



Telecommunications Access Minnesota

2011 Annual Report to the Minnesota Public Utilities Commission

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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 Stat. § 237.50 – 237.56 and Minnesota Rules, Chapter 8775.

MINNESOTA RELAY

The state contracts with Communication Service for the Deaf (CSD) for the provision of Telecommunications Relay Services (TRS) in Minnesota. The contract is effective from July 1, 2006, through June 30, 2013, with the option to renew up to an additional 36 months.

In 2011, Minnesota consumers placed 682,646 relay calls for a total of 1.66 million conversation minutes of use. Overall usage of Minnesota Relay traditional¹, Speech-to-Speech (STS), and captioned telephone (CapTel) relay services declined in 2011, as many consumers are transitioning to Internet-based relay services (which are under the Federal Communications Commission's jurisdiction).

In July 2011, DOC–TAM began contracting with DHS–TED Program for the provision of Minnesota Relay outreach services. With this transition, outreach will be 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 will have greater oversight of staff and program objectives. In addition, the new contract will save the TAM fund approximately \$250,000 annually.

In 2011, there were 207 Minnesota Relay outreach activities performed reaching approximately 12,865 Minnesotans.

TELEPHONE EQUIPMENT DISTRIBUTION (TED) PROGRAM

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

¹ Traditional TRS includes TTY, VCO, HCO, and Spanish forms of relay services. Traditional TRS does not include STS relay. Descriptions of the various forms of relay services are provided on pages 11-14 of this report.

In 2011, the TED Program served 1,317 new participants, 2,454 repeat participants, and provided information and referrals to 315 consumers. Program specialists conducted 80 presentations and staffed booths at 28 expos, fairs, and other events. In total, the TED Program distributed 3,595 telecommunications devices this year.

TAM FUND

In addition to Minnesota Relay and the TED Program, three additional programs receive funding via the TAM surcharge assessed on each wired and wireless telephone access line in Minnesota: the Department of Employment and Economic Development - Accessible News for the Blind (DEED-ANB) program has a maximum annual budget of \$100,000, the DHS - 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 2009, the legislature approved three \$100,000 annual appropriations from the TAM fund for FY 2010 and FY 2011: the Office of Enterprise Technology (OET) to be used for technology accessibility and usability, the Legislative Coordinating Commission (LCC) to be used for captioning of live streaming of legislative sessions, and the MCDHH to be used for American Sign Language Web site content.

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

TAM Fund Activity in Fiscal Year 2011

Revenues:

- Surcharge revenue: \$7,463,476
- Account interest: \$10,569

Expenditures:

- TAM Administration: \$108,743
- CSD Contract: \$2,423,092
- TED Program: \$1,516,541
- DHS – Rural Real-time Captioning: \$227,939
- DEED-ANB: \$96,675
- MCDHH: \$400,000
- OET: \$100,000
- LCC: \$100,000
- General Fund: \$270,000

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: the 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, deaf-blind, 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 – 237.56.

The TED Program provides specialized telecommunications equipment to enable persons who are deaf, hard of hearing, deaf-blind, 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). (DPS and DOC were merged on September 15, 1999). DHS–DHHS, through an interagency agreement with DOC–TAM, operates the TED Program (Minnesota Stat. § 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.

Effective August 1, 2002, the name of the Telecommunications Access for Communication Impaired Persons (TACIP) program was changed to Telecommunications Access Minnesota (TAM). DOC sought the name change at the request of consumers, who objected to the inclusion of the word “impaired” in 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 to be funded via the TAM surcharge assessed on each wired and wireless telephone access line in Minnesota.

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 (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. Effective July 1, 2011, DOC–TAM extended the basic relay and captioned telephone relay services components of the TRS contract with CSD through June 30, 2013. 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 Minnesotans² (MCDHH), to be used for operational expenses. MCDHH is a governor appointed commission that advocates for equality of opportunity for Minnesotans who are deaf, deaf-blind, 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. In 2009, the Minnesota Legislature passed legislation allowing for three direct appropriations from the TAM fund in FY 2010 and in FY 2011. The Office of Enterprise Technology (OET) was appropriated \$100,000

² 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.

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 Web site 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 July 2011, DOC-TAM began contracting with DHS-TED Program for the provision of Minnesota Relay outreach services. With this transition, outreach will be 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 will have greater oversight of staff and program objectives. In addition, the new contract will save 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 Stat. § 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.³

In May 2011, the PUC approved DOC–TAM's fiscal year 2012 Budget and Surcharge Recommendations. The PUC accepted DOC–TAM's recommendation to decrease the surcharge from \$0.10 to \$0.06 for fiscal year 2012, which will support funding for all TAM fund programs and will maintain an adequate reserve for operating expenses.

³ The Interstate TRS Fund is funded by contributions from all common carriers and interconnected VoIP provider providing interstate telecommunications services, and is administered by the Interstate TRS Fund administrator, currently the National Exchange Carrier Association, Inc. (NECA). By October 2011, non-interconnected VoIP service providers will also be required to contribute to this fund.

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 also serves persons who wish to communicate with these individuals.

ROLE OF THE PUBLIC UTILITIES COMMISSION

In accordance with Minnesota Stat. § 237.55, “The commissioner of commerce must prepare a report for presentation to the commission by January 31 of each year. Each report must review the accessibility of the telephone system to communication-impaired persons, review the ability of non-communication-impaired persons to communicate with communication-impaired persons via the telephone system, describe service provided, account for money received and disbursed annually for each aspect of the program to date, and include predicted future operations.”

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 Stat. §237.52, Subd. 2).

MINNESOTA RELAY PROGRESS

MINNESOTA RELAY OUTREACH

In 2006, the state contracted with Communication Service for the Deaf (CSD) to provide Minnesota Relay services and associated outreach in Minnesota. Under the contract, the cost for Minnesota Relay outreach was built into the price-per-minute for basic relay services. The original five-year contract expired on June 30, 2011, but had an option to renew for up to an additional five years. During negotiations to extend the contract, CSD stated that they no longer wished to include outreach in the price-per-minute for basic relay services, but instead proposed a fixed annual price of \$300,000 for outreach services.

DOC–TAM negotiated a two-year extension of the relay services components of the contract but felt that there may be other, more cost effective ways to provide outreach services for Minnesota Relay, and did not extend the outreach services component.

TAM explored the option of contracting with the DHS – TED Program for the provision of Minnesota Relay outreach services, and determined that it would be a good fit. Many of the specialized telecommunications devices distributed by the TED Program work in conjunction with Minnesota Relay services. In addition, the TED Program has staff in offices located in Mankato, Metro, St. Cloud, Duluth, and Moorhead.

The TAM fund already reimburses DHS for TED Program administrative costs (salaries, rent, communications, equipment, computers, system services, etc.) and staff salaries. As such, by having the TED Program also provide outreach services for Minnesota Relay, DOC–TAM would

not incur additional expense for staff salaries or for most administrative costs. In addition, because a considerable amount of TED Program and Minnesota Relay outreach is duplicative – both programs have common target audiences – staff are able to combine information on both programs into presentations, booths, trainings, drop-in visits, and so forth. This collaboration will allow for savings in travel costs, booth registration fees, advertising, equipment costs, and staff time. We anticipate that annual Minnesota Relay outreach costs will be less than \$50,000.

Transitioning the provision of Minnesota Relay outreach services from an outside vendor to the DHS–TED Program will allow us greater accessibility to communities in out-state Minnesota – areas that were underserved in the past because of the cost of travel – will allow for greater oversight of staff and program objectives, and will save the TAM fund approximately \$250,000 annually.

