



Telecommunications Access Minnesota

2023 Annual Report to the Public Utilities Commission
Docket Number P999/PR-24-5

February 26, 2024

Table of Contents

- Executive Summary..... 4
 - Key Points 5
- Telecommunications Access Minnesota (TAM)..... 6
 - TAM Program History..... 6
 - TAM Administration 6
 - TAM Funding 7
 - TAM Surcharge Funded Programs..... 7
- Minnesota Relay 7
 - Minnesota Relay Services Provided 8
 - Types of Relay Services..... 8
 - 711 Dialing Access 8
 - 911 Dialing Access 8
 - Minnesota Relay Operations in 2023..... 9
 - Minnesota’s Telecommunications Relay Services (TRS) Contracts..... 9
 - T-Mobile TTY-Based and STS Relay Product and Service Enhancements 9
 - Hamilton CTS Product and Service Enhancements 10
 - Minnesota Relay Call Volumes..... 11
 - Minnesota Relay Predicted Future Operations 12
- Telephone Equipment Distribution Program..... 12
 - TED Program Services Provided 12
 - Telecommunications Equipment Provided..... 13
 - TED Program Operations in 2023..... 13
 - TED Program Changes from 2022 to 2023 13
 - New Client Population Served..... 14
 - Marketing Analysis 14
 - TED Program Predicted Future Operations 14
 - Department of Human Services Equity Toolkit 14
 - Statewide Outreach..... 15
- Minnesota Relay and TED Program Outreach 15
 - Telephone Directories, Bill Inserts and Newsletters..... 15
 - DHHS Regional Advisory Committee Meetings 16

TAM Fund Revenues and Expenditures FYs 2023 & 2024 17
Appendices..... 18

Minnesota Department of Commerce

For more than 150 years, the Minnesota Department of Commerce and its predecessor agencies have protected consumer interests and ensured a fair and competitive marketplace in our state.

Our Priorities

- Protect the public interest through consumer protection, consumer education, assistance to consumers, safety, health and financial security, and lowering inequities.
- Serve as a trusted public resource for consumers and businesses by listening and learning from the Minnesotans Commerce services, being effective stewards of public resources, advocating for Minnesota consumers and develop a policy, programmatic, and regulatory environment that meets their needs.
- Reduce economic barriers within Commerce, provide regulatory oversight, and reduce disparities within those of all races, ethnicities, religions, economic statuses, gender identities, sexual orientations, (dis)abilities, and zip codes.
- Ensure all, especially historically disadvantaged Minnesotans, are resilient to Minnesota's climate and engaged in advancing efforts to mitigate climate change.
- Ensure a strong, competitive, and fair marketplace for Minnesotans.

Copyright

All material in this report is protected by copyright. The Minnesota Department of Commerce claims copyright on all intellectual property created by the agency and reserves the right to reproduce, distribute, or display the material, in addition to authorizing others to do so.

Some of the material on this report may be copyrighted by others. The Department of Commerce cannot grant permission to use or reproduce others' copyrighted material.

Contact the Minnesota Department of Commerce for permission to use or reproduce any material in this report.

Executive Summary

In accordance with Minn. Stat. § 237.55, the Minnesota Department of Commerce (Commerce) submits the 2023 Annual Report to the Public Utilities Commission (Commission). This report provides information on the Telecommunications Access Minnesota (TAM) fund, and on Minnesota Relay and Telephone Equipment Distribution (TED) Program, which were established to provide equal access to the telecommunications network for people who are deaf, deafblind, hard of hearing, speech disabled, or physically disabled.

Also, this report reviews the accessibility of telecommunications services to persons who have communication disabilities, describes services provided, accounts for annual revenues and expenditures for each aspect of the fund to date, and predicts future program operation.

Minnesota Relay and the TED Program are funded by a surcharge on all wired and post-paid wireless telephone access lines in Minnesota, and by a fee on each Minnesota retail transaction for prepaid wireless telecommunications services. In addition to Minnesota Relay and the TED Program, the TAM fund supports six additional programs:

- The Department of Human Services (DHS) – Rural Real-Time Captioning program has a maximum annual budget of \$300,000.
- The Department of Employment and Economic Development (DEED) – Accessible News for the Blind program has a maximum annual budget of \$100,000.
- The Minnesota Commission of the Deaf, DeafBlind and Hard of Hearing (MNCDHH) receives \$1,620,000 annually.
- Minnesota IT Services (MNIT) receives \$290,000 annually for coordinating technology accessibility and usability.
- Minnesota IT Services (MNIT) receives \$50,000 annually for a consolidated access fund for other state agencies related to accessibility of their web-based services.
- The Legislative Coordinating Commission (LCC) receives \$133,000 annually to provide captioning of live legislative activity streaming on the LCC’s website.

