



Minnesota Department of Commerce

# **Telecommunications Access Minnesota**

**2012 Annual Report to the Public Utilities Commission**

**Docket No. P999/PR-13-5**

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## EXECUTIVE SUMMARY

In order to provide equal access to the telecommunications network for people who are deaf, hard of hearing, speech disabled, or physically disabled, the Minnesota Legislature created what is now known as the Telecommunications Access Minnesota (TAM) program. Minnesota Relay and the Telephone Equipment Distribution (TED) Program were established to achieve this objective, and are funded by a surcharge on all wired and wireless telephone access lines in the state of Minnesota. The current TAM surcharge is \$0.06 per access line; by statute, the surcharge may not exceed \$0.20 per access line.

The state procedures and requirements regulating Minnesota Relay, the Telephone Equipment Distribution Program, and the Telecommunications Access Minnesota fund fall under Minnesota Statute § 237.50 – 237.56 and Minnesota Rules, Chapter 8775.

### MINNESOTA RELAY

The state contracts with Communication Service for the Deaf for the provision of Telecommunications Relay Services in Minnesota. The contract is effective from July 1, 2006, through June 30, 2014, with the option to renew up to an additional 24 months.

In 2012, Minnesota consumers placed 678,918 relay calls for a total of 1.68 million conversation minutes of use. Total call volume for Minnesota Relay continued to decline in 2012, as many consumers are transitioning to Internet-based relay services, which are under the Federal Communications Commission's jurisdiction. However, use of two forms of Minnesota Relay services – Speech-to-Speech and captioned telephone (CapTel) – increased slightly this year.

The TED Program provides Minnesota Relay Outreach services (via an interagency agreement) from Deaf and Hard of Hearing Services Division offices located in St. Paul, Mankato, St. Cloud, Duluth, and Moorhead. In 2012, there were 107 Minnesota Relay outreach activities performed reaching approximately 8,344 Minnesotans.

### TELEPHONE EQUIPMENT DISTRIBUTION (TED) PROGRAM

The TED Program is administered through an interagency agreement between the Department of Human Services – Deaf and Hard of Hearing Services Division and the Department of Commerce – TAM Program.

In 2012, the TED Program served 1,055 new participants, 2,465 repeat participants, and provided information and referrals to 1,436 consumers and agencies. Program specialists conducted 97 presentations and staffed booths at 45 expos, fairs, and other events. The TED Program distributed 2,169 telecommunications and auxiliary devices this year.

## TAM FUND

In addition to Minnesota Relay and the TED Program, three additional programs receive funding via the TAM surcharge: the Department of Employment and Economic Development – Accessible News for the Blind (ANB) program has a maximum annual budget of \$100,000, the Department of Human Services – Rural Real-time Captioning program has a maximum annual budget of \$300,000, and the Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans (MCDHH) receives \$300,000 annually.

In 2011, the legislature passed legislation allowing for a one-time direct appropriation from the TAM fund to the Office of Enterprise Technology (OET). OET receives \$230,000 in FY 2012 and \$230,000 in FY 2013 for coordinating technology accessibility and usability.

In 2011, the legislature passed legislation allowing for a one-time direct appropriation from the TAM fund to Legislative coordinating Commission (LCC). LCC receives \$150,000 in FY 2012 and \$150,000 in FY 2013 to provide captioning of live streaming of legislative activity on the LCC's website and for a consolidated access fund for other state agencies.

In 2011, the legislature passed legislation allowing for a one-time direct appropriation from the TAM fund to the Commission of Deaf, DeafBlind and Hard-of-Hearing Minnesotans (MCDHH). MCDHH receives \$20,000 in FY 2012 and \$20,000 in FY 2013 to provide information on their website in American Sign Language and to provide technical assistance to state agencies.

In 2011, the Minnesota Legislature approved a transfer of \$1,100,000 from the TAM fund to the general fund.

### **TAM Fund Activity in Fiscal Year 2012**

#### *Revenues:*

- Surcharge Revenue: \$4,857,642
- Account Interest: \$14,015

#### *Expenditures:*

- TAM Administration: \$122,880
- CSD (TRS) Contract: \$2,412,872
- TED Program: \$1,376,068
- Minnesota Relay Outreach: \$330
- Rural Real-time Captioning: \$220,105
- Accessible News for the Blind: \$100,000
- MCDHH: \$320,000
- OET: \$230,000
- LCC: \$150,000
- General Fund: \$1,100,000

## PROGRAM HISTORY

In 1987, the Minnesota Legislature passed legislation creating the Telecommunications Access for Communication Impaired Persons (TACIP) Board for the purpose of enabling people who have difficulty hearing or speaking on the telephone to talk to standard voice telephone users. Two programs were established to accomplish this goal: Minnesota Relay, which began service on March 1, 1989; and the Equipment Distribution Program (now re-named the Telephone Equipment Distribution [TED] Program), which began as a pilot program on October 1, 1988.

Minnesota Relay is a federally mandated Telecommunications Relay Services (TRS) program that allows an individual who is deaf, hard of hearing, deafblind, or speech disabled to communicate over the telephone in a manner that is functionally equivalent to the ability of an individual who does not have hearing loss or a speech disability. Minnesota Relay must be in full compliance with the requirements and intent of Title IV of the Americans with Disabilities Act of 1990, 47 U.S.C. § 225, Federal Communications Commission (FCC) regulations at 47 C.F.R. §§ 64.601 through 64.606, and Minnesota Statute §§ 237.50 through 237.56.

The TED Program provides specialized telecommunications equipment to enable persons who are deaf, hard of hearing, deafblind, speech disabled, or physically disabled to access telecommunications services. Program participants must meet eligibility requirements.

There have been significant changes and improvements to Minnesota Relay since its early years of operation. In 1995, the Minnesota Legislature eliminated the TACIP Board and transferred the responsibility for Minnesota Relay to the Department of Public Service (DPS)<sup>1</sup>. The Department of Human Services (DHS), through an interagency agreement with DOC-TAM, operates the TED Program (Minnesota Statute § 237.51, Subd. 1).

In 1996, after careful consideration of the needs of Minnesota Relay users, DPS-TACIP determined that it was in the best interest of relay users, telephone ratepayers, and the legislature to relieve the state of the burden of owning and maintaining TRS equipment. It was apparent that the Minnesota Relay facility and its equipment had become severely outdated and beyond the point of overhaul. DPS-TACIP was faced with two options: spend millions of dollars for the purchase of new equipment, or contract with a qualified TRS vendor that would furnish continually upgraded equipment and software as well as specially trained call center staff to provide Minnesota Relay services. It was decided that the best way to provide quality and cost effective relay services in Minnesota was to contract with a highly qualified TRS vendor.

On July 1, 1996, DPS-TACIP contracted with Communication Service for the Deaf (CSD) and Sprint Communications Company, LP (Sprint) for TRS. CSD's contract was for the provision of management, human resources and outreach components for Minnesota Relay. Sprint's contract was for the provision of the call center facility, equipment and maintenance, and access to Sprint's fiber optic telecommunications network. Initially, Minnesota Relay traffic was forwarded to relay centers operated jointly by CSD/Sprint. The Minnesota Relay center, located in Moorhead, began processing calls on December 16, 1996.

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<sup>1</sup>DPS and DOC merged on September 15, 1999.

Effective August 1, 2002, the name of the Telecommunications Access for Communication Impaired Persons (TACIP) program changed to Telecommunications Access Minnesota (TAM). The Department of Commerce (DOC) sought the name change at the request of consumers, who objected to the inclusion of the word “impaired” in the program name.

In 2005, the Minnesota Legislature passed legislation that created two new state programs, Accessible News for the Blind and Rural Real-time Captioning, that are funded via the TAM surcharge.

The Accessible News for the Blind (ANB) program provides accessible electronic information (news and other timely information) for people who are blind and disabled. This program is administered by the commissioner of the Department of Employment and Economic Development (DEED), and has a maximum annual budget of \$100,000.

The Rural Real-time Captioning program provides real-time, closed-captioning of certain local television news programs for people who are deaf, hard of hearing, or deaf-blind. This program is administered by the commissioner of the Department of Human Services (DHS), and has a maximum annual budget of \$300,000.

On October 17, 2005, DOC–TAM issued a Request for Proposal for the provision of TRS and associated outreach. The TRS contract was awarded to Communication Service for the Deaf (CSD) – with Sprint as a subcontractor – and was effective from July 1, 2006, through June 30, 2011, with the option to renew up to an additional 60 months. DOC–TAM extended the basic relay and captioned telephone relay services components of the TRS contract with CSD through June 30, 2014. The Minnesota Relay outreach component was not included in the contract extension.

In 2006, the Minnesota Legislature passed legislation that appropriates \$200,000 annually from the TAM fund to the Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans<sup>2</sup> (MCDHH) for operational expenses. MCDHH is a governor appointed commission that advocates for equality of opportunity for Minnesotans who are deaf, deafblind, and hard of hearing. In 2007, the Minnesota Legislature passed legislation that appropriates an additional \$100,000 annually from the TAM fund to MCDHH, for a total direct appropriation of \$300,000 annually.

In 2008, the Minnesota Legislature passed legislation allowing for two direct appropriations from the TAM fund in FY 2009: \$85,000 was appropriated for a State Video Franchising study and \$175,000 was appropriated for a Broadband Mapping project.

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<sup>2</sup> Effective August 1, 2008, the Minnesota Legislature passed legislation to change the name of the Minnesota Commission Serving Deaf and Hard-of-Hearing People to the Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans. The commission will continue to use the MCDHH initialism.



In 2009, the Minnesota Legislature passed legislation allowing for three one-time direct appropriations from the TAM fund in FY 2010 and in FY 2011. The Office of Enterprise Technology (OET) was appropriated \$100,000 each year for technology accessibility and usability. The Legislative Coordinating Commission (LCC) was appropriated \$100,000 each year for captioning of live streaming of legislative sessions. MCDHH was appropriated \$100,000 each year for American Sign Language website content.

In 2010, the Minnesota Legislature approved transfers of \$246,000 in FY 2010 and \$270,000 in FY 2011 from the TAM fund to the general fund.

In 2011, the legislature again passed legislation allowing for one-time direct appropriations from the TAM fund to OET, LLC, and MCDHH. OET receives \$230,000 in FY 2012 and \$230,000 in FY 2013 for coordinating technology accessibility and usability. LCC receives \$150,000 in FY 2012 and \$150,000 in FY 2013 to provide captioning of live streaming of legislative activity on the LCC's website and for a consolidated access fund for other state agencies. MCDHH receives \$20,000 in FY 2012 and \$20,000 in FY 2013 to provide information on their website in American Sign Language and to provide technical assistance to state agencies.

In 2011, the Minnesota Legislature approved a transfer of \$1,100,000 from the TAM fund to the general fund; the transfer was processed in FY 2012.

In July 2011, DOC-TAM began contracting with DHS – TED Program for the provision of Minnesota Relay Outreach services. With this transition, outreach is provided from five regional Deaf and Hard of Hearing Services office (in the past, Minnesota Relay outreach was provided from one office located in St. Paul), and TAM has greater oversight of staff and program objectives. In addition, the new contract saves the TAM fund approximately \$250,000 annually.

## TELECOMMUNICATIONS ACCESS MINNESOTA (TAM)

### TAM ADMINISTRATION

DOC–TAM administers the TAM fund and manages vendor contracts and interagency agreements. Minnesota Relay services are provided to the state under contract with Communication Service for the Deaf. The TED Program, Minnesota Relay Outreach services, and the Rural Real-time Captioning program are provided to the state under interagency agreements with the Department of Human Services. The Accessible News for the Blind program is provided to the state under an interagency agreement with the Department of Employment and Economic Development.