CAPTEL PUBLIC SERVICE ANNOUNCEMENT

In 2011, Minnesota Relay ran a Public Service Announcement (PSA) to increase awareness of CapTel relay service and telephone equipment. The PSA ran during April, May, June, November, and December 2011, and in January 2012. The CapTel PSA aired during popular shows such as Ellen, Good Morning America, Judge Judy, Jeopardy, as well as during ABC, CBS and NBC news programs. The entire cost for the production and airtime of the CapTel PSA was paid by Sprint.

ANTICIPATED TRS PLATFORM ENHANCEMENTS IN 2012

In 2012, Sprint will be rolling out an e-mail pre-call set-up option for Speech-to-Speech (STS) users. Up to two hours prior to making a relay call, the STS user can e-mail information such as the number to be dialed, to whom the STS user wishes to speak, the subject of the call, special instructions, the message to leave if the call goes to an answering machine – anything that makes it easier for the STS user to complete the call. After the STS user sends a pre-call e-mail, the relay center will send a confirmation e-mail back to the STS user. When placing the relay call, the STS user informs the communications assistant that they have sent a pre-call e-mail; the CA accesses the e-mail and is able to use the information for a smoother, clearer, and faster relay call.

MINNESOTA RELAY SERVICES PROVIDED

Minnesota Relay is a free service that provides full telephone accessibility to persons who are deaf, deaf-blind, hard of hearing, or speech disabled. A specially trained communication 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 our consumers with services that have the same level of quality and provide the same features and options 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.

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 successfully activated all of their call centers (including the Moorhead center) 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. Ordinarily, VCO users need to say “GA” so that the CA knows that it is the other party’s turn to speak. The responsibility for taking turns when speaking rests entirely upon the calling and called parties because the CA does not hear what the VCO user says.
- **Voice Call Progression:** allows voice or HCO callers to listen during call set-up (i.e. ringing or busy).

CALL VOLUMES

In 2011, Minnesota Relay averaged 56,887 calls per month: 22,655 traditional⁴ relay calls, 1,030 Speech-to-Speech calls, and 33,202 CapTel calls. The following Minnesota Relay call charts can be found in **Appendix A**:

- 2002 – 2011 Minnesota Relay Call Volume
- 2011 Minnesota Relay Conversation Minutes by Type
- 2011 Minnesota Relay Traditional TRS Conversation Minutes
- 2011 Minnesota Relay Speech-to-Speech Conversation Minutes
- 2011 Minnesota Relay CapTel Conversation Minutes

Minnesota Relay's traditional TRS call volume has been decreasing for the past nine years. In 2011, we also saw a decrease in overall STS and CapTel relay use. The decline can primarily be attributed to the increasing reliance on e-mail and text messaging as communication resources and, more significantly, the introduction of a number of Internet-based relay services since 2002. (Internet-based relay services are under the Federal Communications Commission's jurisdiction and do not fall under the Minnesota Relay umbrella.)

There has been a surge in popularity of Internet Protocol (IP) Relay and Video Relay Service (VRS) as more and more consumers gain access to high-speed Internet services.

IP Relay is accessed using a computer (or other Web-enabled device) and the Internet, rather than a TTY and a telephone. Many consumers prefer using a computer screen and keyboard as it allows for much faster typing and permits users to see much more of the conversation on their computer screens than they can see with a TTY LCD window. IP Relay also allows users to print out and save conversations.

VRS is the preferred telecommunications method for most people with hearing disabilities who use American Sign Language (ASL). The VRS user is able to use sign language to communicate on the telephone call instead of having to type their conversation. Using ASL allows the relay user to express themselves through facial expressions and body language. VRS calls are also more natural, as the conversation is able to flow back and forth without the each party having to say "go ahead" after they have finished speaking.

Even captioned telephone relay users are migrating to internet-based services, as they offer enhanced features. For instance, WebCapTel allows the user to make captioned telephone calls without having to purchase a captioned telephone – all you need is a standard phone and a computer with internet connectivity. The user simply logs on via a Website to make relay calls. In addition, there are a number of relay providers that now offer captioned telephone devices that use the consumer's telephone service and Internet connection to provide voice and captions during a call. This allows the user to receive captioned telephone calls without the inbound party having to dial the relay service's telephone number first.

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

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, and the iPod Touch.

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. Once the back-up generator is on line, stable power is established and maintained to all TRS system equipment and facility environmental control until commercial power is restored.

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.

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.

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 TRS⁵. 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.

Currently, 48 percent of Minnesota Relay calls are placed using this dialing shortcut. Relay users are still able to access Minnesota Relay by dialing the 10 digit toll-free access numbers.

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 uses a system for incoming emergency calls that automatically and immediately transfers the relay caller to the appropriate Public Safety Answering Point (PSAP). Minnesota Relay considers an emergency call to be one in which the caller indicates the need to connect to the police department, fire department, paramedics, or ambulance.

⁵ 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.

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 2011, Minnesota Relay’s average speed of answer was 1.1 seconds, and the average service level was 95 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.

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.

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.

CONSUMER COMPLAINTS

In 2011, Minnesota Relay received complaints on less than 0.003 percent of relay calls – 682,646 calls were relayed and 23 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.⁶

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

Beginning in July 2011, Minnesota Relay outreach is provided under an interagency agreement with DHS’s 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, deaf-blind, hard of hearing, late deafened, speech disabled, hearing consumers, and businesses.

⁶ C.F.R. § 64.605(c)(6)(iii).

Outreach activities 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.
- Conducting presentations to American Sign Language I class students.
- Staffing a booth at exhibitions, seminars, and the Minnesota State Fair.
- Conducting one-on-one training sessions for individuals who are having trouble using specialized telephone equipment, such as a TTY, CapTel, or VCO telephone.
- Conducting “drop-in” visits at organizations that serve persons with hearing, speech or physical disabilities.
- Conducting Business Partner presentations (educating businesses on Minnesota Relay services and training employees on how to place and receive Minnesota Relay calls).

In 2011, staff performed 207 outreach activities reaching 12,865 Minnesotans.

Reports containing Minnesota Relay outreach efforts are compiled monthly and forwarded to the TAM administrator. An outreach summary for 2011 is provided in [Appendix C](#).

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 an avenue 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. In addition, a Minnesota Relay Outreach/TED Program staff person attends a minimum of one DHHS Advisory Committee 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 seven regional offices around the state staffed with professionals experienced in working with people who are deaf, hard of hearing, deaf/blind, 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.

AUTHORITY TO PROVIDE EQUIPMENT

Minnesota Stat. § 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, but are not limited to:

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

PROGRAM OUTREACH

DHSD 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 Web sites, 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.

2011 outreach efforts included:

- 80 presentations to groups of professionals and potential consumers.
- 28 booths at health fairs and senior expos to potential consumers and professionals.
- 56 cold calls to service providers.
- 30 drop-in visits to various agencies who serve TED clients.
- Multiple advertisements in Good Age, East Central Resource Guide, Healthy Lifestyles, MN Health Care News, MN Physicians, Star Tribune, and the Twin Cities Housing Guide.
- Online ads in Twin Cities Housing Guide and Good Age.
- A statewide direct mailing to over 7,500 Minnesota residents over the age of fifty-five who have a hearing loss and fall within a specific income bracket.

- Postcard mailing to 4,000 churches and 1,000 special education nurses.
- E-mails to over 11,000 public health nurses statewide.
- Posters with tear-off program contact information were mailed out to churches and audiologist/hearing aid dispensers.
- Articles placed in Aging Services MN and the University of Minnesota, “Old News” publications.

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 1998-2011.

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

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 1,317 new participants and 2,454 repeat participants. TED Program specialists also provided information and referrals to 315 consumers and agencies, *for a total of 4,086 Minnesotans receiving service in 2011.*

STATISTICAL INFORMATION

A report of TED Program activities is submitted quarterly to the TAM administrator by the TED Program administrator. The report documents outreach activity, the number of individuals served and the types of equipment distributed. The charts provided in **Appendix D** demonstrate 2011 TED Program activities.