Key Points

- In fiscal year 2023, the TAM surcharge generated revenue of \$3,680,601 to fund eight programs providing a variety of services, with expenditures totaling \$4,210,001.
- In 2023, Minnesotans placed 163,415 relay calls with a total of 210,351 conversation minutes of use.
- From 2022 to 2023, Minnesota Relay calls declined 4%, and conversation minutes decreased 32%. Many relay users have migrated to internet-based services, which are under the jurisdiction of the Federal Communications Commission.
- In 2023, the TED Program served 112 new clients and 331 repeat clients.
- From 2022 to 2023, the TED Program experienced:
 - A 6% increase in new TED Program clients served.
 - A 19% decrease in the number of repeat clients served.
 - An 8% decrease in telecommunication devices distributed.
 - A 54% decrease in the number of auxiliary devices distributed.
- TED Program staff provided outreach for both the TED Program and Minnesota Relay at 15 booths and 19 presentations with a total of 510,506 event attendees.

Telecommunications Access Minnesota (TAM)

TAM Program History

In 1987, the Legislature established two programs to ensure that people who are deaf, hard of hearing, or speech disabled have access to telephone service: the Minnesota Relay, which began service on March 1, 1989; and the Telephone Equipment Distribution (TED) Program, which began as a pilot program on October 1, 1988. The Legislature created the Telecommunications Access for Communication Impaired Persons (TACIP) board to administer these programs.

In 1995, the Legislature eliminated the Telecommunications Access for Communication Impaired Persons board and transferred the responsibilities for administering the fund and the Minnesota Relay program to the Department of Public Service (the Departments of Public Service and Commerce merged on September 15, 1999). The Department of Human Services (DHS), through an interagency agreement with Commerce, administers the TED Program.

In 2002, the name of the Telecommunications Access for Communication Impaired Persons program changed to Telecommunications Access Minnesota (TAM). Commerce sought the name change at the request of consumers, who objected to the word “impaired” in the program name.

Beginning in 2005, the Minnesota Legislature appropriated TAM funds for various other state programs (see [TAM Surcharge Funded Programs](#) below).

TAM Administration

Commerce administers the TAM fund and manages the following vendor contracts and interagency agreements:

- Minnesota Relay services are provided to the State of Minnesota under contracts with T-Mobile USA, Inc. and Hamilton Relay.
- The TED Program (including Minnesota Relay outreach services) and the Rural Real-Time Captioning program are provided through interagency agreements with DHS.
- The Accessible News for the Blind program is provided through an interagency agreement with DEED.

TAM Funding

TAM is funded through a monthly surcharge on all wired and post-paid wireless telephone access lines in the state of Minnesota.¹ In addition, there is a fee on each Minnesota retail transaction for prepaid wireless telecommunications services.

The TAM surcharge is currently \$0.04 per wired and post-paid wireless access line and prepaid wireless retail transaction. The surcharge is capped at \$0.20 per access line per month, or per retail transaction.

TAM Surcharge Funded Programs

- TAM Administrative Expenses
- Minnesota Relay Services and Outreach
- Telephone Equipment Distribution Program
- Accessible News for the Blind
- Rural Real-Time Captioning
- The Minnesota Commission of the Deaf, DeafBlind and Hard of Hearing
- MNIT for coordinating technology accessibility and usability
- MNIT for a consolidated access fund for other State agencies
- Legislative Coordinating Commission for captioning live streaming of legislative activity

Minnesota Relay

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, United States Code, title 47, section 225, Code of Federal Regulations, title 47, sections 64.601 to 64.606 and Minn. Stat. § 237.50 to 237.56.

¹ The Eighth Circuit Court of Appeals affirmed the Federal District Courts decision that Voice over Internet Protocol (VoIP) telephone service provided by Charter Advanced Services is an information service and that the Federal Communications Commission's "policy of nonregulation" of these services preempted state law. *Charter Advanced Servs. (MN), LLC v. Lange*, 903 F. 3d 715, 718 (2018). Thus, VoIP services, where there is a net protocol conversion as occurs with Charter's VoIP telephone services, are not required to collect and remit the TAM surcharge.