### TAM FUNDING

Minnesota Relay, Minnesota Relay Outreach, TED Program, Accessible News for the Blind, Rural Real-time Captioning, annual direct appropriation for MCDHH, and administrative expenses of DOC–TAM are funded by a monthly surcharge on all wired and wireless telephone access lines in the state of Minnesota. TAM surcharge revenue is deposited into a dedicated account. The monthly surcharge is capped at \$0.20 per access line.

Minnesota’s Telecommunications Relay Services (TRS) program observes all jurisdictional separation of costs as required by 47 C.F.R. § 64.604(c)(5), Section 410 of the Communications Act of 1934, Minnesota Statute § 237.10, and Minnesota Rules, Chapter 7810.6400. All Minnesota Relay intrastate and interstate minutes are reported separately and distinctly to the state and are included in monthly invoices from CSD.

Minnesota Relay local and intrastate minutes of service (including 49 percent of toll free and 900 minutes, and 89 percent of two-line CapTel minutes) are reimbursed through the TAM fund. Minnesota Relay interstate and international minutes of service (including 51 percent of toll free and 900 minutes, and 11 percent of two-line CapTel minutes) are reimbursed by the Interstate TRS Fund.<sup>3</sup>

In May 2012, the PUC approved DOC–TAM’s fiscal year 2013 Budget and Surcharge Recommendations. The PUC accepted DOC–TAM’s recommendation to maintain the surcharge at \$0.06 for fiscal year 2013, which will support all TAM fund programs and will maintain an adequate reserve for operating expenses.

### POPULATION SERVED

TAM and the TED Program serve Minnesotans who have a hearing, speech, or physical disability that makes it difficult or impossible to use standard telecommunications services and equipment, and also serves persons who wish to communicate with these individuals.

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<sup>3</sup> The Interstate TRS Fund is funded by contributions from every carrier providing interstate telecommunications services (including interconnected and non-interconnected VoIP service providers) based on interstate end-user revenues. The fund administrator is currently Rolka Loube Saltzer Associates.

## ROLE OF THE PUBLIC UTILITIES COMMISSION

In accordance with Minnesota Statute § 237.55, “The commissioner of commerce must prepare a report for presentation to the Public Utilities Commission by January 31 of each year. Each report must review the accessibility of telecommunications services to persons who have communication disabilities, describe services provided, account for annual revenues and expenditures for each aspect of the fund to date, and include predicted program future operation.”

DOC–TAM must also submit an annual budget and surcharge recommendation to the PUC for approval. The commission reviews the recommendation for reasonableness, may modify the budget to the extent it is determined unreasonable, and sets the annual TAM surcharge amount (Minnesota Statute §237.52, Subd. 2).

## MINNESOTA RELAY PROGRESS

### STATUTE REVISIONS

In 2012, the Department of Human Services, in consultation with the Department of Commerce, introduced a bill to amend the Communication Impaired Persons statute (Minnesota Statutes 2010, sections 237.50 to 237.56). The revisions were primarily to update telecommunications and disability definitions and to modernize terminology. The legislation passed. The revised statute can be found on the Minnesota Office of the Revisor of Statutes website at <https://www.revisor.mn.gov/statutes/>.

### SPEECH-TO-SPEECH ENHANCEMENTS

In 2012, Minnesota Relay introduced new features for Speech-to-Speech (STS) users, including:

- Ⓢ **My Support:** Dedicated customer services staff is available 24/7 to assist STS users or organizations serving STS users with basic information about STS, filling out customer profiles, and other features designed to support STS customers and their callers.
- Ⓢ **My E-Mail Set-Up:** During long calls, a STS user may tire and speech may become more difficult. In order to expedite the set-up of the call, Minnesota Relay offers *My E-Mail Set-up*. STS users can e-mail call instructions or information 2 to 24 hours prior to the call. This can include information such as the phone number to be dialed, the name of the person being called, the subject of the call, any special instructions, or anything that makes it easier for the STS user to complete the call.
- Ⓢ **My Saved Messages:** Sometimes a STS user can spend a good deal of time dictating a message for an answering machine only to get a busy signal and be unable to leave that message. With *My Saved Messages*, upon request, the STS CA can copy any messages desired onto the customer’s profile. When the STS user wants to try the call again, he/she simply redials STS and asks the CA to retrieve the saved message. After 24-hours, the message copied into the profile is automatically deleted from the system.

© **My Name and My Places:** With *My Name* and *My Places*, receiving calls is easier than ever for STS users. Once a STS user registers *My Name*, voice callers can simply call STS relay and ask for the STS user directly by name – without having to provide the telephone number. STS users can add multiple telephone numbers and hours of availability and when a voice user calls, the relay CA will reference the STS user’s *My Places* to view the registered phone numbers and times of availability.

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## CAPTEL CALL CENTER

To address growth in CapTel relay services, CapTel, Inc. opened a third CapTel call center in November 2012. The new call center is located in Orlando, FL. In May 2012, Sprint opened a CapTel call center in Lubbock, TX. The new centers will provide greater redundancy for CapTel relay calls.

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## MINNESOTA’S TRS STATE CERTIFICATION APPLICATION

On September 28, 2012, TAM filed an application for renewal of the certification for Minnesota’s Telecommunications Relay Services (TRS) program by the Federal Communications Commission.

The application must establish, as required by 47 C.F.R. § 64.606 (b)(1), that Minnesota’s TRS program (1) “meets or exceeds all operational, technical, and functional minimum standards contained in § 64.604”; (2) “makes available adequate procedures and remedies for enforcing the requirements of the state program, including that it makes available to TRS users informational materials on state and Commission complaint procedures sufficient for users to know the proper procedures for filing complaints”; and (3) where the program “exceeds the mandatory minimum standards contained in § 64.604, the state establishes that its program in no way conflicts with federal law.”

Certifications remain in effect for five years. Minnesota’s current state TRS certification expires on July 26, 2013. One year prior to expiration of certification, states may file an application for renewal. The FCC has indicated that it will issue Public Notices and Letter Orders of certification renewals in May – June 2013.

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## ANTICIPATED TRS PLATFORM ENHANCEMENTS IN 2013

CapTel, Inc. will open a fourth CapTel call center in the spring of 2013, located in Syracuse, NY.

A Speech-to-Speech video enhancement may be implemented in 2013. The new feature, called video assisted STS (VA STS), allows the relay communications assistant (CA) to see the STS user as they are speaking. Seeing the STS user’s mouth movements, facial expressions, and gestures enable the CA to better understand and re-voice for the STS user. The STS user must have a computer with a webcam or a have a videophone to use VA STS.

## MINNESOTA RELAY SERVICES PROVIDED

Minnesota Relay is a free service that provides telephone accessibility to persons who are deaf, deafblind, hard of hearing, or speech disabled. A specially trained communications assistant (CA) facilitates the telephone conversation between a person who has hearing loss or a speech disability and the person with which they wish to speak. Calls can be made to anywhere in the world (long-distance charges apply), 24 hours a day, 365 days a year, with no restrictions on the number, length, or type of calls. All calls are strictly confidential and no records of any conversations are maintained.

TAM and the TED Program recognize the importance of looking to the future and monitoring the trends and rapid advances in telecommunications technology. We strive to provide services that have the same level of quality and provide similar features as the telecommunications services and equipment available to consumers without hearing, speech, or physical disabilities.

TAM and the TED Program are also committed to providing Minnesotans with education, training, and support regarding TRS and specialized telecommunications equipment.

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## MINNESOTA RELAY FEATURES

- **7-1-1:** A nationwide abbreviated dialing code for accessing all types of relay services.
- **800/877/888 Numbers:** Minnesota Relay users are able to reach regionally restricted 800, 877, and 888 toll free numbers and business offices of local telephone companies that have special prefixes, all of which would normally be accessible to consumers in their calling area.
- **900 Service:** allows Minnesota Relay users to access 900 number pay-per-call services.
- **Answering Machine Retrieval:** TTY users can request a CA to retrieve messages from the user's voice answering machine or voice mail.
- **American Standard Code for Information Interchange (ASCII) Split Screen:** allows high-speed ASCII computer users and CAs to type and communicate more clearly and quickly. Similar to voice-to-voice conversation, ASCII Split Screen provides interrupt capability, when appropriate, for the ASCII user and the voice party.
- **Call Release:** allows the CA to sign-off or be "released" from the telephone line after the CA has set up a telephone call between the originating TTY caller and a called TTY party, such as when a TTY user must go through a TRS facility to contact another TTY user because the called TTY party can only be reached through a voice-only interface, such as a switchboard.
- **Caller ID:** Calls placed through Minnesota Relay will provide the originating calling party number (ANI), or caller ID information, through the local exchange carrier for all local and most long distance calls.

- **Captioned Telephone Relay Service (CapTel™):** allows individuals with hearing loss to receive word-for-word captions of what the other person on the call is saying, while also allowing them to use their residual hearing to listen to their phone conversations. The captions, which are generated through a captioning service using the latest in voice recognition technology, appear on the text display of the relay user’s specialized captioned telephone.
  - **Two-Line CapTel:** Like standard CapTel relay, two-line CapTel provides live captions of everything the other party says during a phone conversation. With two-line CapTel, the conversation is carried on one telephone line and the captions are provided on a second line. This gives two-line CapTel relay users the ability to caption any phone call – incoming or outgoing – at any point in the conversation. Two-line CapTel also supports enhancements that the user has purchased from their telephone service, including call waiting.
- **Carrier of Choice (COC):** allows a relay user to choose their preferred carrier for intrastate, interstate, and international calls. This requires the user’s COC to enter into a billing and collection agreement with Sprint.
- **Cellular/PCS Phone Access:** allows a cellular customer to reach Minnesota Relay’s toll-free number(s) to complete relay calls.
- **Customer Preference Database:** offers relay users numerous ways to automatically expedite the initiation of custom calls. These pre-selected customer calling features include, but are not limited to, communication modes (TTY, Voice, and ASCII), carrier of choice, preferred billing method, frequently dialed numbers, emergency numbers, and customer notes for call processing.
- **Directory Assistance:** A CA will relay directory assistance (DA) calls between a relay user and the Local Exchange Carrier (LEC) DA operator. Once the caller makes a request for directory assistance, the CA will contact a LEC DA operator. After obtaining the requested phone number, the caller may choose to place the call through the relay or dial it directly (i.e. TTY to TTY). Note: DA is often subject to charges by the caller’s local telephone service provider.
- **Deaf-Blind Transmission Speed:** A modification of the default transmission speed for Telebraille users. Instead of the default setting at 45 words-per-minute, the transmission speed has been reduced to 15 words-per-minute, with system capability to increase or decrease transmission speed by 5 words-per-minute increments.
- **Emergency Assistance:** Although relay users are discouraged from placing 9-1-1 calls through the relay, calls are placed at the caller’s request. Through the provider’s E911 database, CAs use a “hot button” to automatically place a call to the most appropriate Public Safety Answering Point.

- **Enhanced Turbo Code (E-Turbo™):** allow a TTY user to automatically submit dialing and call set-up instructions when they dial into Minnesota Relay. This significantly reduces the amount of time necessary for the CA to set-up and process the outbound call. The result is that the TTY user is connected to their desired party at a speed that is more functionally equivalent to that of a non-relay call.
- **Error Correction:** This feature automatically corrects many typographical errors and spells out non-TTY abbreviations that may be used by the CA in voice-to-text transliteration.
- **Flexible Billing:** allows Minnesota Relay users to complete long distance calls using pre-paid calling cards, carrier calling cards, third party billing ,or by placing collect calls.
- **Gender ID:** This feature automatically matches the relay user’s gender with the gender of a CA. For example, the user has the option of allowing Minnesota Relay to use the caller’s Customer Preference information to automatically match the CA’s gender to their own.
- **Hearing Carry Over (HCO):** allows a hearing person who has very limited or no speech capability to make a phone call. The HCO user types his/her conversation for the CA to read to the hearing person, and listens directly to the hearing person’s response.
  - **Two-line HCO:** allows a hearing person with speech difficulties to make and receive telephone calls with real-time interaction (i.e. not having to wait for the “Go Ahead” or “GA” to respond). The HCO user uses one telephone line to listen to the other party’s conversation, and uses the second line to type his or her conversation for the CA to read to the other person. With two-line HCO, the relay user does not have to constantly move the telephone receiver from their ear to the TTY in order to hear the conversation and type their response. This makes for a smoother and more natural flow to the telephone conversation.
- **Intelligent Call Router:** Technology that automatically and seamlessly routes relay calls to the first available CA in the network.
- **International Calls:** allows the relay user to place and receive calls to and from anywhere in the world (using English or Spanish languages only).
- **Last Number Redial:** allows the relay user to call the last person dialed through the relay without having to provide the telephone number dialed to the CA.
- **Recording Machine Capabilities:** allows the CA to record and play back audio-text interaction messages to reduce numerous callbacks to convey entire messages to calling parties.
- **Spanish Relay:** the CA relays calls between a Spanish speaking person with a hearing or speech disability and a Spanish speaking hearing person.