POPULATION SERVED

The TED Program serves a wide range of individuals with a variety of communication needs. *Currently, the oldest TED Program participant is 105 years of age, and the youngest is age 18.* The average consumer served is female, 80 years old, and hard of hearing. In 2011, 67 percent of TED Program participants were female and 64 percent lived outside of the seven-county metropolitan area. Ninety-two percent of TED Program participants are hard of hearing, 2 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 2011, 18 percent of TED Program participants had two or more disabilities, such as a speech and physical disability or a loss of hearing and vision.

CELLULAR TELEPHONE PILOT

The TED Program continues to distribute the Jitterbug cell telephone. Even though the distribution is small, many seniors report increased benefits from the phone, especially for safety and emergency reasons. In 2012, 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.

FUTURE TED PROGRAM OPERATIONS

Online Electronic TED Application

The TED Program participated in a LEAN Kaizen event in 2011 to examine how to increase the efficiency of the program's application process. One of the recommendations was to create an online application, which would allow consumers, family members, service providers, and designated TED Program staff to complete the application electronically. Once submitted, the data would automatically populate a secure TED Program database. The benefit of doing this is that information would be collected upfront, thus reducing the delay time of receiving the paperwork.

Future Technology

The TED Program continually explores new telecommunications equipment possibilities for distribution. 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 deaf/blind 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 2011 Actual	FY 2012 Budgeted
REVENUE		
Surcharge Revenue Per Subscriber Line (FY 2011 = \$0.10; FY 2012 = \$0.06)	\$ 7,466,675.86	\$ 4,563,413.16
TAM Fund Interest	\$ 10,568.55	\$ 18,000.00
Total TAM Fund Revenue	\$ 7,477,244.41	\$ 4,581,413.16

EXPENDITURES		
TAM Administration Funding	\$ (125,986.80)	\$ (175,350.00)
CSD (Minnesota Relay) Funding	\$ (2,423,091.85)	\$ (2,759,636.25)
DHS–TED Program Funding	\$ (1,516,540.78)	\$ (1,558,435.00)
DHS-Minnesota Relay Outreach Funding	\$ 0.00	\$ (23,240.00)
DHS-Rural Real-time Captioning Funding	\$ (227,938.95)	\$ (300,000.00)
DEED-Accessible News for the Blind Funding	\$ (96,674.73)	\$ (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 (One Time Appropriation)	\$ (100,000.00)	\$ (230,000.00)
Legislative Coordinating Commission - Captioning of Live Streaming of Legislative Sessions (One Time Appropriation)	\$ (100,000.00)	\$ (150,000.00)
Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans-ASL Website Content (One Time Appropriation)	\$ (100,000.00)	\$ (20,000.00)
Transfer to General Fund	\$ (270,000.00)	\$ 0.00
Total TAM Fund Expenditures	\$ (5,260,233.11)	\$ (5,616,661.25)

REVENUE VS. EXPENDITURES	\$ (2,217,011.30)	\$ (1,035,248.09)
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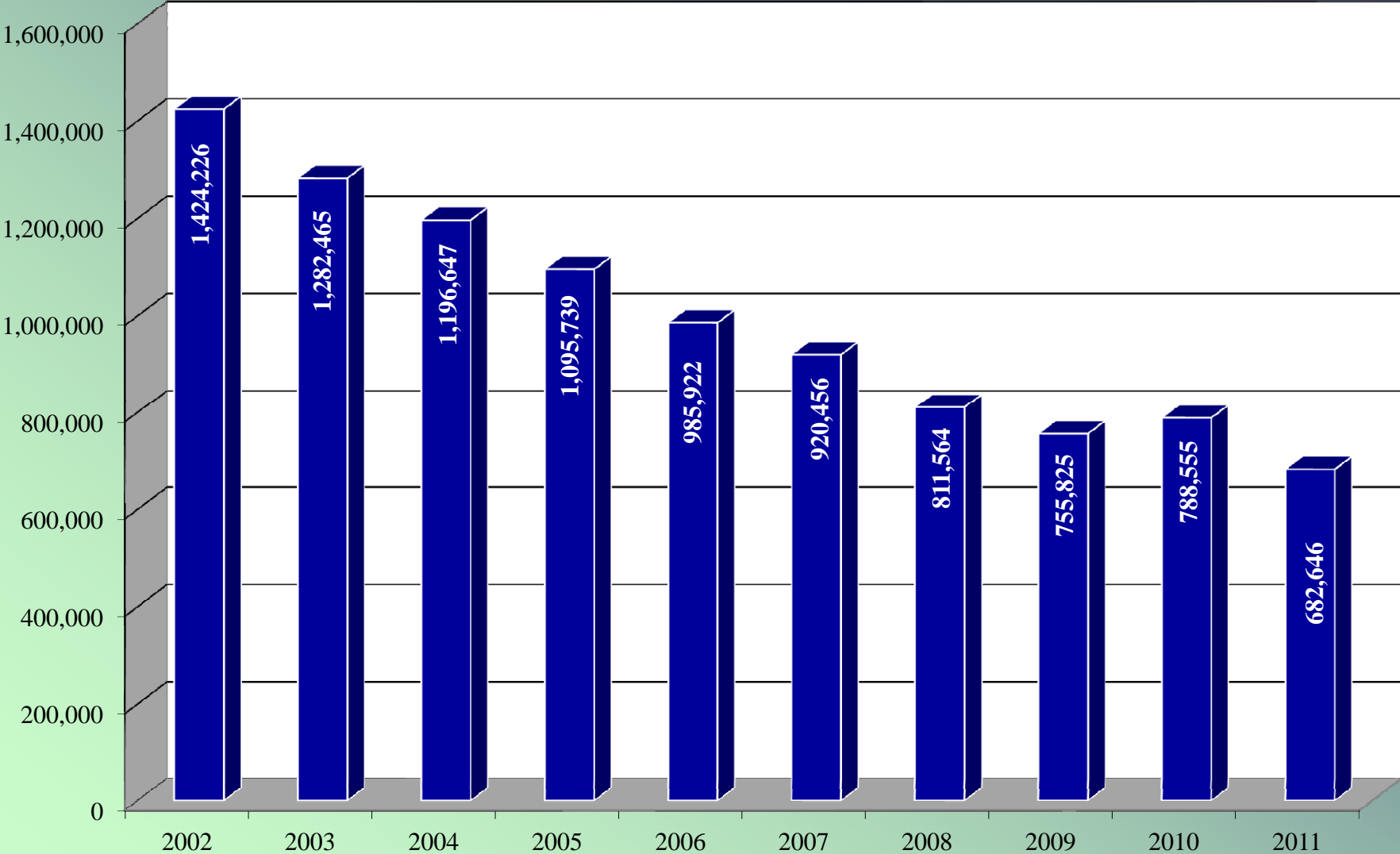
STATEMENT OF TAM FUND BALANCE	FY 2011 Actual	FY 2012 Budgeted
TAM Fund Balance at Beginning of Fiscal Year	\$ 1,425,989.90	\$ 3,536,370.94
TAM Fund Revenue & Interest	\$ 7,477,244.41	\$ 4,581,413.16
DHS–TED Program Cash Advance (July)	\$ (200,000.00)	\$ (200,000.00)
DHS-Minnesota Relay Outreach Cash Advance (July)	\$ 0.00	\$ (5,000.00)
Return of DHS–TED Program Cash Advance (June)	\$ 129,279.10	\$ 200,000.00
Return of DHS-Minnesota Relay Outreach Cash Advance (June)	\$ 0.00	\$ 0.00
TAM Fund Expenditures	\$ (5,260,233.11)	\$ 5,616,661.25
TAM Fund Balance at Close of Fiscal Year	\$ 3,572,280.30	\$ 2,496,122.85