Minnesota Relay Services Provided

Types of Relay Services

- **Captioned Telephone Service (CTS):** CTS uses a special telephone with a text display screen so that a person who is hard of hearing can listen to and read captions of everything the other person on the call says.
- **Hearing Carry Over (HCO):** HCO allows a person who can hear clearly but who has very limited or no speech capability to make and receive phone calls.
- **Hearing User:** A hearing person may use a standard telephone or mobile phone to place a relay call and speak with a person who is deaf, hard of hearing, or speech disabled.
- **Spanish Relay:** Spanish speaking persons with a hearing or speech disability can make relay calls.
- **Speech-to-Speech (STS):** STS allows a person who has difficulty speaking or being understood on the phone to communicate using his or her own voice or voice synthesizer.
- **Text-Telephone (TTY):** This service allows a person who is deaf, deafblind, or speech disabled to use a TTY to communicate with the other person on the call.
- **Voice Carry Over (VCO):** VCO allows a person with a hearing disability, but who wants to use his or her own voice, to speak directly to the other party.

711 Dialing Access

The Federal Communications Commission requires all common carriers, wireless providers, payphone vendors, and Private Branch Exchange vendors to provide 711 dialing access to relay services.² Relay users are also able to access Minnesota Relay by dialing the appropriate 10-digit toll-free access numbers.

911 Dialing Access

Minnesota Relay automatically and immediately transfers emergency relay calls to the appropriate Public Safety Answering Point (PSAP) the caller would have reached by dialing 911 directly, or to a PSAP capable of dispatching emergency services in an expeditious manner.

² *In the Matter of the Use of N11 Codes and Other Abbreviated Dialing Arrangements*, Second Report and Order, CC Docket No. 92-105, released August 9, 2000.

Minnesota Relay Operations in 2023

Minnesota's Telecommunications Relay Services (TRS) Contracts

Minnesota contracts with T-Mobile USA, Inc. for the provision of TTY-based³ and Speech-to-Speech (STS) relay services. The contract is effective from July 1, 2014, through March 31, 2024. The current contract rate is \$2.60 per conversation minute, plus a \$6,600 monthly recurring fee.

Commerce contracts with Hamilton Relay for the provision of Captioned Telephone Service (CTS). The contract is effective from July 1, 2022, through June 30, 2025. The fiscal year 2023 contract rate was \$1.85 per conversation minute and the fiscal year 2024 contracted rate is \$2.00 per conversation minute.

T-Mobile TTY-Based and STS Relay Product and Service Enhancements

- Migrated the TRS and Billing platforms and servers from Sprint to T-Mobile systems.
- Implemented an STS shortcut icon for T-Mobile wireless subscribers to easily access STS from their device while on the T-Mobile network.
- Implemented a Web Application Firewall that protects all TRS public web applications.
- Added messaging and hints to be shown to communications assistants processing emergency calls.
- Migrated to a new workforce management tool for communications assistant scheduling.
- Updated multiple help files to improve communications assistant's call handling.
- Enhanced the Spanish "voice tones" panel to show the Spanish tones and the English translation side by side, to assist communications assistants in choosing the correct entry.
- Developed training quality focus newsletters related to TRS, STS, and customer service procedures, customer satisfaction, and diversity awareness articles.
- Made improvements and enhancements to communications assistant call processing system, including:
 - New auto-expand words added to increase typing accuracy.
 - New Spanish auto-correct words added to increase typing accuracy.
 - Keyboard keycaps updated.

³ Includes TTY, Voice Carry-Over, and Hearing Carry-Over relay services.

- Conducted ongoing performance assessment consistency testing, which included:
 - Internal quality testing.
 - Typing and accuracy.
 - Spelling and grammar skills.
 - Train the trainer workshops and consistency Q&A.

Hamilton CTS Product and Service Enhancements

- New analog CTS users will receive a CTS phone capable of switching to Internet Protocol mode if, at some point in the future, the user's analog telephone service changes to digital.
- A technology upgrade that enables communications assistants to use a new proprietary tool to improve accuracy, reduce delay of the user's captions, and provides more details (such as background noise information) to facilitate captions generated by voice recognition technology. This upgrade has resulted in increased caption speed and a higher level of accuracy.
- Remote training for communications assistants.
- CTS services are available to meet the accessibility needs of individuals at carceral facilities.
- The creation of an outreach toolkit that provides staff with the resources to explain the analog to digital transition and assist consumers in finding a CTS solution that works best for their needs. The toolkit includes PowerPoint slides, newsletter articles, a flyer, a bill insert for telephone companies, and a press release.
- To ensure calls are processed accurately and efficiently, Hamilton continually conducts both blind and standardized tests of every communications assistant. A third-party vendor performs blind testing, and Hamilton conducts internal testing.