- **Speech-to-Speech (STS):** allows a person who has difficulty speaking or being understood on the phone to communicate using his or her own voice or a voice synthesizer. The CA revoices the words of the person with a speech disability so the other person on the call can understand them.
- **Telecommunications Service Priority (TSP):** On October 31, 2005, Sprint activated their call centers under the TSP program. If a national or regional emergency causes service to be disrupted and the Moorhead relay center cannot receive or place calls, Sprint's participation in the TSP program means that Local Exchange Carriers will be required to restore service as rapidly as possible consistent with the priority status assigned to the Moorhead relay center.
- **Three-Way Calling Feature:** allows more than two parties to be on the telephone line at the same time with the CA.
- **Transfer Gate Capabilities:** allows the CA to transfer a caller to another form of relay service (i.e. Spanish, CapTel, Speech-to-Speech), to customer service, or to a relay center manager.
- **Text Telephone (TTY) Operator Service:** is available to complete a TTY to TTY call, obtain directory assistance information, or receive credit for erroneous billing.
- **Turbo Code Capability:** allows users to send information at the same speed it is typed, resulting in a more natural conversational flow and the ability to interrupt one another.
- **Variable Time Stamp Macro:** This macro enables the relay caller to know when their called party has disconnected from the call.
- **Voice Carry Over (VCO):** allows a person who has difficulty hearing on the phone to voice their conversations directly to the other person on the call. The CA then types the other person's response to the VCO user.
  - **Two-Line VCO:** allows a VCO user to use one phone line for speaking directly to the other person, while the second line is used to receive the CA's typed response from the other person. This enhanced feature provides for a more natural flow of conversation without the pauses of single-line VCO calls.
  - **VCO Gated Calling:** Minnesota Relay has dedicated VCO and two-line VCO toll-free phone numbers, which provide significant improvements in service by directing VCO users to specifically trained VCO and two-line VCO CAs.
  - **VCO-With-Privacy-and-No-GA:** allows VCO users to use the standard VCO feature without needing to say "Go ahead" or "GA". Additionally, the CA does not listen to the VCO user's spoken words.
- **Voice Call Progression:** allows voice or HCO callers to listen during call set-up (i.e. ringing or busy).



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## CALL VOLUMES

In 2012, Minnesota Relay averaged 56,577 calls per month: 19,709 traditional<sup>4</sup> relay calls, 1,068 Speech-to-Speech calls, and 35,800 CapTel calls. The following Minnesota Relay call charts can be found in **Appendix A**:

- 2002 – 2012 Minnesota Relay Call Volume
- 2012 Minnesota Relay Conversation Minutes by Type
- 2012 Minnesota Relay Traditional TRS Conversation Minutes
- 2012 Minnesota Relay Speech-to-Speech Conversation Minutes
- 2012 Minnesota Relay CapTel Conversation Minutes

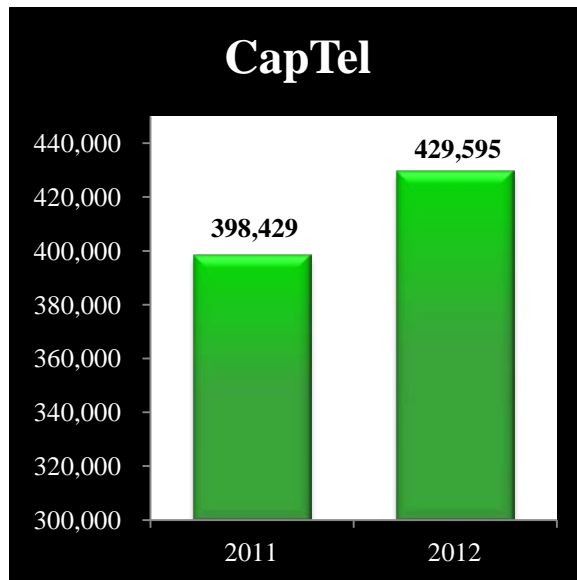
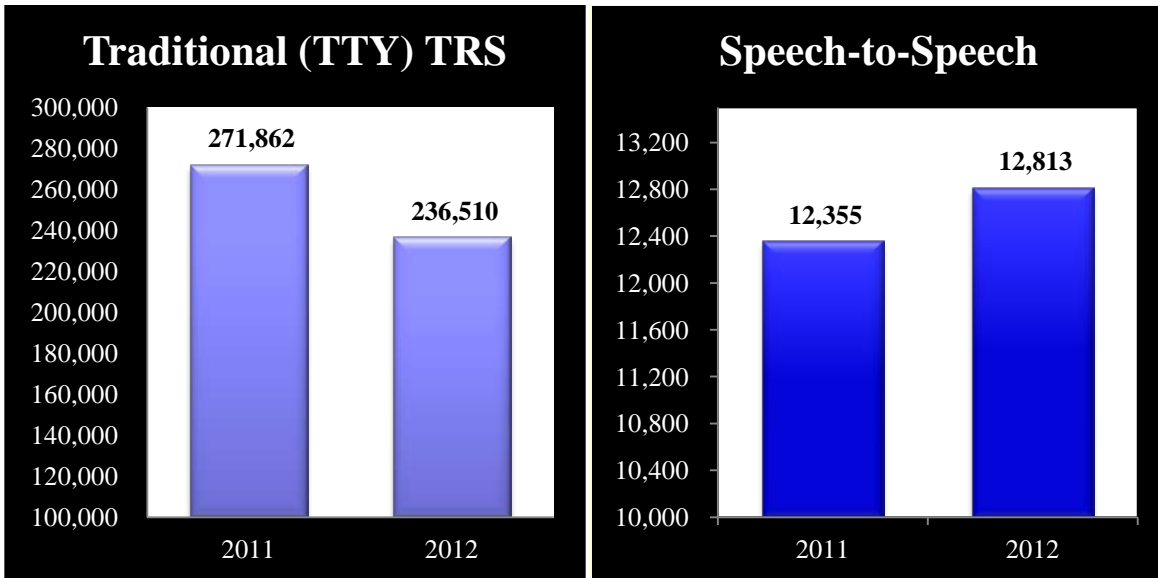
The use of Telecommunications Relay Services (TRS) continues to increase each year. However, the use of TTY based relay services began declining in 2002 with the introduction of Internet-based relay services such as Video Relay Service (VRS) and Internet Protocol (IP) Relay.

VRS is seen as true functional equivalence for relay users whose native language is American Sign Language (ASL), as communication is faster, smoother, and more natural than TTY communication. IP Relay is accessed via the Internet and a computer or Web-enabled device, and offers the ability to make relay calls without the use of a TTY. Internet-based relay services also allow relay users to make calls on the go, as many relay providers are developing free applications that can be downloaded to make relay calls on wireless devices such as smartphones, tablets, iPad, and iPod Touch.

The migration to Internet-based relay services continues to grow as more and more consumers gain access to high-speed Internet services. Because Internet-based relay services are currently under the Federal Communications Commission's jurisdiction, and are paid out of the Interstate TRS Fund, Minnesota Relay has not experienced the same growth in use. In 2012, traditional (TTY) based relay services continued to decline, while STS relay saw a slight increase in use and CapTel relay experienced a moderate increase.

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<sup>4</sup> Traditional TRS includes TTY, VCO, HCO, and Spanish forms of relay services. Traditional TRS does not include STS relay.



**ACCESSIBILITY OF TELECOMMUNICATIONS NETWORK**

**MINNESOTA RELAY FACILITIES**

The relay service facility uses an Avaya Automatic Call Distribution (ACD) switching system. The switch is an all-digital system that provides caller accessibility in excess of 99.99 percent. All major systems and components are redundant, which minimizes the dropping of calls originating or terminating in Minnesota.

The Minnesota Relay center utilizes both Uninterruptible Power Source (UPS) and backup power generators to ensure that the relay has uninterrupted power, even in the event of a power outage. UPS is used only long enough for the backup power generators to come on line – usually within a few minutes. The backup power generators are supplied with sufficient fuel to maintain operations for at least 24 hours. The generators can stay in service for longer periods as long as fuel is available. In the event of a power outage, the UPS and backup power generator ensure seamless power transition until normal power is restored. While this transition is in progress, power to all of the basic equipment and facilities essential to the relay center’s operation is maintained.

As a safety precaution (in case of a fire during a power failure), the fire suppression system is not electrically powered.

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## TRANSMISSION CIRCUITS

CSD’s subcontractor, Sprint, is a certified interexchange carrier in all 50 states. Using Sprint’s nationwide all digital fiber-optic network, transmission circuits meet, if not exceed, FCC and TAM intraexchange performance standards, and ANSI T1.506-1990 Network Performance – Transmission Specifications for Switched Exchange Access Network standards for circuit loss and noise.

Sprint’s Synchronous Optical Network (SONET), using four-fiber bi-directional line switched ring capability, allows automatic switching to alternate paths to provide for traffic rerouting in the event of a route failure. The SONET fiber optic backbone topology is currently designed with more than 100 overlapping rings to ensure sufficient alternate paths for total network survivability. As such, Minnesota Relay is linked to a coast-to-coast telecommunications route, which ensures voice, data, and video services without interrupting the call. This guarantees that Minnesota Relay calls are safeguarded by automatically rerouting service around disruptions in approximately 60 milliseconds.

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## SWITCHING SYSTEM

Minnesota Relay’s Avaya ACD switching system incorporates redundant Central Processor Units (CPUs) on hot stand-by and allows for remote monitoring and administration. This includes full maintenance and administrative access, real-time system monitoring, real-time report generation, and real-time programming capabilities. The maintenance staff and administrative personnel have the ability to perform preventative maintenance without taking the system off-line, via Transmission Control Protocol/Internet Protocol connections. In addition, on-line and off-line diagnostic routines identify system faults or failures at the individual board level and automatically notify a 24-hour staff of monitoring personnel.

Diagnostic procedures are continually processed by the switching system software to detect defective components before they are used. The relay network is designed to contend with any foreseeable weather-related challenges, power outages, and disasters. If one core switching system must shut down, the other core switching systems in the network remain operational and available to process calls, guaranteeing that communication is accessible at all times.

During a major or minor service disruption, the dynamic call-routing feature bypasses the failed or degraded facility and immediately directs calls to the first available CA in any of CSD and Sprint's fully interlinked TRS call centers. The transfer of calls between centers is transparent to users.

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## 7-1-1 DIALING ACCESS

On August 9, 2000, the FCC released a *Second Report and Order* concerning nationwide 7-1-1 dialing access to TRS<sup>5</sup>. The Order required all common carriers, wireless providers, payphone vendors, and Private Branch Exchange (PBX) vendors to provide 7-1-1 dialing access to relay services on or before October 1, 2001.

In 2012, approximately 43 percent of Minnesota Relay calls were placed using this dialing shortcut. Relay users are still able to access Minnesota Relay by dialing the 10 digit toll-free access numbers.