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APPENDIX A

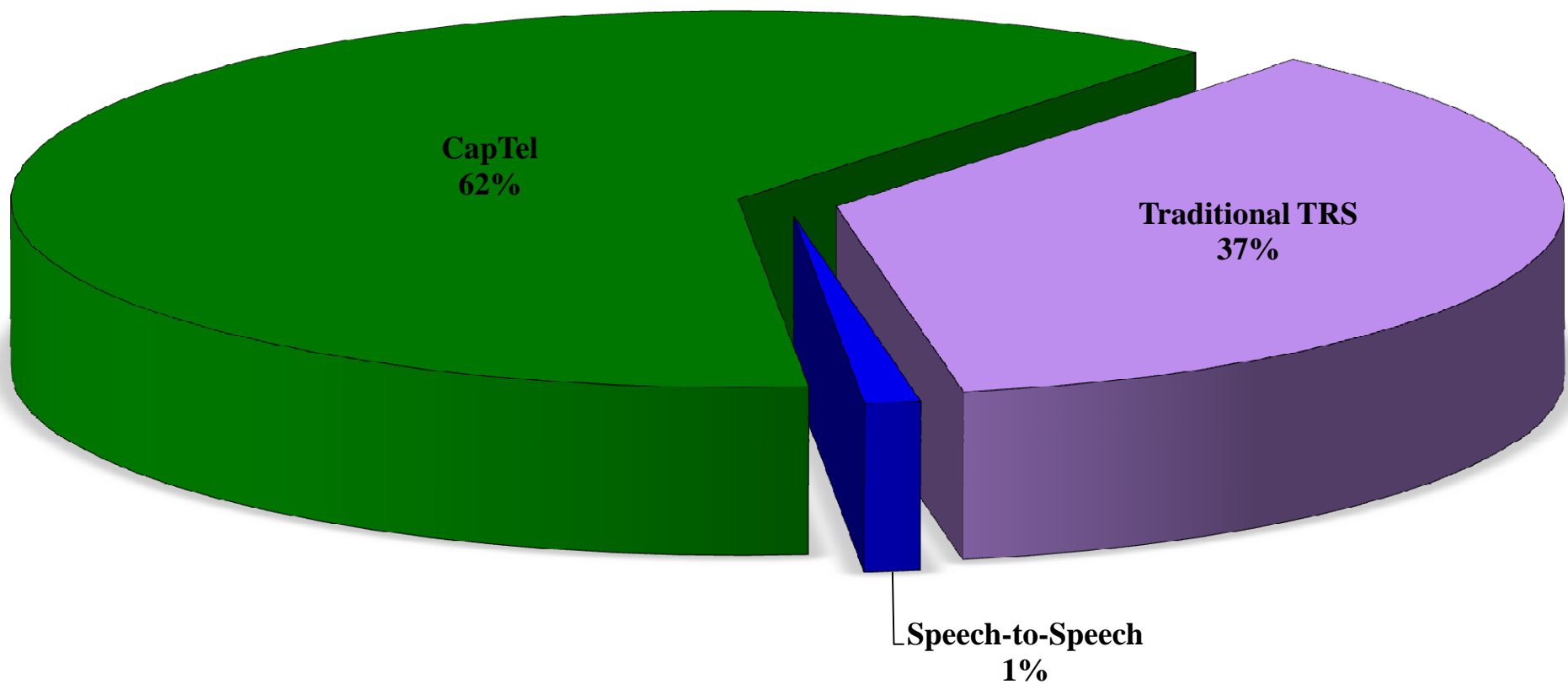
2002 - 2011 Minnesota Relay Call Volume

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

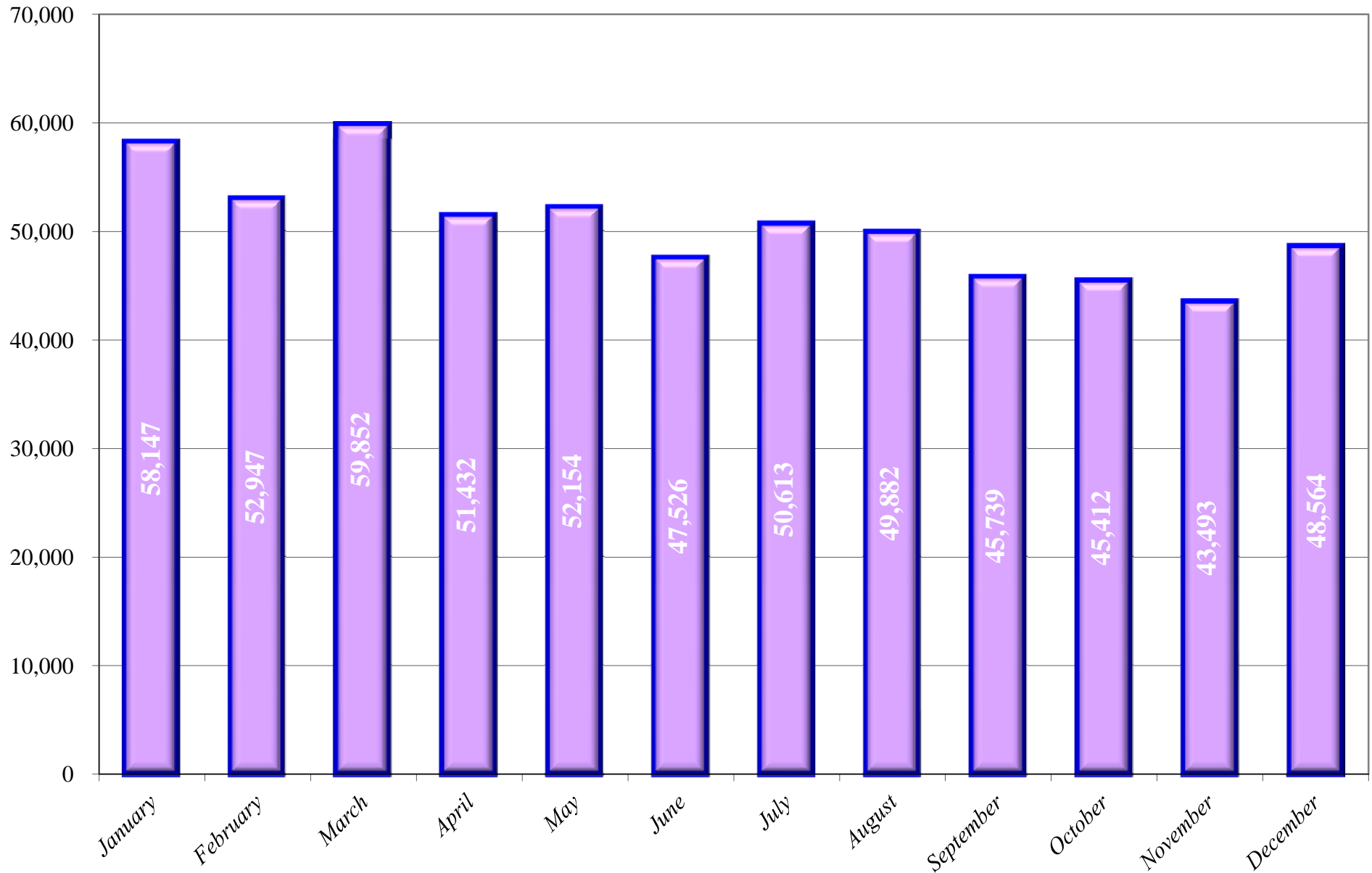


