (TAP), beginning Fall 1994.

On Saturday, September 10, 1994, Governor Allen announced the extension of the VRC contract for one additional year (through February 29, 1996). This action was enthusiastically received by the citizens and local governments of Southwest Virginia, as this contract has maintained more than 170 full-time jobs in Norton.

Recommendations

Taking into consideration the VRC service statistics compiled since February 1, 1991 and valuable consumer input, obtained primarily through the VRC Consumer Input Form implemented in July 1992, the following recommendations are made to upgrade/improve services through the VRC.

- 1) The VDDHH and the SCC, in conjunction with the VRC and consumers, should investigate current VCO technology provided through the VRC and should provide recommendations for enhancing the quality of this vital feature. The investigation should include: methods to decrease set-up time; the provision of VCO in conjunction with ASCII (the communication code used by personal computers); a more seamless exchange (no obvious "switching" of equipment); and the provision of VCO that does not degrade the vocal quality of the speaker.

- 2) The VDDHH and the SCC, in conjunction with consumers, should provide input to and coordinate with the FCC to establish standard nationwide "N-1-1" numbers for voice and text telephone access to the VRC. These numbers would replace the existing toll-free "800" access numbers for the VRC. ("N-1-1" is a term meaning 3-digit access like 9-1-1, for emergency, and 4-1-1, for directory assistance.)
- 3) Initially, the gubernatorially-appointed TRS Advisory Board was invaluable to the establishment of the VRC. Over the past three years, the combination of technical expertise and identification of consumer service needs enabled the VDDHH and SCC to implement a quality service. However, as the Center has matured, the need for input from an advisory entity has shifted towards consumer input and away from specific technical expertise. Therefore, the VDDHH and SCC recommend that Code section 56-484.7.B. be reviewed by the Fall of 1995 to include increased consumer participation on the Board.

Appendix I
Federal Communications Commission
Certification Letter FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

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IN REPLY REFER TO:

July 8, 1993

Mr. Bruce A. Sofinski
Manager, Technology Programs
Commonwealth of Virginia
Department for the Deaf and Hard of Hearing
Washington Building Capitol Square
1100 Bank Street, 12th Floor
Richmond, VA 23219-3640

RE: Telecommunications Relay Services (TRS)
State Certification Grant
Application No. TRS-17-92: VIRGINIA

Dear Mr. Sofinski:

Pursuant to Title IV of the Americans with Disabilities Act of 1990, § 225 of the Communications Act of 1934, as amended, and §§ 64.601 - 64.605 of the Code of Federal Regulations, 47 C.F.R. §§ 64.601-64.605, Application No. TRS-17-92: VIRGINIA is hereby granted. The referenced state TRS application meets or exceeds all operational, technical, and functional minimum standards contained in § 64.604 of our rules, and makes available adequate procedures and remedies for enforcing the requirements of the state program.

This certification shall remain in effect for a five year period beginning July 26, 1993, and ending July 25, 1998. As of July 26, 1997, the state may apply for renewal of its certification by filing documentation as prescribed by 47 C.F.R. § 64.605.

For good cause shown, we hereby suspend enforcement, until July 26, 1995, of the requirement that TRS shall be capable of handling coin-sent paid calls. At that time, we will review whether such a service is technically feasible.

Sincerely,

Kathleen B. Levitz

Kathleen B. Levitz
Acting Chief
Common Carrier Bureau