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## HANDLING OF EMERGENCY CALLS

Minnesota Relay encourages users to dial 9-1-1 or other existing emergency numbers directly in emergency situations as using relay may result in a delay in getting their call through. However, some consumers are more comfortable using relay to access emergency services.

Minnesota Relay automatically and immediately transfers emergency relay calls to the appropriate Public Service Answering Point (PSAP) that the caller would have reached by dialing 9-1-1 directly, or to a PSAP that is capable of dispatching emergency services in an expeditious manner. Minnesota Relay considers an emergency call to be one in which the relay user indicates the need for police, fire department, paramedics, or ambulance. Minnesota Relay utilizes a standard E911 database (provided by dash Carrier Services) that serves all of the United States.

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## SPEED OF ANSWER

Minnesota Relay meets the FCC mandatory minimum standard for TRS speed of answer (FCC 47 C.F.R. § 64.604), which states "TRS facilities shall, except during network failure, answer 85 % of all calls within 10 seconds by any method which results in the caller's call immediately being placed, not put in a queue or on hold." DOC-TAM's TRS contract with CSD requires a higher standard than that mandated by the FCC, requiring 90 percent of Minnesota Relay calls be answered within 10 seconds. In 2012, Minnesota Relay's average speed of answer was 1.3 seconds, and the average service level was 96 percent.

Minnesota Relay is equipped with sufficient facilities to provide a Grade of Service (GOS) of P.01 or better for calls entering the relay call center(s) switch equipment.

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<sup>5</sup> In the Matter of the Use of N11 Codes and Other Abbreviated Dialing Arrangements, (Second Report and Order), CC Docket No. 92-105, FCC 00-257, 15 FCC Rcd 15188, released August 9, 2000.

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## EQUAL ACCESS TO INTEREXCHANGE CARRIERS

47 C.F.R. § 64.604 (b)(3) requires that “TRS users shall have access to their chosen interexchange carrier through the TRS, and to all other operator services, to the same extent that such access is provided to voice users.”

Minnesota Relay users are able to have their intrastate, interstate and international calls carried by any interexchange carrier who has completed the steps necessary to be available as a Minnesota TRS Carrier of Choice (COC). When a caller indicates their COC preference, the CA will verify that the requested carrier is available as a COC in Minnesota; if they are, the call will be routed accordingly. Callers are able to use any billing method made available by the requested carrier including collect, third party, prepaid, and calling cards.

If a Minnesota Relay caller does not indicate a COC preference to the CA, either at the time of the relay call or via their Customer Preferences, or if the user’s preferred carrier is not available as a COC in Minnesota, the long distance relay call will be carried and billed by Sprint.

When a relay user requests a long distance carrier that is not a COC participant in Minnesota, CSD completes a Customer Contact form and provides the TAM administrator with the name of the requested carrier. The TAM administrator sends the non-participating long distance carrier a letter notifying the company of its obligation to provide access to TRS users, as well as instructions on how to become a COC in Minnesota.

Please see [Appendix B](#) for carriers currently available as a COC for Minnesota Relay.

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## RATES

Minnesota Relay users are charged no more for services than those charges paid by standard “voice” telephone users. Minnesota Relay users who do not select a preferred COC will have their long distance relay calls rated and invoiced by Sprint. Users who select a preferred COC will be rated and invoiced by their selected interstate carrier. Minnesota Relay users placing long distance calls are only billed for conversation time.

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## CONSUMER COMPLAINTS

In 2012, Minnesota Relay received complaints on 0.002 percent of relay calls; 678,918 calls were relayed and 16 complaints were filed.

Minnesota Relay users have many options for filing a complaint or commendation. The CA has the capability to transfer the caller directly to Sprint’s or CapTel’s 24-hour Customer Service departments, or the relay user may request to speak to a relay supervisor during or immediately after a call. Relay users may also file a complaint with Minnesota Relay outreach staff, with the TAM Administrator, or with the Federal Communications Commission (FCC).

All complaints and commendations are recorded electronically by Sprint on a Customer Contact form. Each form includes the date the complaint was filed, an explanation of the complaint, the

date the complaint was resolved, an explanation of the resolution and any other pertinent information. Sprint provides copies of each Customer Contact form to the TAM administrator monthly. In the event that DOC-TAM and the TRS provider fail to resolve a Minnesota Relay complaint within 180 days after the complaint was filed, the FCC exercises jurisdiction over the complaint. Failure to meet the deadlines for complaint resolution may adversely affect the continued certification of Minnesota Relay.<sup>6</sup>

DOC-TAM submits an annual Complaint Log Summary to the FCC in accordance with 47 C.F.R. § 64.605(c)(1)(ii).

## OUTREACH

### MINNESOTA RELAY OUTREACH

Minnesota Relay outreach is provided under an interagency agreement with the Department of Human Services – TED Program. Outreach staff is responsible for providing a comprehensive statewide outreach program to educate all people about, and promote Minnesota Relay services. Outreach personnel distribute informational pamphlets, train consumers and businesses, make presentations, staff exhibitions, and perform other similar forms of consumer contacts. Outreach program staff also serves as the point of contact for Minnesota consumers who have questions, concerns, complaints, commendations, etc. Outreach efforts are tailored to effectively target appropriate demographics, including consumers who are deaf, deafblind, hard of hearing, late deafened, speech disabled, hearing consumers, and businesses.

Outreach activities primarily include the following:

- Contacting organizations to schedule presentations and/or to provide them with printed materials on Minnesota Relay services.
- Contacting hospitals, nursing homes, rehabilitation facilities, and other medical facilities to schedule presentations and/or to provide printed materials.
- Staffing a booth at exhibitions, seminars, and fairs.
- Conducting one-on-one training sessions for individuals who are having trouble using specialized telephone equipment, such as a TTY, CapTel, or VCO telephone.

In 2012, staff performed 107 outreach activities reaching 8,344 Minnesotans.

Reports containing Minnesota Relay outreach efforts are compiled monthly and forwarded to the TAM administrator. An outreach summary for 2012 is provided in **Appendix C**.

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<sup>6</sup> C.F.R. § 64.605(c)(6)(iii).

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## DHHS REGIONAL ADVISORY COMMITTEE MEETINGS

The Department of Human Services – Deaf and Hard of Hearing Services Division (DHS – DHHS) has established six advisory committees throughout Minnesota. Each advisory committee meets quarterly and serves as a venue to provide information to, and gather information from, the community. Advisory committee meeting minutes are provided to the TAM administrator and TED Program administrator so that issues, questions and concerns regarding Minnesota Relay and the TED Program may be addressed.

The TAM Administrator attends the Metro advisory committee meetings, and a Minnesota Relay Outreach/TED Program staff person attends a minimum of one meeting per region, per year.

## TELEPHONE EQUIPMENT DISTRIBUTION PROGRAM

The Telephone Equipment Distribution Program (TED Program) is responsible for distributing specialized telecommunications devices to income eligible Minnesotans, informing the public of services available through the program, and providing training for the use of distributed equipment.

The TED Program is administered through an interagency agreement between DHS–DHHS and DOC–TAM. DHHS has six regional offices around the state staffed with professionals experienced in working with people who are deaf, hard of hearing, deafblind, speech disabled, or physically disabled. TED Program services are provided through five of the DHHS regional offices: Duluth, Moorhead, Mankato, St. Cloud, and St. Paul.

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## AUTHORITY TO PROVIDE EQUIPMENT

Minnesota Statute § 237.51, Subd. 5(a)(3) provides DHS with the authority to establish specifications for special communication devices to be purchased under section 237.53, Subd. 3.

The types of equipment distributed include:

- Amplified Telephones (both hearing and voice)
- Voice Carry Over Phones
- Hearing Carry Over Phones
- Captioned Telephones
- Remote Control Speaker Phones
- Text Telephones (TTYs)
- TTYs with Large Visual Display
- Braille Phones
- Amplified Cell Phones
- Ring Signaling Devices (auditory, visual and tactile)
- Special Needs Devices (multiple disability)

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## PROGRAM OUTREACH

DHHS is responsible for the promotion of TED Program services. TED Program specialists conducted much of their outreach by traveling to client homes and providing information and training “face-to-face.” While websites, e-mails and telephone calls can be an efficient, effective, and convenient way of providing information, TED Program specialists find that many consumers are more receptive if material is provided to them in person. Traveling to consumers to provide information, equipment, and training of the complexity of the device helps eliminate apprehension and mistrust, and results in a more personal, relaxed, and productive experience for the consumer.

A large portion of Minnesotans with hearing loss – 33 percent – are 65 years of age or older. It is expected that by age 65 one out of three people will have a hearing loss, and the number is expected to rise as the Baby Boomer generation matures. The TED Program is strategizing a promotional campaign to target Baby Boomers.

2012 outreach efforts included:

- 97 presentations to groups of professionals and potential consumers.
- 45 booths at health fairs and senior expos to professionals and potential consumers.
- 33 cold calls to service providers.
- 14 drop-in visits to various agencies who serve TED Program clients.
- Mass mailing (statewide) to 420 organizations who serve potential TED Program clients.
- Mass mailing to 3,000 Meals on Wheels programs in central Minnesota.
- Mass mailing to over 10,000 churches in Minnesota.
- Direct mailing (statewide) to over 16,000 Minnesota residents with a physical disability.
- Mailings to Costco, Sam’s Club, and Walmart store pharmacies and hearing aid centers.
- Mailings to Durable Medical Equipment companies.
- Advertisements in MN Health Care News, MN Physicians Medical Directory, MN Senior Housing Guide, Senior Perspective, White Way Pharmacies, East Central Resource Guide, Seasons and Generations Magazine, Mille Lacs Messenger, Mature Lifestyles section of the Sun Newspaper, Today’s Senior magazine, and 11 community newspapers.
- Radio advertisements for six weeks on KFAI Radio in the Metro and surrounding area.
- Advertisements in conference booklets for the MN Homecare Association, Maplewood Community Center, and St. Cloud Senior Expo.
- Designed division banner incorporating four core division programs, including the TED Program.



The chart below lists the number of *new* program participants served by the TED Program, as well as the number of devices distributed to *new* program participants for calendar years 1998-2012.

Year	Number of New Program Participants Served	Number of Devices Distributed to New Program Participants
1998	2,069	2,120
1999	2,141	2,340
2000	2,105	2,695
2001	1,882	2,431
2002	1,913	2,584
2003	1,906	2,337
2004	1,988	2,485
2005	1,872	2,405
2006	1,976	2,081
2007	1,771	2,073
2008	1,566	1,820
2009	1,638	2,728
2010	1,381	2,319
2011	1,317	2,529
2012	1,055	989

The TED Program provides *repeat* service to equipment recipients who need further assistance after equipment is initially provided to them. Program participants often contact the TED Program to receive additional training, repair/replacement of equipment, or to exchange equipment because their communication needs have changed (e.g. a person’s hearing deteriorates and the equipment they initially received no longer meets their needs).

This past year the TED Program served 1,055 new participants and 2,465 repeat participants. TED Program specialists also provided information and referrals to 1,436 consumers and agencies, for a total of 4,956 Minnesotans receiving service in 2012.

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## STATISTICAL INFORMATION

A report of TED Program activities is submitted quarterly to the TAM administrator. The report documents outreach activity, the number of individuals served, and the types of equipment distributed. The charts provided in **Appendix D** demonstrate 2012 TED Program activities.

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## POPULATION SERVED

The TED Program serves a wide range of individuals with a variety of communication needs. *Currently, the oldest TED Program participant is 102 years of age, and the youngest is age 10.* The average consumer served is female, 84 years old, and hard of hearing. In 2012, 68 percent of TED Program participants were female and 63 percent lived outside of the seven-county

metropolitan area. Ninety-one percent of TED Program participants are hard of hearing, 3 percent are deaf, 4 percent are physically disabled, and 2 percent have other disabilities.

In recent years, the TED Program has been utilized by more clients with multiple disabilities. In 2012, 19 percent of TED Program participants had two or more disabilities, such as a speech and physical disability or a loss of hearing and vision.