*CapTel began in April

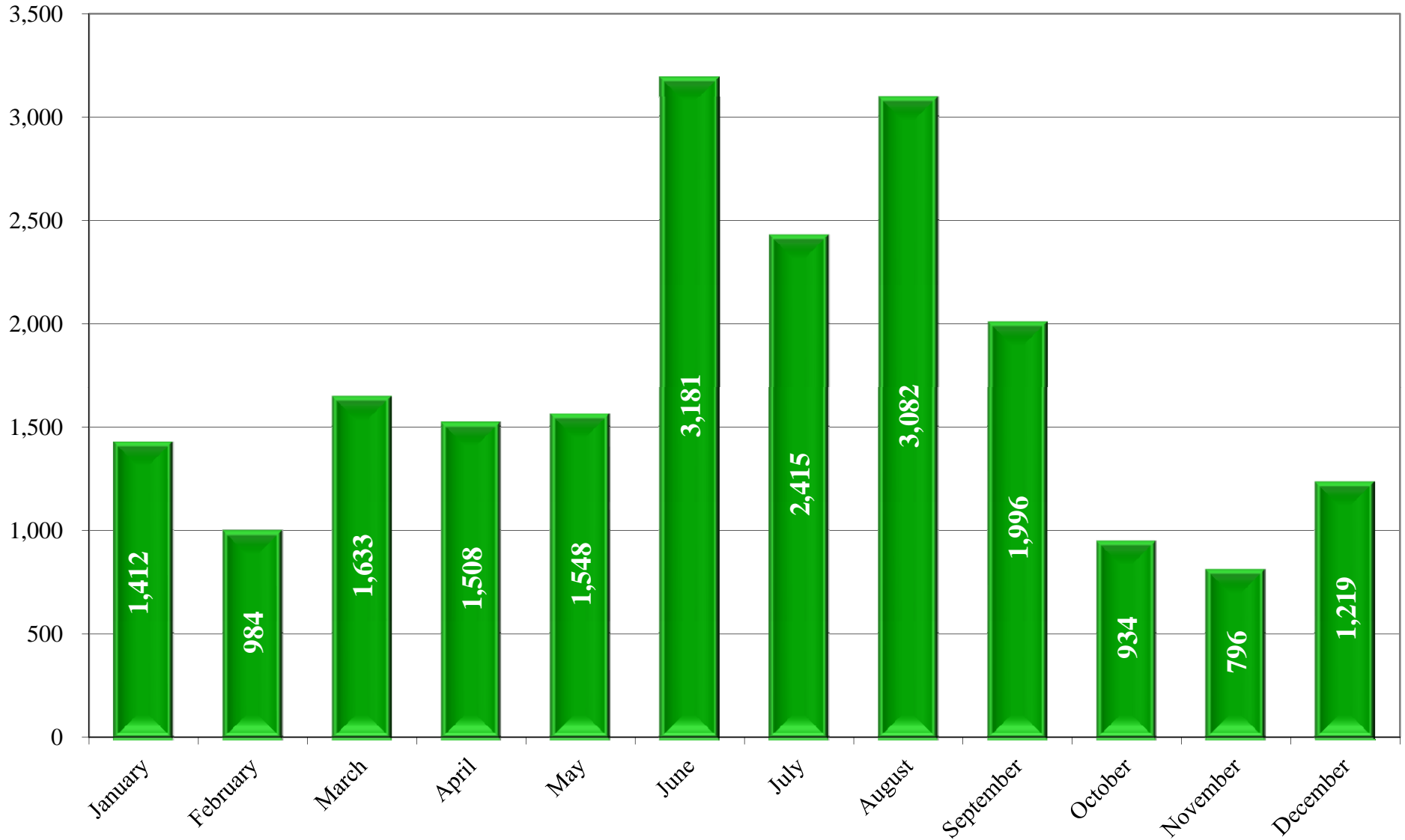
Minnesota Relay 2011 Conversation Minutes by Type



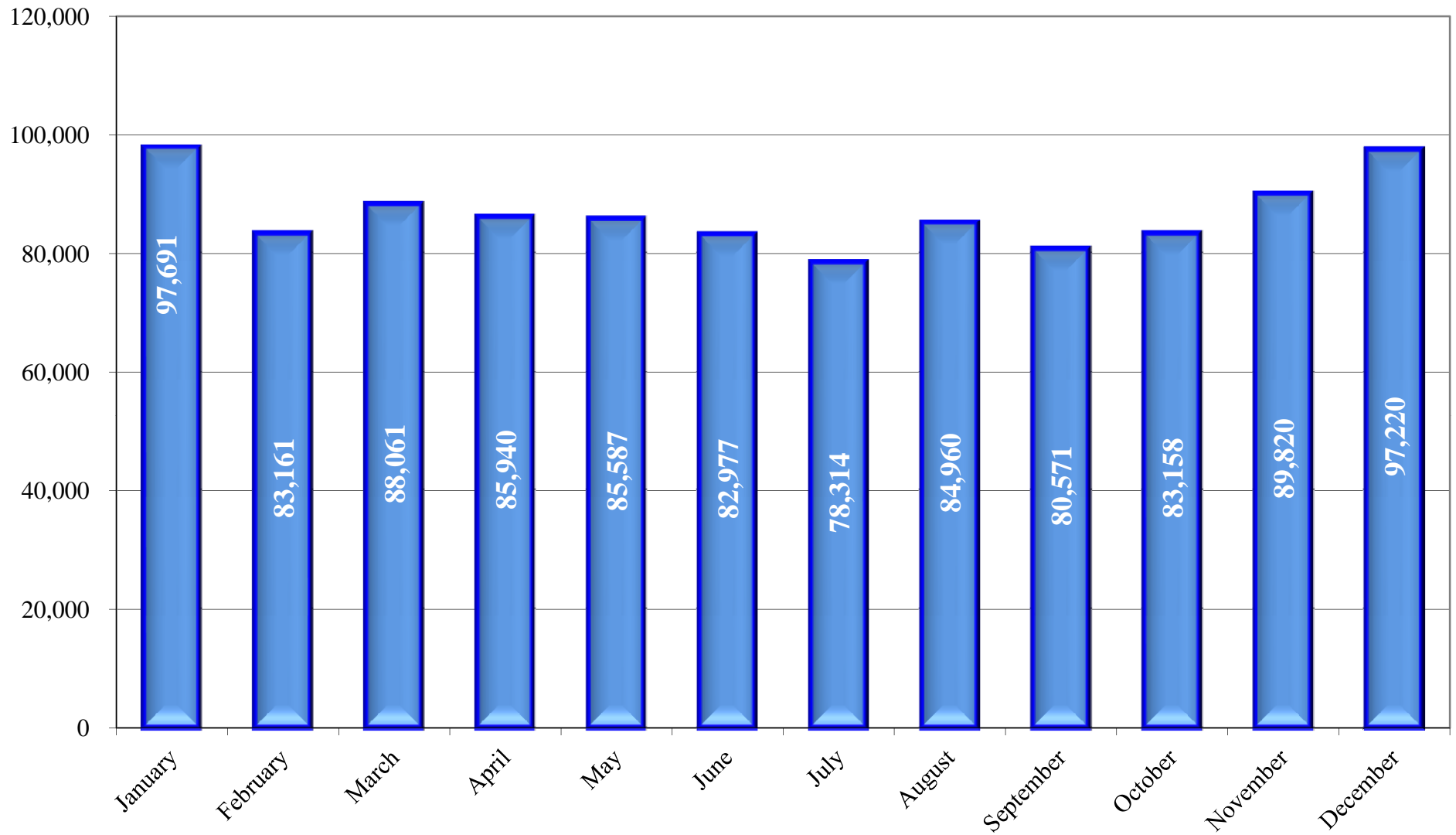
2011 Minnesota Relay Traditional TRS Conversation Minutes (TTY, VCO, HCO & Spanish)