Minnesota Relay Call Volumes

In 2023, Minnesotans placed 163,415 total relay calls⁴ with 210,351 conversation minutes of use. Overall, Minnesota Relay experienced the following changes from 2022 to 2023:

		2022	2023	Change	Percent of Change
Captioned Telephone Service	Total Calls	66,904	49,078	(17,826)	-27%
	Conversation Minutes	224,732	138,477	(86,255)	-38%
TTY-Based	Total Calls	93,817	102,128	8,311	9%
	Conversation Minutes	81,450	70,759	(10,692)	-13%
Speech-to-Speech	Total Calls	10,184	12,209	2,025	20%
	Conversation Minutes	1,908	1,116	(793)	-42%

Over the years, many relay users have migrated away from TTY-based, STS, and CTS relay services to internet-based services such as Video Relay Service, Internet Protocol Captioned Telephone Service, and Internet Protocol Relay. Internet-based relay services are under the Federal Communications Commission’s jurisdiction and are paid for through a federal fund. Internet-based relay services are fully accessible to Minnesota consumers, free of charge, through many providers who offer these services nationwide.

The Affordable Connectivity Program (ACP), which became effective on December 31, 2021, helps low income households afford the internet connection they need to access internet-based relay services. Currently, approximately 245,000 Minnesotans are enrolled in the ACP.⁵ However, the ACP is slated to end in April 2024 unless Congress appropriates additional funding. Until all Minnesotans have access to high-speed internet, and at an affordable cost, many users will have no option but to use the existing non-internet-based relay services.

Appendix A includes the following Minnesota Relay call charts:

- 2023 Minnesota Relay Conversation Minutes by Type
- 2014 – 2023 Minnesota Relay Call Volumes

⁴ Total calls include the sum of outbound calls (completed and busy-ring-no-answer) and general assistance calls (an inbound call that does not result in an outbound call).

⁵ Universal Service Administrative Co. (2024, February 8). *ACP Enrollment and Claims Tracker, Enrollment by State*. <https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/#enrollment-by-state>.

Minnesota Relay Predicted Future Operations

There are no known changes to Minnesota Relay services for 2024.

Industry trends indicate consumers will continue to transition from older, analog-based relay services to internet-based relay services and to new technology that provides communication accessibility (such as text-to-speech apps, built in captioning on Smartphones, over-the-counter hearing aids, etc.).

Telephone Equipment Distribution Program

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, including income, disability, and residency. The TED Program is administered through an interagency agreement between DHS and Commerce.

TED Program Services Provided

The TED Program is responsible for:

- Distributing specialized telecommunications devices and interconnectivity products to eligible Minnesotans.
- Conducting outreach to inform the public of services available through the program.
- Providing training for the use of distributed equipment.
- Assisting a person who is applying for telecommunication devices and products in applying for discounted telecommunications or internet services (when applicable).
- Informing TED Program clients about other assistive technology available in the industry.

TED Program services are provided through four of DHS' Deaf and Hard of Hearing Services Division (DHHSD) regional offices: Duluth, Moorhead, St. Cloud and St. Paul.

Telecommunications Equipment Provided

The types of equipment distributed by the TED Program include:

- Amplified telephones (both hearing and voice output)
- Bluetooth enabled cordless amplified phones
- Captioned telephones (used with captioned telephone relay services)
- Text Telephones (TTYs)
- Basic cell phones and smartphones with hearing aid compatibility
- Apple and Android tablets and smartphones
- Smart displays
- Smart speakers
- Bluetooth streamers to be used with hearing aids
- Electrolarynx used with a landline or cell phone
- Wireless accessories (Bluetooth neckloop, cell phone amplifier, and headsets)
- Ring signaling devices (auditory, visual, and tactile)
- Special needs devices (for multiple disabilities)

TED Program Operations in 2023

TED Program Changes from 2022 to 2023

Category	2022	2023	Increase/ Decrease	Percent
New Program Clients	106	112	6	6%
Repeat Program Clients ⁶	410	331	-79	-19%
Telecommunications Devices Distributed	352	324	-28	-8%
Auxiliary Devices Distributed	70	32	-38	-54%

⁶ Current clients often contact the TED Program to receive additional training, for 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).