The TED Program has observed an increase in distribution of captioned telephones (CapTel). In 2012, the TED Program distributed 422 CapTel devices, which is 19 percent of total equipment distributed. In 2010, CapTel represented only 12 percent of total equipment distributed. For many TED Program clients with hearing loss an amplified phone is not sufficient, and they find that the CapTel, which is amplified and provides captions, better meets their needs.

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## WIRELESS CELLULAR TELEPHONE DISTRIBUTION

The TED Program continues to distribute the Jitterbug cell phone. Even though the distribution is small, many seniors report increased benefits from the phone, especially for safety and emergency reasons. In 2013, the company that manufactures Jitterbug, Great Call, will be offering a text messaging device. The TED Program plans to evaluate this new device for potential distribution to consumers who are deaf.

In 2012, the TED Program expanded its wireless phone options by adding two additional amplified cell phones and a Bluetooth neckloop. The new cell phones can be used with different service providers (the Jitterbug uses Verizon). The TED Program will continue to evaluate more wireless options for distribution in 2013.

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## FUTURE TED PROGRAM OPERATIONS

### **Future Technology Workgroup**

In 2012, the TED Program established a workgroup to examine future telecommunications equipment for the TED Program. The workgroup is also analyzing ways the program can expand to meet the changing needs of the community. Telecommunications technology is advancing rapidly, and as this industry evolves, the TED Program must continually reevaluate the needs of the consumers it serves and analyze the best types of equipment available to meet those needs.

### **Special Needs Clients**

The TED Program also continues to research equipment options for people who are deafblind and people who have a physical or speech disability. These segments of the population have been underserved due to the lack of telecommunications technology available to meet their needs, and the high cost of the specialized equipment. In recent years, there has been an increase in providing equipment to consumers with multiple disabilities. Examples of equipment distributed include cordless speakerphones, Braille phones, infrared devices, and modifying standard devices with adapters and switches.

## TAM FUND BUDGET SUMMARY

	FY 2012 Actual	FY 2013 Budgeted
<b>REVENUE</b>		
Surcharge Revenue Per Subscriber Line (FY 2011 = \$0.10; FY 2012 = \$0.10 in July 2011 & \$0.06 Remainder)	\$ 4,857,641.98	\$ 4,585,103.11
TAM Fund Interest	\$ 14,015.19	\$ 15,000.00
<b>Total TAM Fund Revenue</b>	<b>\$ 4,871,657.17</b>	<b>\$ 4,600,103.11</b>

<b>EXPENDITURES</b>		
TAM Program Administration	\$ (122,880.46)	\$ (165,250.00)
CSD (TRS)	\$ (2,412,871.67)	\$ (2,833,428.39)
DHS-TED Program	\$ (1,376,067.89)	\$ (1,533,350.00)
DHS-Minnesota Relay Outreach	\$ (330.00)	\$ (10,750.00)
DHS-Rural Real-time Captioning	\$ (220,105.43)	\$ (300,000.00)
DEED-Accessible News for the Blind	\$ (100,000.00)	\$ (100,000.00)
Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans	\$ (300,000.00)	\$ (300,000.00)
Office of Enterprise Technology - Technology Accessibility & Usability	\$ (230,000.00)	\$ (230,000.00)
Legislative Coordinating Commission - Captioning of Live Streaming of Legislative Sessions	\$ (150,000.00)	\$ (150,000.00)
Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans - ASL Website Content	\$ (20,000.00)	\$ (20,000.00)
Transfers to General Fund	\$ (1,100,000.00)	\$ (1,100,000.00)
<b>Total TAM Fund Expenditures</b>	<b>\$ (6,032,255.45)</b>	<b>\$ (6,742,778.39)</b>

<b>REVENUE VS. EXPENDITURES</b>	<b>\$ (1,160,598.28)</b>	<b>\$ (2,142,675.28)</b>
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<b>STATEMENT OF TAM FUND BALANCE</b>		
	FY 2012 Actual	FY 2013 Budgeted
TAM Fund Balance at Beginning of Fiscal Year	\$ 3,572,051.66	\$ 3,421,911.01
TAM Fund Revenue & Interest	\$ 4,871,657.17	\$ 4,600,103.11
DHS-TED Program Cash Advance (July)	\$ (200,000.00)	\$ (200,000.00)
DHS-Minnesota Relay Outreach Cash Advance (July)	\$ (5,000.00)	\$ (5,000.00)
Return of DHS-TED Program Cash Advance (June)	\$ 270,720.90	\$ 200,000.00
Return of DHS-Minnesota Relay Outreach Cash Advance (June)	\$ 5,000.00	\$ 5,000.00
TAM Fund Expenditures	\$ (6,032,255.45)	\$ (6,742,778.39)
<b>TAM Fund Balance at Close of Fiscal Year</b>	<b>\$ 2,482,174.28</b>	<b>\$ 1,279,235.73</b>

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# APPENDICES

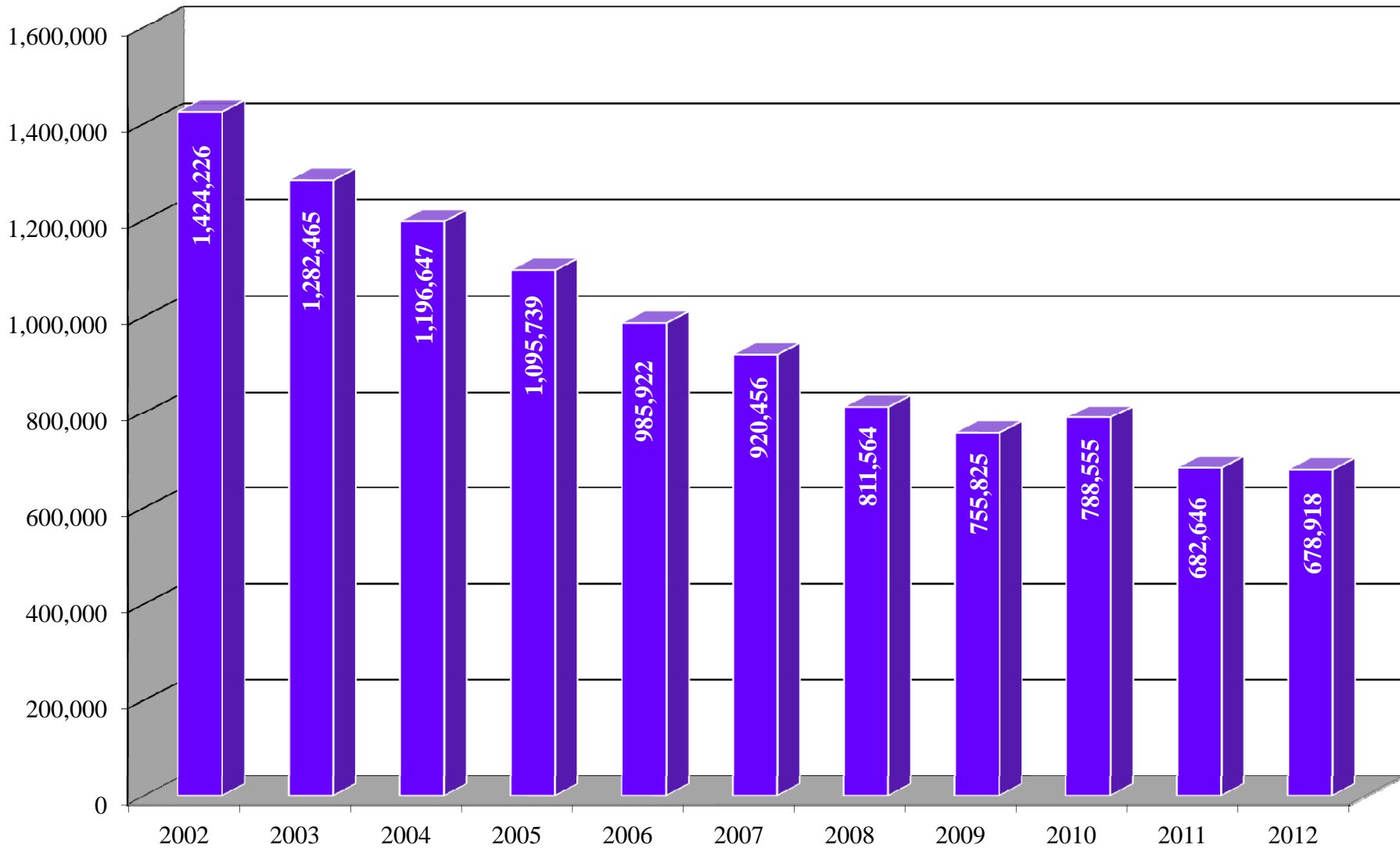
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# Appendix A

## Minnesota Relay Call Charts

# 2002 - 2012 Minnesota Relay Call Volume

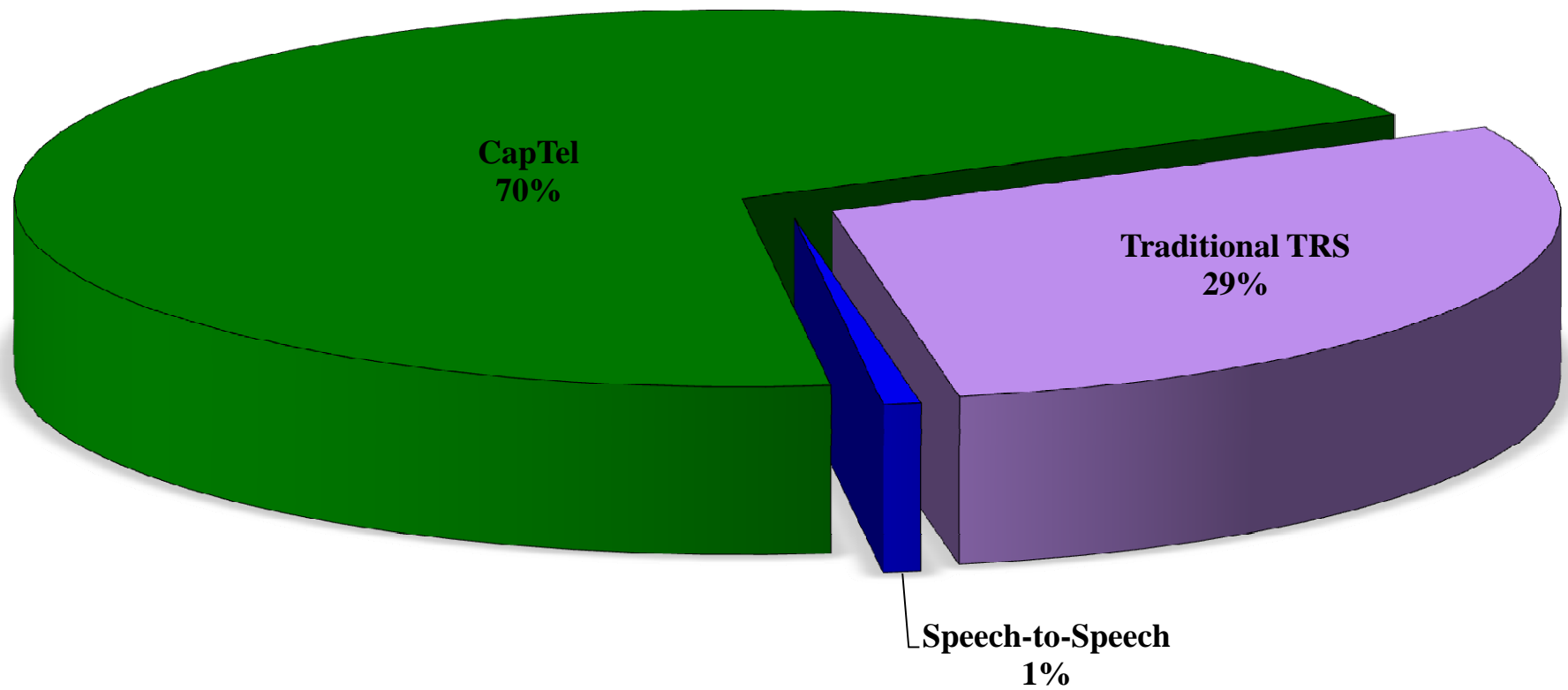
(total number of traditional TRS, STS, and CapTel calls)