2011 Minnesota Relay Speech-to-Speech Conversation Minutes



2011 Minnesota Relay CapTel Conversation Minutes



APPENDIX B

Carrier of Choice List for Minnesota Relay

- 011 Communications
- 10-10-220 Telecom USA
- 10-10-321 Telecom USA
- 10-10-502 WorldxChange
- 10-10-636 Clear Choice
- 10-10-752 Excel
- 10-10-811 Vartec
- 10-10-834 WorldxChange
- 10-10-987
- 702 Communications
- Ace Long Distance
- ACN Communications, Inc.
- ACS Connections Long Distance
- ACS Long Distance
- Advantage Communications
- Affinity Network, Inc.
- Albany Telephone Long Distance
- ANI Networks
- Arrowhead Long Distance
- AT&T
- Barnesville Long Distance
- Benton Telephone Long Distance
- Birch Communications
- Blackduck Long Distance
- Blue Ridge Telecom Systems
- Broadwing Communications
- Cannon Valley Long Distance
- CenturyLink Long Distance
- CenturyLink Solutions
- Charter Communications
- Christensen Communications Company
- CI Long Distance
- CierraCom Systems
- Citizens Communications
- Comcast
- Comcast Business Communications
- Connections Long Distance
- Cooperative Light & Power
- CP Telecom
- Crosslake Long Distance
- CTC Long Distance
- CTI Long Distance
- Delavan Long Distance
- Dunnell Long Distance
- Eagle Valley Long Distance
- Eliteview, LLC
- Emily Long Distance
- En-Tel Communications
- Eschelon Telecom, Inc.
- Exit Mobile
- Farmers Mutual Long Distance
- Federated Long Distance
- Felton Long Distance
- Frontier Communications
- Garden Valley Long Distance
- Gardonville Long Distance
- Global Crossing
- Granada Long Distance
- Groveline
- GTC Telecom
- Halstad Long Distance
- Hancock Long Distance
- Harmony Telephone Company
- HBC Long Distance (Hiawatha Broadband Communications, Inc.)
- HickoryTech
- Home Telephone Long Distance
- Hometown Solutions Long Distance
- Horizon Telecom, Inc.
- HorizonOne Communications
- Hutchinson Telecommunications
- Integra Telecom
- Inter-Tel NetSolutions
- International Plus
- Internet Business Association
- Ionex Communications North, Inc.
- ITC Long Distance
- iVantage Network Services
- KMTC Long Distance
- Lakedale Communications

- LDDS
- Lightyear Network Solutions
- Lismore Long Distance
- Lonsdale Long Distance
- Loretel Long Distance
- Lowry Long Distance
- Mable Cooperative Telephone
- Madelia Long Distance
- Mainstreet Communications LLC
- Mainstreet Long Distance
- MCI
- McLeod USA
- Melrose Long Distance
- Metromedia
- Midcontinent Communications
- Midwest Long Distance
- Milaca Local Link Long Distance
- Minnesota Valley Communications, Inc.
- New Ulm Long Distance
- Norlight Telecommunications
- North Dakota Long Distance
- Northstar Access Long Distance
- NOS Communications
- NOSVA Limited
- Onvoy
- OPEX Communications
- Optic Communications
- OrbitCom, Inc.
- Osakis Long Distance
- Otter Com, Inc.
- Otter Tail Telecom Long Distance
- PAETEC Communications, Inc.
- Park Region Long Distance
- Peoples Long Distance
- Pine Island Long Distance
- Pioneer Telephone
- POPP.com
- Prairiewave Telecommunications
- QuantumLink Communications
- Qwest
- Red River Long Distance
- Reduced Rate Long Distance
- Redwood Long Distance LLC
- Reliance Telephone, Inc.
- Rochester Telecom Systems, Inc.
- Rothsay Long Distance
- Royale Comtronics, Inc.
- Runestone Long Distance
- SBC Long Distance
- Sleepy Eye Long Distance
- Speedway Long Distance
- Spring Grove Communications
- Sprint
- St. James Long Distance
- Sytek Communications Long Distance
- TCG Minnesota, Inc.
- TCO Network
- TDS Telecom
- Telegroup
- Telephone Associates, Inc.
- Touch America
- Touchtone Communications
- Trans National Communications Int'l, Inc.
- TransWorld Network Corp.
- TTI National
- U.S. Telecom Long Distance
- Unitel Long Distance
- USL
- Venture LLP
- Verizon Long Distance
- Verizon Select Services
- VoIP Communications
- WH Comm
- Wiltel
- Windom Long Distance
- Winnebago Cooperative Telecom Association (WCTA)
- Woodstock Long Distance
- Working Assets
- WorldCom
- WTC Long Distance
- XO Communications

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APPENDIX C

2011 Minnesota Relay Outreach Summary

Date	Type of Outreach	City	Number of Participants	Business	CapTel	STS	General TRS
January 04	Presentation	Champlin	3	X			
January 06	Drop In	Bloomington	4		X		
January 06	Drop In	Bloomington	1		X		
January 06	Presentation	Bloomington	2	X			
January 06	Drop In	Bloomington	3		X		
January 11	Drop In	Bloomington	3		X		
January 11	Drop In	Bloomington	6		X		
January 11	Drop In	Bloomington	4		X		
January 11	Drop In	Bloomington	1		X		
January 13	Presentation	Bloomington	6	X			
January 13	Drop In	Bloomington	3		X		
January 13	Presentation	Bloomington	3	X			
January 13	Drop In	Bloomington	2	X			
January 14	Presentation	Burnsville	2	X			
January 14	Drop In	Burnsville	4		X		
January 14	Drop In	Burnsville	1	X			
January 17	Presentation	Burnsville	3	X			
January 17	Drop In	Burnsville	6		X		
January 17	Drop In	Burnsville	2		X		
January 18	Presentation	Champlin	4	X			
January 20	Presentation	Burnsville	4	X			
January 20	Drop In	Burnsville	1		X		
January 20	Drop In	Burnsville	2		X		
January 20	Drop In	Burnsville	4		X		
January 20	Drop In	Burnsville	1		X		
January 26	Presentation	Champlin	4	X			
January 27	Drop In	Maple Grove	5		X		
January 27	Drop In	Maple Grove	1		X		
January 27	Drop In	Maple Grove	1		X		
January 27	Drop In	Maple Grove	1		X		
February 02	In Home Demonstration	Burnsville	2		X		
February 02	Drop In	Burnsville	1		X		
February 02	Drop In	Burnsville	1		X		
February 09	In Home Troubleshooting	Inver Grove Heights	1		X		
February 09	Drop In	Inver Grove Heights	6		X		
February 10	Presentation	Princeton	6	X			
February 10	Drop In	Princeton	1	X			
February 10	Presentation	Princeton	4	X			
February 10	Drop In	Princeton	4	X			
February 11	Presentation	Milaca	3	X			
February 11	Presentation	Milaca	3	X			
February 11	Drop In	Milaca	1		X		
February 11	Drop In	Milaca	3		X		