New Client Population Served

New Clients - Age Range	Number of Clients	Percentage of New Clients
80+ Years Old	78	70%
50-79 Years Old	28	25%
26-49 Years Old	4	4%
0-25 Years Old	2	2%

New Clients - Disabilities Served	Number of Clients	Percentage of New Clients
Hard of Hearing	74	66%
Hard of Hearing with Vision Loss	17	4%
Other Disability (e.g., Deafblind or Speech Disability)	9	8%
Physical Disability	4	7%
Deaf	8	15%

Appendix B includes the following TED Program charts:

- 2014 – 2024 New TED Program Participants
- Types of Telecommunications Equipment Distributed to New and Current Clients
- Types of Auxiliary Equipment Distributed to New and Current Clients

Marketing Analysis

In fiscal year 2023, the TED Program hired a marketing analysis firm to conduct a study and provide recommendations on effective outreach strategies and performance measures. In fiscal year 2024, the TED Program received the report outlining recommendations.

The TED Program implemented phase one of marketing recommendations from the contractor; strategies were prioritized based on target audiences and results were strategically measured.

TED Program Predicted Future Operations

Department of Human Services Equity Toolkit

In 2023, the DHS equity toolkit was approved by the department and divisions were to implement them January 1, 2024. The TED Program will begin analyzing several delivery system(s) and policies. It will be determined how the program can provide services in a more equitable manner.

Statewide Outreach

The TED Program will continue to implement and measure the outreach strategy recommendations from the marketing analysis firm contracted in 2023. The contractor recommended to strategically focus on seven key counties as a sample area to saturate outreach efforts. In fiscal year 2024, the TED Program will focus its outreach efforts in Clearwater, Crow Wing, Itasca, Kittson, St. Louis, Swift, and Wadena counties. Based on US Census data, these counties represent the highest number of low-income residence and persons with a disability.

Minnesota Relay and TED Program Outreach

Minnesota Relay outreach is provided under an interagency agreement with DHS – TED Program. Outreach efforts are tailored to target appropriate demographics, including consumers who are deaf, deafblind, hard of hearing, late deafened, speech disabled, or have mobility limitations. Outreach staff also educate hearing consumers and businesses.

Outreach activities primarily include:

- Staffing a booth at exhibitions, conferences, and fairs.
- Presenting at senior centers, health care facilities, and social service agencies.
- Mass Mailings/Emails.
- Advertising.
- Providing needs assessments and equipment training.
- Providing brochures, instruction sheets, informational videos, and referrals.

In 2023, TED Program staff provided outreach for both the TED Program and Minnesota Relay at 15 booths and 19 presentations with a total of 510,506 event attendees. In addition, 27 advertisements were placed in newspapers and other publications.

Telephone Directories, Bill Inserts and Newsletters

Annually, the TAM administrator sends a letter to all telephone companies serving Minnesota consumers to remind them of their responsibility to ensure that customers are aware of the availability and use of all forms of Telecommunications Relay Services. TAM provides carriers with a sample *Annual Notice to Customers* for carriers to use in their telephone directory, bill insert and/or newsletter. TRS annual notice requirements and resources are available on Commerce’s website (<https://mn.gov/commerce/business/telecom/reporting/>) so that carriers have access to up-to-date information on Minnesota Relay and TED Program services.

DHSD Regional Advisory Committee Meetings

DHSD has six advisory committees throughout Minnesota. Each advisory committee meets three times per year and serves as a venue to provide information to, and gather information from, the community. Advisory committee meeting minutes are provided to the TAM and TED Program administrators so that issues, questions and concerns regarding Minnesota Relay and the TED Program may be addressed. The TAM and TED Program administrators attended many of the advisory committee meetings in 2023.