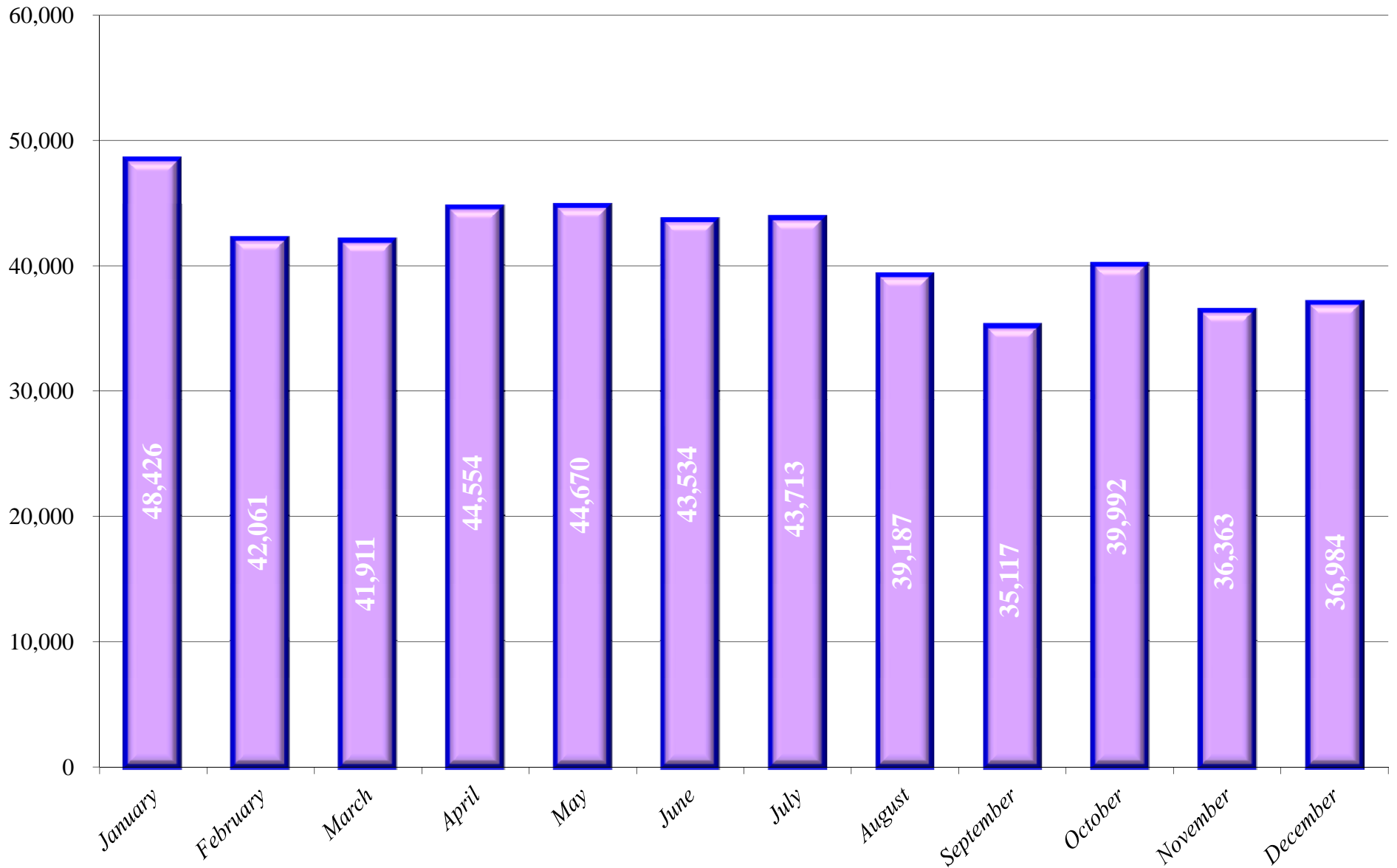
\*CapTel  
began in  
April



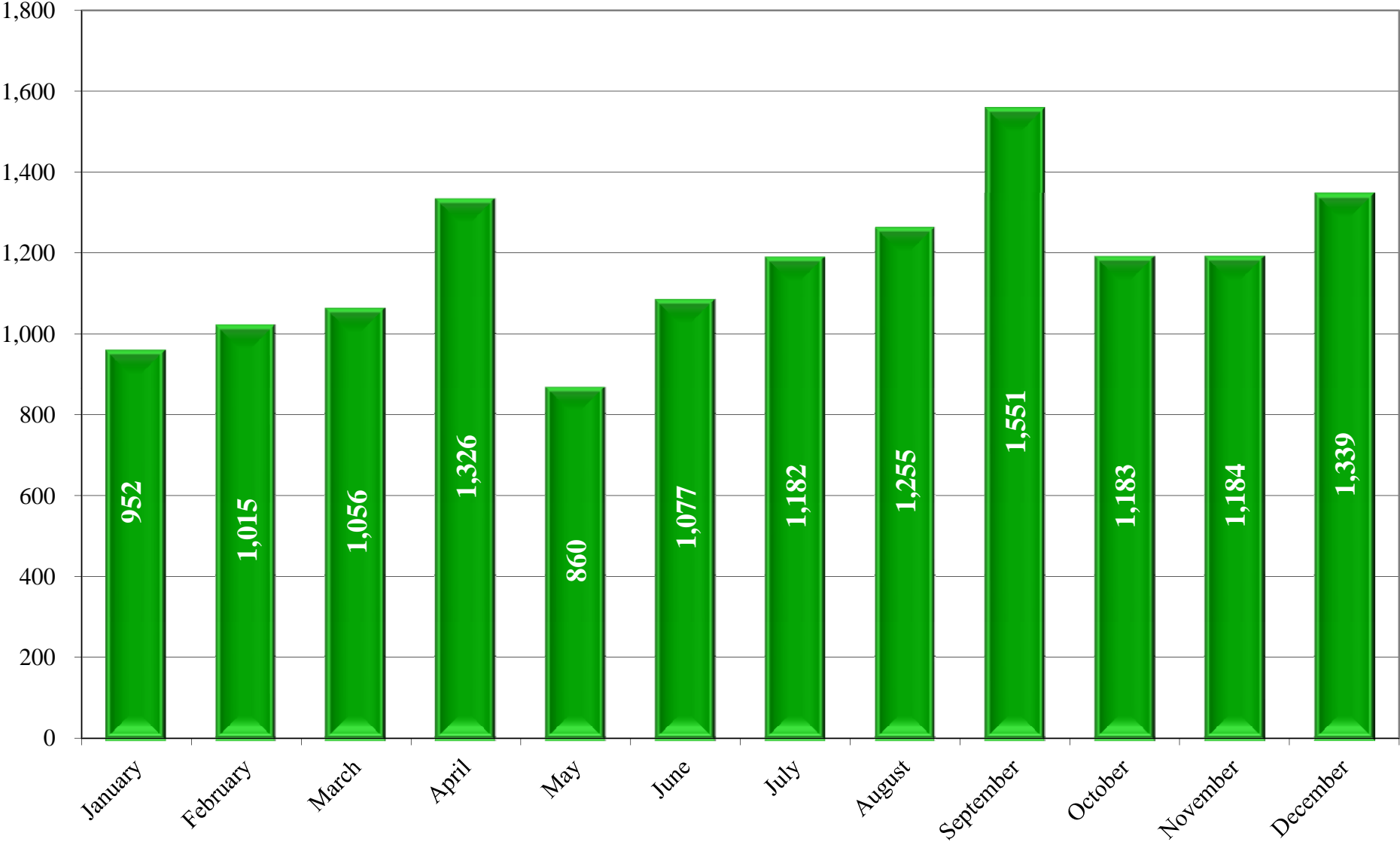
# Minnesota Relay 2012 Conversation Minutes by Type



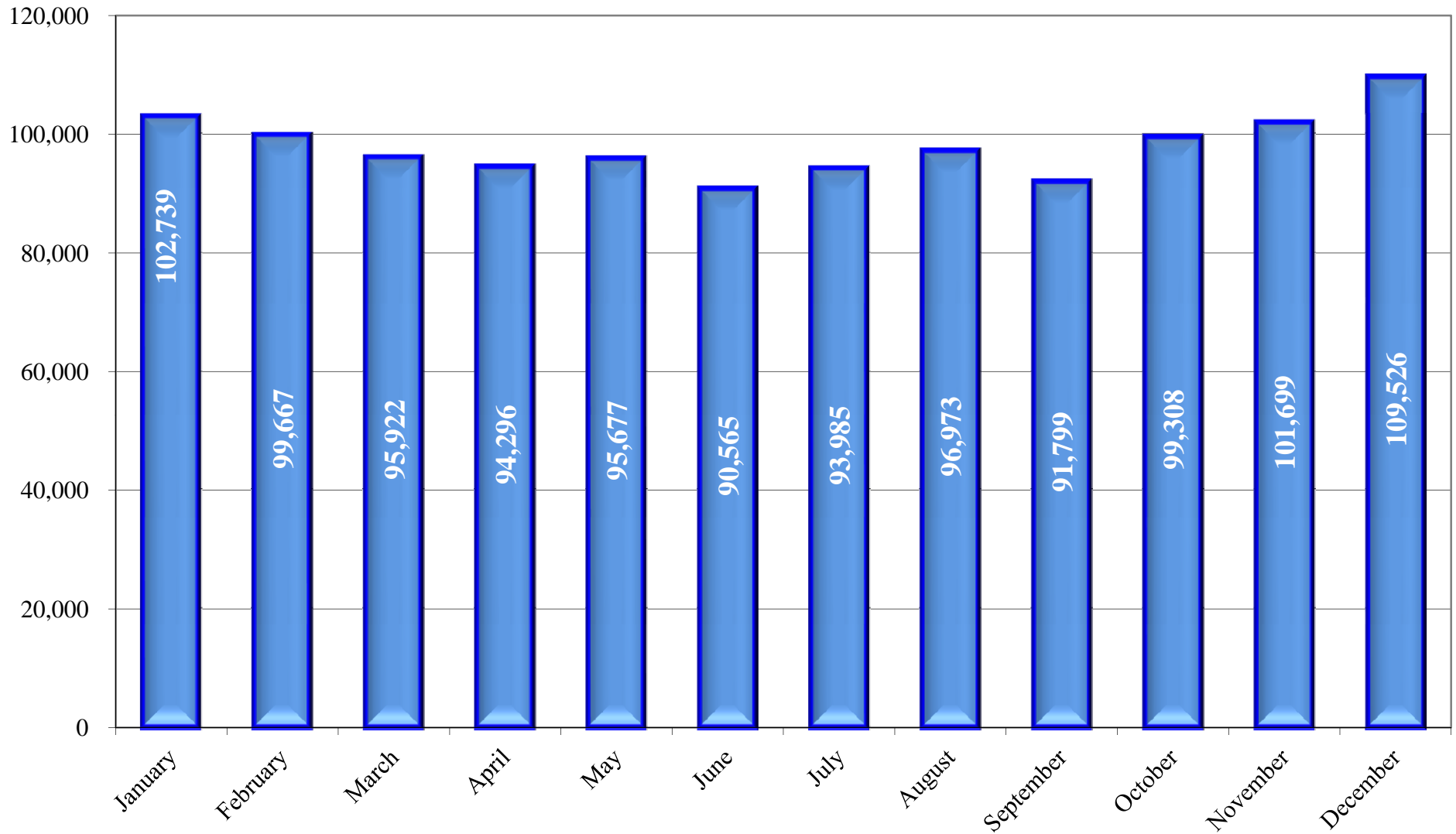
# 2012 Minnesota Relay Traditional TRS Conversation Minutes (TTY, VCO, HCO & Spanish)