Date	Type of Outreach	City	Number of Participants	Business	CapTel	STS	General TRS
February 12	Drop In	Onamia	2	X			
February 15	In Home Training	Inver Grove Heights	1		X		
February 15	Presentation	Inver Grove Heights	4	X			
February 15	Drop In	Inver Grove Heights	2		X		
February 17	In Home Troubleshooting	West St. Paul	1		X		
February 17	Drop In	Woodbury	1	X			
February 21	Presentation	Coon Rapids	3	X			
February 21	Drop In	Coon Rapids	6		X		
February 21	Drop In	Coon Rapids	4		X		
February 23	Meeting	Bloomington	25		X		
February 23	Drop In	Bloomington	1	X			
February 23	Drop In	Bloomington	1	X			
February 23	Drop In	Eden Prairie	2	X			
February 25	Presentation	Coon Rapids	2	X			
February 25	Drop In	Coon Rapids	3		X		
February 25	Presentation	Coon Rapids	4	X			
February 28	Drop In	Minneapolis	1	X			
March 02	Deaf Social Event	St. Paul	30				X
March 04	In Home Demonstration	Rogers	2		X		
March 04	Drop In	Rogers	2		X		
March 04	Drop In	Rogers	1		X		
March 08	In Home Demonstration	Coon Rapids	1		X		
March 08	Drop In	Coon Rapids	2		X		
March 10	Drop In	Coon Rapids	1		X		
March 10	Drop In	Coon Rapids	1		X		
March 14	Presentation	Cottage Grove	5	X			
March 14	Drop In	Cottage Grove	3		X		
March 14	Drop In	Cottage Grove	5		X		
March 15	In Home Troubleshooting	Cottage Grove	3		X		
March 15	Drop In	Cottage Grove	1		X		
March 15	Presentation	Cottage Grove	6	X			
March 15	Drop In	Cottage Grove	2		X		
March 16	In Home Troubleshooting	Golden Valley	3		X		
March 16	Drop In	Golden Valley	3		X		
March 16	Drop In	Golden Valley	1		X		
March 16	Drop In	Golden Valley	1		X		
March 18	Presentation	Golden Valley	3	X			
March 18	Drop In	Golden Valley	3		X		
March 22	Exhibit	Minneapolis	800		X		
March 23	Exhibit	Minneapolis	800		X		
March 23	Presentation	Minneapolis	10				X
March 29	Presentation	Stillwater	3	X			
March 29	Drop In	Stillwater	3		X		
March 29	Drop In	Stillwater	1		X		
March 30	Presentation	Ramsey	2	X			
March 30	Drop In	Ramsey	1		X		
March 30	Drop In	Ramsey	1		X		

Date	Type of Outreach	City	Number of Participants	Business	CapTel	STS	General TRS
April 01	In Home Demonstration	Wabasha	2		X		
April 01	Drop In	Wabasha	4		X		
April 01	Drop In	Wabasha	1	X			
April 01	Presentation	Wabasha	5	X			
April 01	Drop In	Wabasha	2	X			
April 01	Drop In	Wabasha	3	X			
April 01	Drop In	Wabasha	2	X			
April 01	Drop In	Lake City	1		X		
April 01	Drop In	Lake City	3		X		
April 06	Presentation	Brooklyn Park	2	X			
April 08	Exhibit	Bloomington	100			X	
April 08	Presentation	Bloomington	2	X			
April 09	Exhibit	Bloomington	100			X	
April 13	Exhibit	Brooklyn Park	175		X		
April 14	Presentation	Brooklyn Center	3	X			
April 18	Presentation	Bloomington	28		X		
April 18	Drop In	Bloomington	1		X		
April 18	Drop In	Bloomington	1		X		
April 18	Drop In	Bloomington	1		X		
April 19	Exhibit	Prior Lake	450		X		
April 19	Presentation	Prior Lake	2	X			
April 20	Exhibit	Prior Lake	450		X		
April 27	In Home Demonstration	Plymouth	3		X		
April 27	Drop In	Plymouth	1		X		
April 27	Drop In	Plymouth	1		X		
April 27	Exhibit	North Branch	50		X		
April 27	Drop In	North Branch	2		X		
April 27	Drop In	North Branch	2		X		
April 29	Exhibit	Brooklyn Center	150		X		
May 03	Presentation	Anoka	35				X
May 03	Drop In	Anoka	2	X			
May 03	Drop In	Anoka	4		X		
May 03	Drop In	Anoka	2		X		
May 06	Presentation	Anoka	1	X			
May 06	Drop In	Anoka	3		X		
May 06	Drop In	Anoka	1		X		
May 12	Exhibit	Virginia	300		X		
May 12	Drop In	Virginia	2		X		
May 12	Drop In	Virginia	2		X		
May 13	Drop In	Eveleth	1		X		
May 13	Drop In	Eveleth	1		X		
May 13	Drop In	Eveleth	1		X		
May 18	In Home Demonstration	Richfield	3		X		
May 18	Drop In	Richfield	1		X		
May 18	Drop In	Richfield	2		X		
May 18	Drop In	Richfield	1		X		

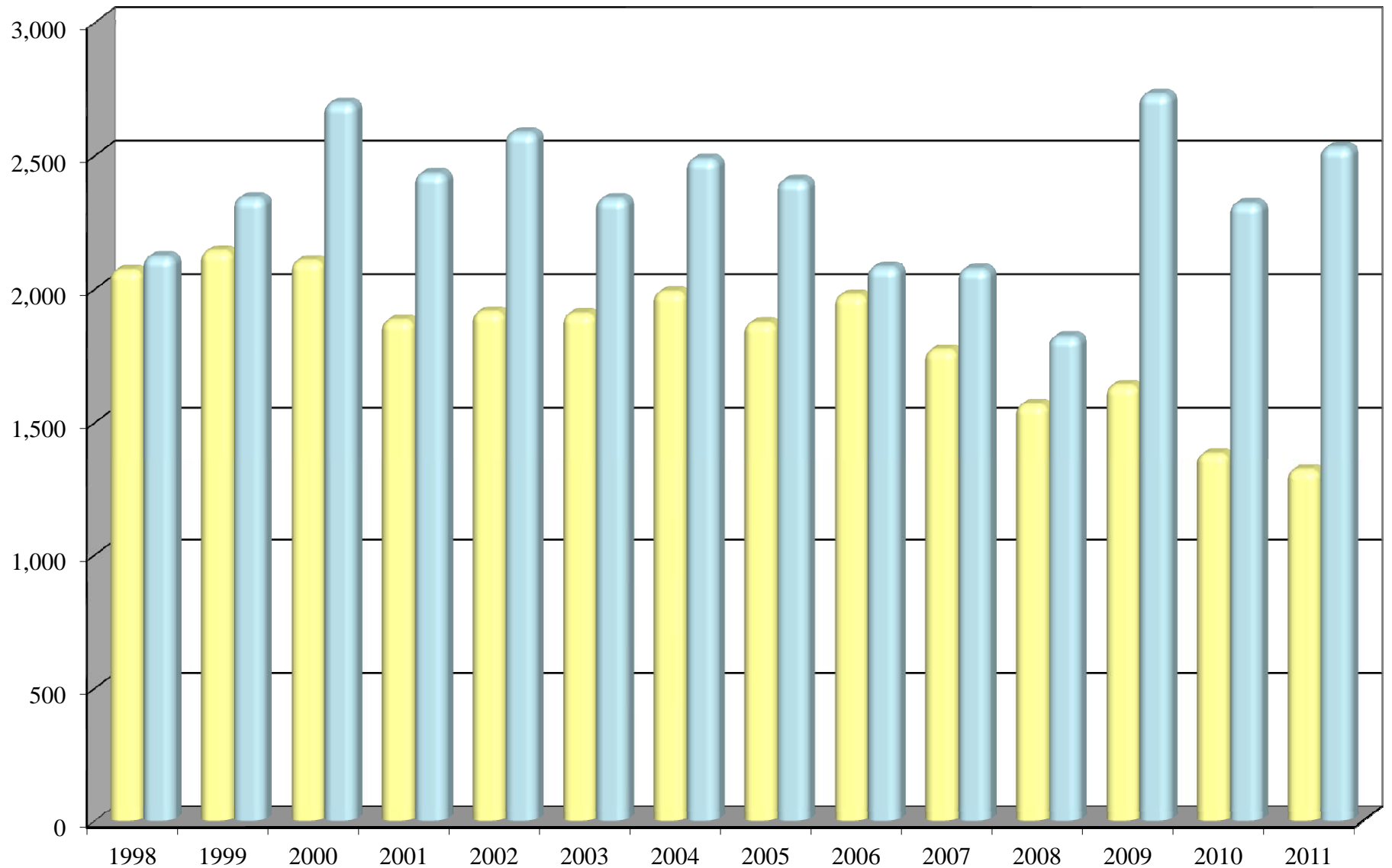
Date	Type of Outreach	City	Number of Participants	Business	CapTel	STS	General TRS
May 20	Presentation	Richfield	2	X			
May 20	Drop In	Richfield	1		X		
May 20	Drop In	Richfield	2		X		
May 24	In Home Demonstration	West St. Paul	2		X		
May 24	Drop In	West St. Paul	1		X		
May 24	Drop In	West St. Paul	1	X			
May 24	Drop In	West St. Paul	2		X		
May 26	Presentation	Inver Grove Heights	2	X			
May 26	Drop In	West St. Paul	1		X		
May 27	Presentation	Robbinsdale	3	X			
May 27	Drop In	Robbinsdale	2		X		
May 27	Drop In	Robbinsdale	1		X		
June 03	Presentation	Brooklyn Park	3	X			
June 07	Presentation	Edina	4	X			
June 07	Drop In	Edina	1		X		
June 07	Drop In	Edina	1		X		
June 10	Drop In	Brainerd	2		X		
June 10	Drop In	Brainerd	2		X		
June 10	Drop In	Brainerd	2		X		
June 10	Drop In	Brainerd	3		X		
June 14	In Home Troubleshooting	New Brighton	2		X		
June 14	Drop In	New Brighton	1		X		
June 14	Drop In	New Brighton	3		X		
June 15	Presentation	Brooklyn Park	2	X			
June 17	Presentation	Blaine	3	X			
June 21	In Home Demonstration	Coon Rapids	2		X		
June 21	Drop In	Coon Rapids	2		X		
June 21	Drop In	Coon Rapids	1		X		
June 21	Drop In	Coon Rapids	2		X		
June 21	Drop In	Coon Rapids	1	X			
June 22	In Home Training	New Brighton	2		X		
June 24	Drop In	Brooklyn Park	1	X			
July 22	In Home Training	New Brighton	1		X		
August 10	Presentation	Fairmont	27				X
August 10	Presentation	Maple Grove	15				X
August 15	Presentation	New Ulm	13				X
August 17	Presentation	Minnetonka	12				X
August 17	Presentation	Plymouth	10				X
August 18	Presentation	Duluth	5				X
August 22	Presentation	Minneapolis	1				X
August 26	State Fair Booth	Falcon Heights	1,000				X
August 27	State Fair Booth	Falcon Heights	1,000				X
August 28	State Fair Booth	Falcon Heights	1,000				X
August 29	Presentation	Moorhead	5				X
August 29	State Fair Booth	Falcon Heights	1,000				X
August 30	Presentation	Fergus Falls	7				X
August 31	Presentation	Breckenridge	8				X