TAM Fund Revenues and Expenditures FYs 2023 & 2024

REVENUE	FY 2023 Actual	FY 2024 Budgeted
Per Wired/Post-Paid Wireless Customer Access Line FY 2023=\$0.06 for 1 month and \$0.04 for 11 months FY 2024= \$0.04	\$ 3,254,432.18	\$ 3,013,072.53
Prepaid Wireless Retail Transactions	\$ 337,940.51	\$ 321,309.61
TAM Fund Interest	\$ 88,228.10	\$ 8,211.00
Total TAM Fund Revenue	\$ 3,680,600.79	\$ 3,342,593.14

EXPENDITURES	FY 2023 Actual	FY 2024 Budgeted
TAM Program Administration	\$ (122,871.43)	\$ (145,719.00)
Telecommunications Relay Services	\$ (535,862.95)	\$ (564,890.17)
DHS-TED Program	\$ (1,228,132.11)	\$ (1,298,536.15)
DHS-Rural Real-Time Captioning	\$ (150,916.68)	\$ (162,839.00)
DEED-Accessible News for the Blind	\$ (79,218.00)	\$ (100,000.00)
MN Commission of the Deaf, DeafBlind and Hard of Hearing	\$ (1,620,000.00)	\$ (1,620,000.00)
MNIT Services (1)	\$ (290,000.00)	\$ (290,000.00)
MNIT Services (2)	\$ (50,000.00)	\$ (50,000.00)
Legislative Coordinating Commission	\$ (133,000.00)	\$ (133,000.00)
Total TAM Fund Expenditures	\$ (4,210,001.17)	\$ (4,364,984.32)

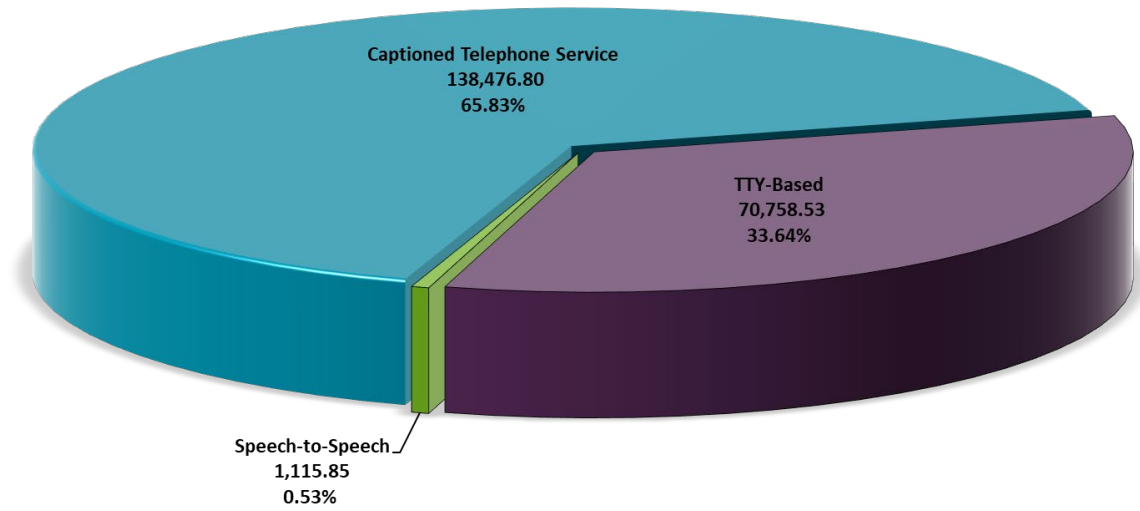
REVENUE VS. EXPENDITURES	\$ (529,400.38)	\$ (1,022,391.18)
---------------------------------	------------------------	--------------------------

STATEMENT OF TAM FUND BALANCE	FY 2023 Actual	FY 2024 Budgeted
TAM Fund Balance at Beginning of Fiscal Year	\$ 4,039,860.91	\$ 3,291,053.60
TAM Fund Revenue & Interest	\$ 3,680,600.79	\$ 3,342,593.14
TAM Fund Expenditures	\$ (4,210,001.17)	\$ (4,364,984.32)
TAM Fund Balance at Close of Fiscal Year	\$ 3,510,460.53	\$ 2,268,662.42