# 2012 Minnesota Relay Speech-to-Speech Conversation Minutes



# 2012 Minnesota Relay CapTel Conversation Minutes



# Appendix B

## Long Distance Carriers of Choice

## Carrier of Choice List for Minnesota Relay

Carrier	Traditional TRS	CapTel
011 Communications	X	X
10-10-220 Telecom USA	X	
10-10-321 Telecom USA	X	
10-10-502 WorldxChange	X	
10-10-636 Clear Choice	X	
10-10-752 EXCEL	X	
10-10-811 Vartec	X	
10-10-834 WorldxChange	X	
10-10-987	X	
702 Communications	X	X
Ace Long Distance	X	X
ACN Communication Services		X
ACN Communications, Inc.	X	X
ACS Connections LD	X	X
ACS Long Distance	X	X
Advantage Communications	X	X
Affinity Network, Inc.	X	X
Albany Telephone LD	X	X
ANI Networks	X	X
Arrowhead LD	X	X
AT&T	X	X
Barnesville LD	X	X
Bell Atlantic Communications, Inc. dba Verizon LD		X
Benton Telephone LD	X	X
Birch Telecom/Ionex Comm.	X	X
Blackduck LD	X	X
Blueridge Telecom Systems	X	X
Broadwing Communications	X	X
Broadwing Telecommunications	X	X
Cannon Valley LD	X	X
CenturyLink (formerly Qwest)	X	X
CenturyTel Long Distance	X	X
CenturyTel Solutions	X	X
Charter Communications	X	X
Christensen Communication Company	X	X
CI Long Distance	X	X
CierraCom Systems	X	X
Citizens Communications	X	X
Comcast	X	X
Comcast Business Communications	X	X
Connections Long Distance	X	X
Consolidated Network Inc.		X
Cooperative Light & Power	X	X

Carrier	Traditional TRS	CapTel
CP Telecom	X	X
Crosslake LD	X	X
CTC Long Distance	X	X
CTI Long Distance	X	X
Delavan LD	X	X
Dunnell LD	X	X
Eagle Valley LD	X	X
EliteView, LLC	X	X
Emily Long Distance	X	X
En-Tel Communications	X	X
Eschelon Telecom, Inc.	X	X
Excel/Vartec		X
Exit Mobile	X	X
Farmers LD	X	X
Federated LD	X	X
Felton LD	X	X
FONETEL		X
Frontier Communications	X	X
Garden Valley LD	X	X
Gardonville LD	X	X
Global Crossing	X	X
Granada LD	X	X
Group Long Distance		X
GroveLine	X	X
GTC Telecom	X	X
Halstad LD	X	X
Hancock LD	X	X
Harmony Telephone Company	X	X
HBC Long Distance	X	X
HickoryTech	X	X
Home Telephone LD	X	X
Hometown Solutions LD	X	X
Horizon Telecom, Inc.	X	X
HorizonOne Communications	X	X
Hutchinson Telecommunications	X	X
Incomnet Communications Corporation		X
Integra Telecom	X	X
International Plus	X	X
Internet Business Association	X	X
Inter-Tel NetSolutions, Inc	X	X
ITC Long Distance	X	X
Ivantage Network Solutions	X	X
KMTC Long Distance	X	X
La Conexion Familiar Inc		X

Carrier	Traditional TRS	CapTel
Lakedale Communications	X	X
LDDS	X	X
LDMI		X
Lightyear Network Solutions	X	X
Lismore LD	X	X
Lonsdale One Plus	X	X
Loretel LD	X	X
Lowry Long Distance	X	X
Mabel Cooperative Telephone Co.	X	X
Madelia LD	X	X
Mainstreet Communications Long Distance	X	X
Mainstreet LD	X	X
Matrix Telcom		X
MCI		X
MCI/WorldCom	X	X
MCI/WorldXchange (Acceris Communications)		X
McLeod USA	X	X
Melrose LD	X	X
Metromedia	X	X
Midcontinent Communications	X	X
Midwest LD	X	X
Milaca Local Link LD	X	X
Minnesota Valley Communications, Inc	X	X
MRC Communications		X
New Ulm LD	X	X
Norlight Telecommunications Inc.	X	X
North Dakota Long Distance	X	X
Northstar Access LD	X	X
NOS Communications, Inc.	X	X
NOSVA Limited	X	X
Onvoy	X	X
OPEX LD	X	X
Optic Communications	X	X
Orbit Com, Inc.	X	X
Osakis Long Distance	X	X
OtterCom, Inc	X	X
Ottertall Telecom LD	X	X
PAETEC Communications, Inc.	X	X
Park Region LD	X	X
Peoples Long Distance	X	X
Pine Island LD	X	X
Pioneer Telephone	X	X
POPP.Com	X	X
PrairieWave Communications	X	X



Carrier	Traditional TRS	CapTel
QuantumLink Communications	X	X
Red River LD	X	X
Reduced Rate Long Distance, LLC	X	X
Redwood Long Distance Company	X	X
Reliance Telephone Inc.	X	X
Rochester Telecom System, Inc.	X	X
Rothsay Long Distance	X	X
Royale Comtronics, Inc.	X	X
RSLCom		X
Runestone LD	X	X
SBC Long Distance	X	X
Sleepy Eye LD	X	X
Speedway Long Distance	X	X
Spring Grove Communications	X	X
Sprint	X	X
St. James LD	X	X
Switched Services Comm. L.L.C.		X
Sytek Comm LD	X	X
Talk America (formerly AOL Long Distance)		X
TCG Minnesota Inc.	X	X
TCO Network	X	X
TDS Metrocom		X
TDS Telecom	X	X
Telcom Group, Inc.		X
Telec Inc.		X
Telecom USA		X
Telegroup	X	X
Telemanagement Consultants Corp		X
Telephone Associates, Inc.	X	X
The Furst Group, Inc		X
Touch America	X	X
TouchTone Communications	X	X
Trans National Communications International, Inc.	X	X
TransWorld Network Corp	X	X
TTI National	X	X
U.S. Telecom Long Distance, Inc.	X	X
Unitel Long Distance	X	X
US Xchange		X
USL	X	X
Venture LLP	X	X
Verizon Long Distance	X	X
Verizon Select Services(VSSI)	X	
VoIP Communications	X	X
WCTA Long Distance	X	X

<b>Carrier</b>	<b>Traditional TRS</b>	<b>CapTel</b>
WH Comm	X	X
Williams Local Network Inc.		X
Wiltel	X	X
Windom Long Distance	X	X
Winstar		X
Winstar (Midcom)		X
Woodstock LD	X	X
Working Assets	X	X
WorldCom	X	X
WTC Long Distance	X	X
XO Communications	X	X
Xtracom, Inc.		X

# Appendix C

## Minnesota Relay Outreach

## 2012 Minnesota Relay Outreach Activities

Date	Type of Outreach	Location Name	City	Number of Participants	Business	CapTel	STS	General TRS
Jan 16	In Home Demonstration	Elder Care Services	Madison lake	3				X
Jan 18	Presentation	Guardian Angels Senior Housing	Elk River	8				X
Jan 19	Presentation	Senior Center - Jackson	Jackson	15				X
Jan 26	Drop-In	Living at Home Block Nursing Program	Atwater	1				X
Jan 26	Presentation	Wildwood Manor	Moundsview	18				X
Jan 26	Presentation	Suite Living Assisted Living	Le Sueur	17				X
Jan 27	Presentation	Monticello Middle School	Monticello	7				X
Jan 30	Presentation	Sertoma - Mankato	Mankato	14				X
Feb 07	Presentation	Echo Ridge Presbyterian Homes	Oakdale	25				X
Feb 15	Presentation	Windlow Commons	St. Paul	17				X
Feb 16	Presentation	Oak Terrace Assisted Living	Mankato	18				X
Feb 21	Presentation	Lighthouse of Barnum and Cloquet	Cloquet	1				X
Feb 22	Presentation	Area Agency on Aging - Minnesota River	Mankato	22				X
Feb 28	Meeting	Senior Networking	Hibbing	7				X
Mar 02	Meeting	Alzheimer's Association	Duluth	1				X
Mar 14	Meeting	Land of the Dancing Sky Area Agency on Aging	Warren	19		X		
Mar 16	Presentation	Senior Center - Monticello	Monticello	8				X
Mar 17	Booth	Family Event - DHHS Northwest	Moorhead	42				X
Mar 20	Booth	DEED - Rehab Services Duluth	Duluth	30				X
Mar 21	Presentation	Kandiyohi County Health & Human Services	Willmar	15				X
Mar 27	Booth	Living at Home Block Nursing Program	Atwater	25				X
Mar 28	Booth	Grove City Block Nurse Program	Grove City	19				X
Apr 04	Presentation	Area Agency on Aging - Minnesota River	Mankato	25				X
Apr 04	Presentation	Monarch Meadows Senior Living	North Mankato	15				X
Apr 05	Presentation	The Wilds of Sand Prairie	St. Peter	15				X
Apr 13	Presentation	Fellowship Missionary Baptist Church	Minneapolis	25				X
Apr 14	Booth	Anoka County Senior Expo	Ramsey	250				X
Apr 24	Booth	Folwell Park	Minneapolis	75				X
Apr 25	Presentation	Oxbowl Bend Apartments	Coon Rapids	5				X
Apr 30	Booth	Pope County Triad	Glenwood	13				X
Apr 30	Presentation	Oak Crest Senior Housing	Roseau	7				X

Date	Type of Outreach	Location Name	City	Number of Participants	Business	CapTel	STS	General TRS
May 02	Presentation	GreenLeaf Senior Living - TRF	Thief River Falls	15				X
May 02	Presentation	Senior Citizens Service Co-op	North Mankato	60				X
May 03	Presentation	DHHS St. Cloud	St. Cloud	6				X
May 09	Booth	MnDOT/Disability Programs	Mankato	22				X
May 10	Presentation	Birch Haven Village	Bemidji	7		X		X
May 14	Presentation	North Park Plaza Apartments	New Hope	10				X
May 15	Booth	Senior Expo - Mankato	Mankato	1500				X
May 15	Presentation	MN Regions Assistive Technology Collaborative	Maple Plain	7				X
May 16	Booth	Minnesota Home Care Association	St. Paul	130				X
May 23	Presentation	Rivers Edge Assisted Living	Hallock	7				X
May 23	Presentation	The Meadows	Karlstad	11				X
May 24	Booth	Maplewood Community Center	Maplewood	100				X
May 30	Presentation	Naytahwaush Human Services	Naytahwaush	13				X
Jun 04	Meeting	Hawley Senior Citizen Center	Hawley	8				X
Jun 06	Booth	Clay County Seniors Coordinator	Hitterdal	15				X
Jun 13	Social Event	Deaf and Hard of Hearing Services	Moorhead	7				X
Jun 19	Presentation	St. Benedict's Senior Community	St. Cloud	4				X
Jun 25	Meeting	Felton Senior Center	Felton	5				X
Jul 09	Meeting	Rollag Senior Citizen Center	Hawley	20				X
Jul 09	Presentation	Lions Club - Isle	Isle	36				X
Jul 09	Presentation	Nicollet County Committee on Aging	St. Peter	10				X
Jul 17	Presentation	Commonbound/Advantage Service Coordinator	Blaine	15				X
Jul 18	Presentation	Rock County Family Service Agency	Luverne	7				X
Jul 19	Social Event	Whitney Senior Center	St. Cloud	0				X
Jul 23	Presentation	Commonbound/Advantage Service Coordinator	Blaine	10				X
Jul 26	Booth	Comprehensive Health Services	Red Lake	46				X
Aug 06	Presentation	Traverse Care Center	Wheaton	6				X
Aug 07	Presentation	Senior Center - Ulen	Ulen	13				X
Aug 07	Social Event	Minnesota Hands and Voices	St. Paul	45				X
Aug 08	Booth	Forest Lake Senior Center	Forest Lake	25				X
Aug 09	Booth	U Care Minnesota	Minneapolis	120				X
Aug 18	Booth	Whitney Senior Center	St. Cloud	200				X
Aug 20	Presentation	Windmill Ponds	Alexandria	10				X
Aug 20	Presentation	Bonnie's Senior Haven	Alexandria	8				X