Date	Type of Outreach	City	Number of Participants	Business	CapTel	STS	General TRS
September 1	State Fair Booth	Falcon Heights	1,000				X
September 2	State Fair Booth	Falcon Heights	1,000				X
September 3	State Fair Booth	Falcon Heights	1,000				X
September 4	State Fair Booth	Falcon Heights	1,000				X
September 8	In Home Demonstration	Roseville	1		X		
September 20	Drop-in	Mankato	5				X
September 21	Drop-in	Redwood Falls	3				X
September 28	Presentation	Moorhead	12				X
September 29	Booth	Duluth	125				X
October 4	Presentation	Duluth	10				X
October 5	Presentation	Cook	18				X
October 6	Booth	Roseville	15				X
October 10	Booth	St. Paul	4				X
October 11	Presentation	Cass Lake	8				X
October 12	Booth	Park Rapids	11				X
October 12	Presentation	Eveleth	30				X
October 19	Booth	Duluth	300				X
October 27	Booth	Minneapolis	35				X
October 27	Presentation	Hibbing	7				X
November 1	Booth	Cloquet	200				X
December 20	In Home Demonstration	Moorhead	1		X		
December 21	Presentation	Cottage Grove	45				X
December 21	Presentation	Cottage Grove	70				X
December 28	Meeting	Le Center	6				X

Total Presentation:	207
Total Participants:	12,865

APPENDIX D

New TED Program Participants 1998 - 2011

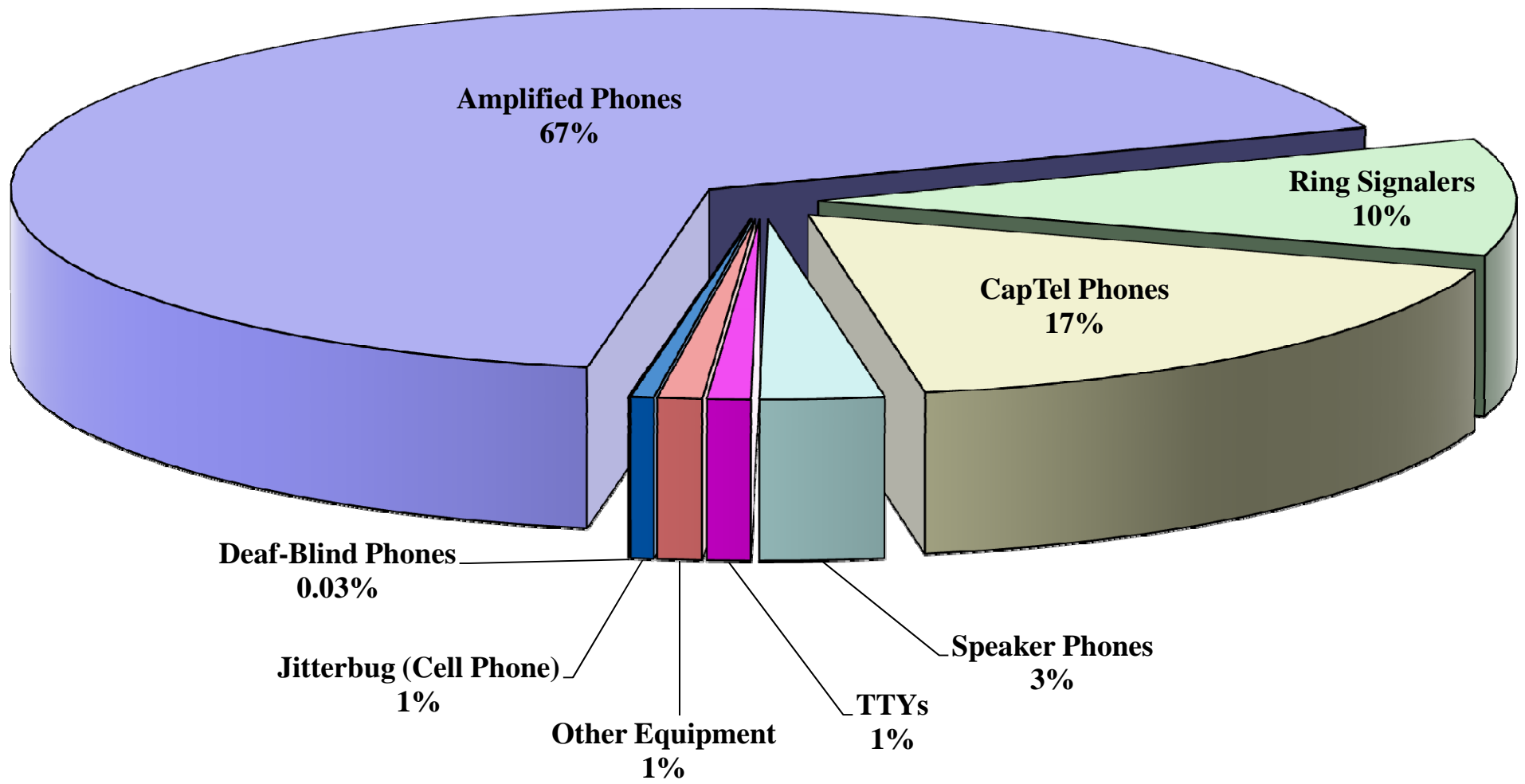


■ Number of New Program Participants Served

■ Number of Devices Distributed to New Program Participants

TED Program

Types of Equipment Distributed in 2011



2011 TED Program Services