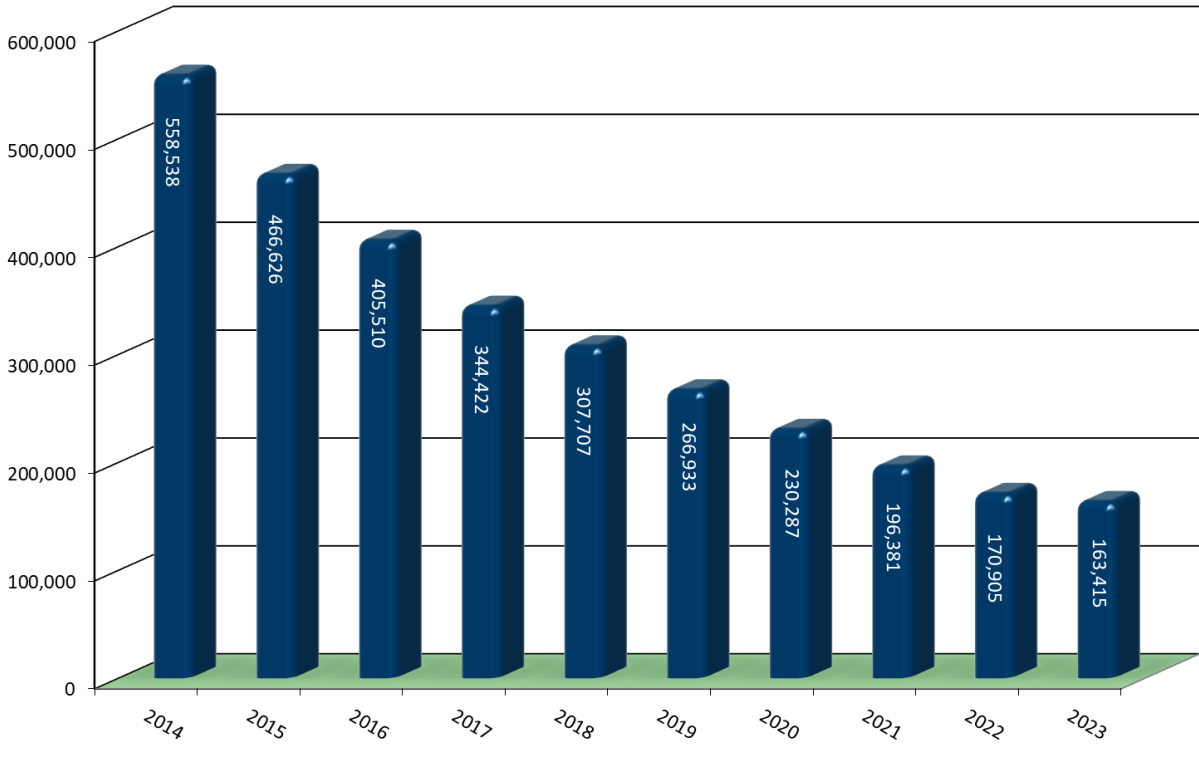
Appendices

Appendix A – Minnesota Relay Call Charts

2023 Minnesota Relay Conversation Minutes by Type

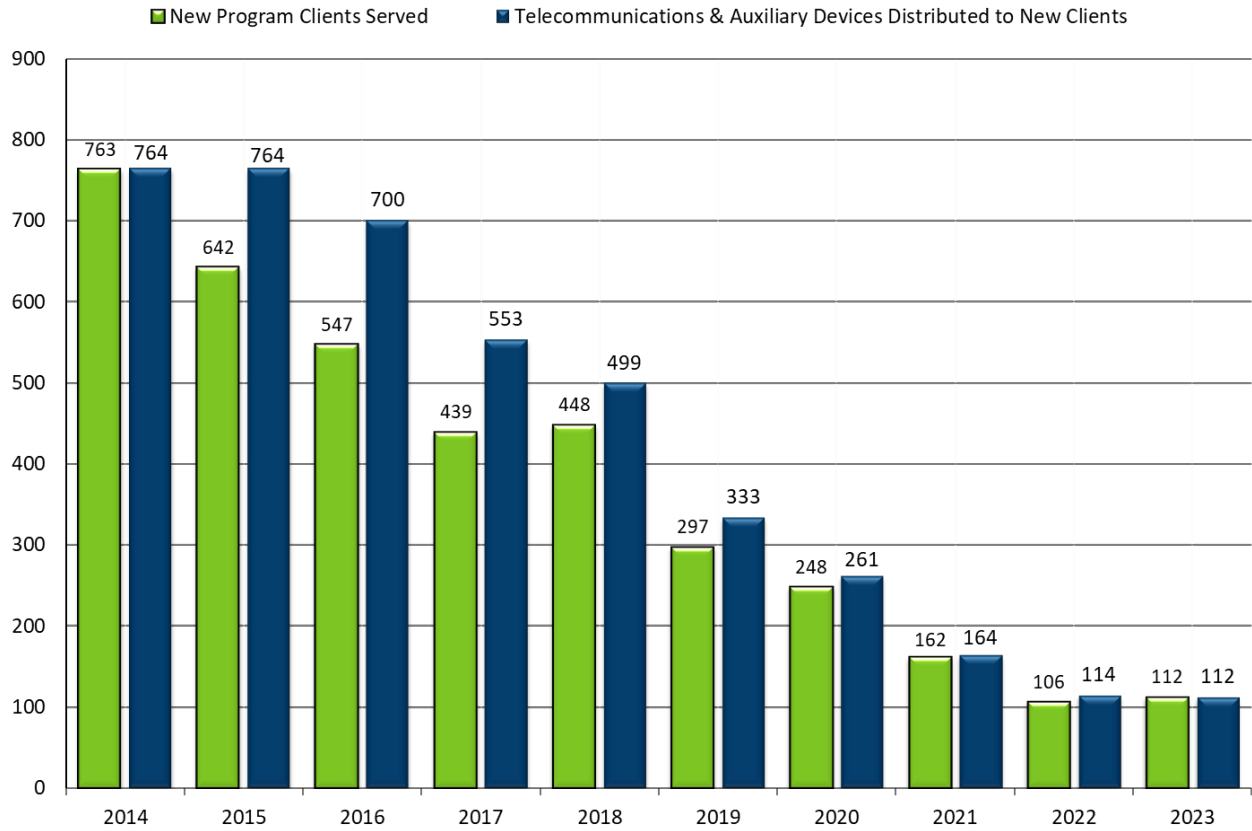


2014 - 2023 Minnesota Relay Call Volume Total number of Captioned Telephone Service, TTY-Based and Speech-to-Speech calls