Date	Type of Outreach	Location Name	City	Number of Participants	Business	CapTel	STS	General TRS
Aug 23	Booth	Minnesota State Fair	Falcon Heights	500				X
Aug 23	Presentation	Evansville Senior Living	Evansville	15				X
Aug 23	Presentation	Terrace Heights Assisted Living	Osakis	4				X
Aug 24	Booth	Minnesota State Fair	Falcon Heights	500				X
Aug 24	Meeting	Assumption Court	Cold Spring	9				X
Aug 25	Booth	Minnesota State Fair	Falcon Heights	500				X
Aug 27	Booth	Minnesota State Fair	Falcon Heights	500				X
Aug 28	Booth	Minnesota State Fair	Falcon Heights	500				X
Aug 30	Booth	Minnesota State Fair	Falcon Heights	500				X
Aug 31	Booth	Minnesota State Fair	Falcon Heights	500				X
Sep 01	Booth	Minnesota State Fair	Falcon Heights	500				X
Sep 14	Booth	Senior Legal Fair	St. Paul	130				X
Sep 14	Presentation	Park Gardens Senior Living	Fergus Falls	15				X
Sep 18	Presentation	Assistive Living - Olivia	Olivia	7				X
Sep 19	Booth	Ebenezer Park Apartments	Minneapolis	25				X
Sep 19	Meeting	Todd County Public Health	Long Prairie	1				X
Sep 20	Booth	St. Peter Senior Center	St. Peter	158				X
Sep 25	Booth	McLeod County Senior Expo	Glencoe	230				X
Sep 25	Presentation	Norman County Human Services	Ada	34				X
Sep 29	Presentation	Realife Cooperative at Mueller Gardens	St. Cloud	24				X
Oct 01	Presentation	Emmanuel Community	Detroit Lakes	13				X
Oct 01	Presentation	Birchview Gardens	Hackensack	8				X
Oct 02	Presentation	Senior Center Luverne	Luverne	31				X
Oct 02	Presentation	Senior Advisory Group Luverne	Luverne	18				X
Oct 03	Presentation	Humboldt Secondary School	St. Paul	7				X
Oct 10	Booth	Mayo Clinic Health Systems Mankato	Mankato	55				X
Oct 10	Presentation	Minnetonka Recreation and Senior Services	Minnetonka	8				X
Oct 16	Presentation	Oak Ridge Assisted Living	Hastings	12				X
Oct 19	Booth	Alternative Senior Care	Sauk Centre	80				X
Oct 24	Presentation	Advantage Service Coordinators	Minneapolis	45				X
Oct 30	Booth	Healthy Alternatives Fair	Detroit Lakes	30				X

Date	Type of Outreach	Location Name	City	Number of Participants	Business	CapTel	STS	General TRS
Nov 02	Presentation	Stephen Senior Center	Stephen	7				X
Nov 05	Presentation	Twin Town Villa Assisted Living	Breckenridge	20				X
Nov 08	Presentation	Sabathani Community Center	Minneapolis	25				X
Nov 19	Presentation	Apollo High School	St. Cloud	11				X
Nov 26	Presentation	Faith in Action	Becker	9				X
Dec 03	Presentation	Pope County Public Health	Glenwood	9				X
Dec 05	Presentation	Delano Commons	Delano	8				X
Dec 05	Presentation	Vicksburg Crossing	Plymouth	20				X
Dec 05	Presentation	Plymouth Town Square Apartments	Plymouth	9				X
Dec 13	Drop-In	Anoka Treatment Center	Anoka	1				X
Dec 20	Presentation	Emmanuel Nursing Home	Detroit Lakes	6				X

*Total Outreach Activities: 107*  
*Total Outreach Participants: 8,344*

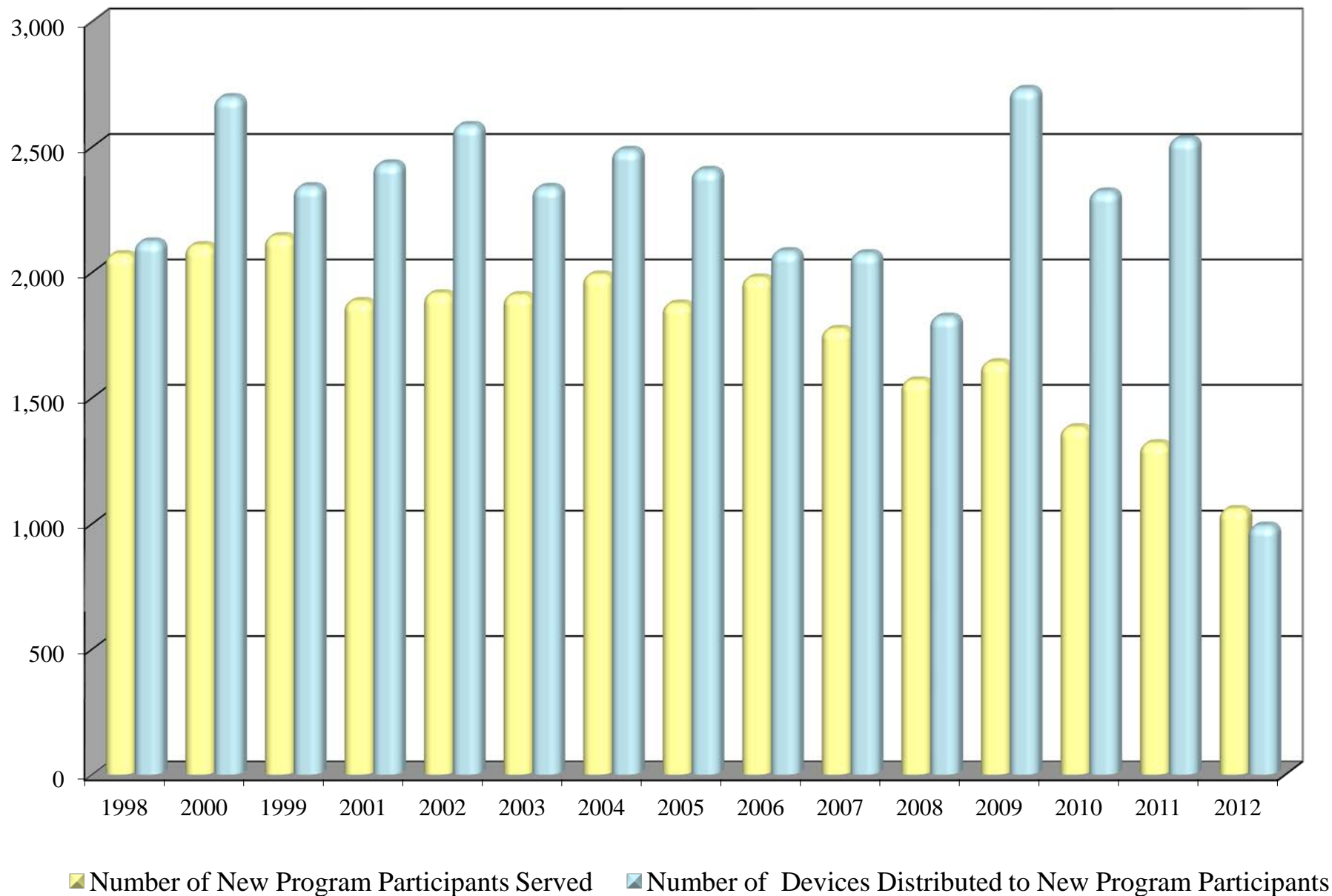
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# Appendix D

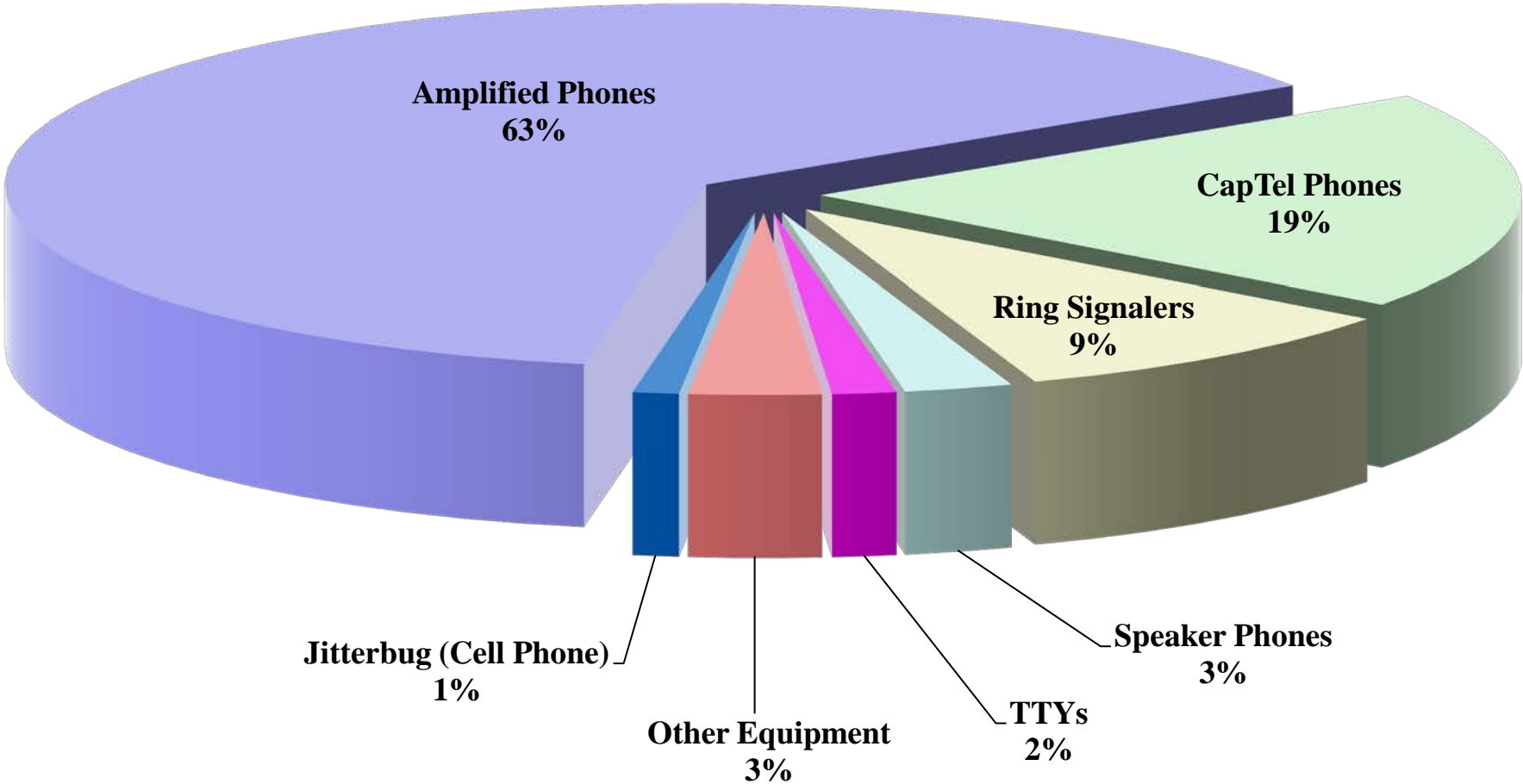
## TED Program Activities

## New TED Program Participants 1998 - 2012



# TED Program

## Types of Equipment Distributed in 2012



# Minnesotans Being Served in 2012 by the TED Program