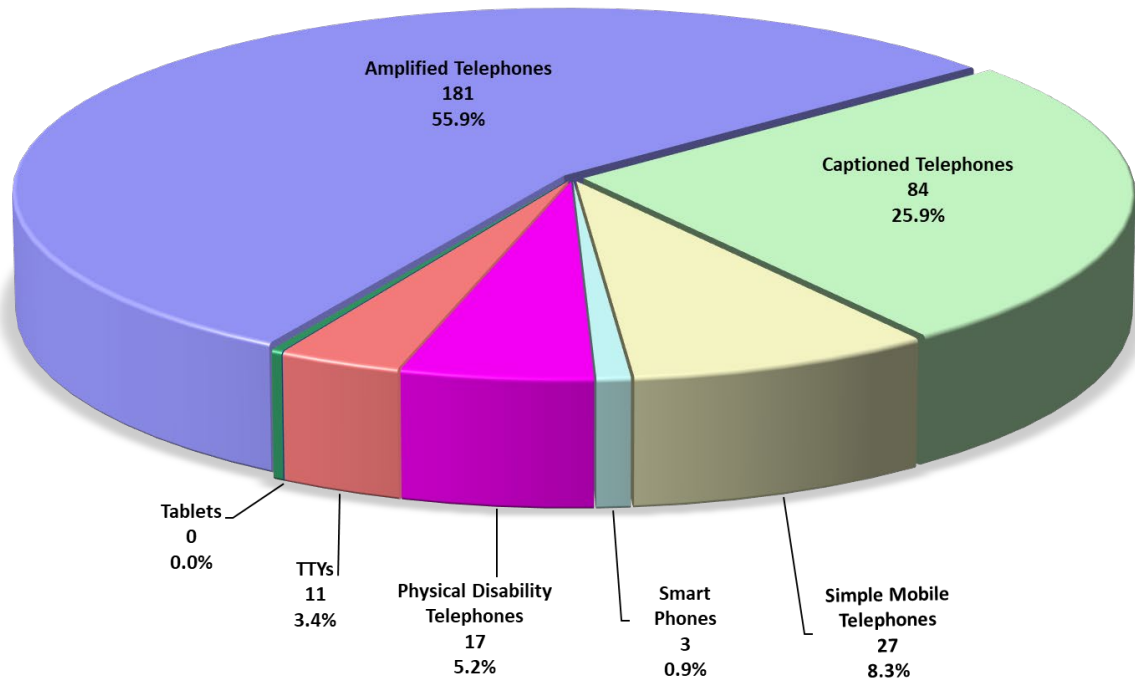
Appendix B – TED Program Charts

2014 - 2023 New TED Program Participants



TED Program

Types of Telecommunications Equipment Distributed to New and Current Clients in 2023



TED Program Types of Auxiliary Equipment Distributed to New and Current Clients in 2023

