



Telecommunications Access Minnesota

2020 Annual Report to the Public Utilities Commission
Docket Number P999/PR-21-5

February 1, 2021

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Minnesota Department of Commerce

Mission

Commerce protects all Minnesotans in their everyday financial transactions by investigating and evaluating services and advocating that they be fair, accessible and affordable.

With You Every Day

Wherever you are in Minnesota, the Department of Commerce is with you every day. Whether you're filling up on gas, purchasing a home, working to reduce energy consumption or rebuilding after a disaster—we are with you, no matter what.

Commerce oversees more than 20 regulated industries, ensuring that Minnesota consumers are protected, and businesses are strong. Our mission is to protect the public interest, advocate for Minnesota consumers, ensure a strong, competitive and fair marketplace, strengthen the state's economic future and serve as a trusted public resource for consumers and businesses. Learn more at mn.gov/commerce.

Executive Summary

In accordance with Minn. Stat. § 237.55, Commerce submits the 2020 annual report on the accessibility of telecommunications services to persons who have communication disabilities. The report describes services provided, accounts for annual revenues and expenditures for each aspect of the fund to date, and includes predicted program future operation.

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 known as the Telecommunications Access Minnesota (TAM) program. Minnesota Relay and the Telephone Equipment Distribution (TED) Program were established to achieve this objective. The programs 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.

The current TAM surcharge is \$0.07 per access line or retail transaction. By statute, the surcharge may not exceed \$0.20 per access line or retail transaction.

“In 2020, Minnesotans placed 230,287 relay calls for a total of 626,245 conversation minutes of use.”

Minnesota’s procedures and requirements regulating Minnesota Relay, the TED Program, and the Telecommunications Access Minnesota fund are outlined in Minn. Stat. §§ 237.50 to 237.56, and Minnesota Rules chapter 8775.

Minnesota Relay Calls Continue to Decline

Minnesota Relay is a free, federally-mandated Telecommunications Relay Services (TRS) program that allows individuals who are deaf, deafblind, hard of hearing, or speech disabled to place and receive telephone calls. Minnesota Relay is also used by individuals and businesses to communicate by phone with people with a hearing loss or speech disability. The State of Minnesota contracts with Sprint Communications Company, L.P. for the provision of TRS in Minnesota. The current contract became effective on July 1, 2014, and runs through June 30, 2021.

In 2020, Minnesotans placed 230,287 relay calls for a total of 626,245 conversation minutes of use. Due to the pandemic, Minnesota Relay experienced a notable increase in Caption Telephone (CapTel) conversation minutes in March through May 2020. Usage began to return to normal levels in the summer months, but started increasing again in late fall.

Teletype (TTY)-based relay conversation minutes also increased at the start of the pandemic, and remained elevated through September, when they began decreasing. Speech-to-Speech (STS) experienced a decline in conversation minute in 2020.

Overall, Minnesota Relay experienced the following changes from 2019 to 2020:

		2019	2020	Change	Percent of Change
CapTel	Total Calls	175,902	139,393	(36,509)	-21%
	Conversation Minutes	524,823	519,059	(5,764)	-1%
TTY-Based	Total Calls	84,362	84,870	508	1%
	Conversation Minutes	119,410	103,146	(16,264)	-14%
STS	Total Calls	6,669	6,024	(645)	-10%
	Conversation Minutes	8,156	4,039	(4,117)	-50%

In recent years, many relay users have migrated from TTY-based, Speech-to-Speech, and CapTel relay services to internet-based services such as Video Relay Service, Internet Protocol Relay, and Internet Protocol Captioned Telephone Service – services under the Federal Communications Commission’s jurisdiction and 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.

COVID-19 Affects Relay Services

As the pandemic escalated and face-to-face interactions were limited, families, friends, businesses, and medical services transitioned to communicating more by telephone – including Minnesota Relay users.

The pandemic also affected staffing levels at TRS centers. Some relay communications assistants were unable to work because of illness, quarantines, caring for children when schools and daycares are closed, and so forth. In addition, when a relay center employee is diagnosed with COVID-19, the center closes for deep cleaning.

The increase in the number of phone calls and reduced relay center staffing levels are resulting in long wait times for relay calls to be processed. TRS providers, relay center staff, the Federal Communications Commission, and state TRS administrators are working together to ensure accessible telecommunications services remain available to consumers with disabilities so that they have access to vital services, family, and friends.

TED Program Numbers Decline – New Services Added in 2020

The TED Program is administered through a statutorily prescribed interagency agreement between the Department of Human Services (DHS) Deaf and Hard of Hearing Services Division and Commerce (TAM program). In 2020, the TED Program served 248 new participants, 747 repeat participants, and distributed 797 telecommunications and auxiliary devices.

The TED Program experienced the following changes from 2019 to 2020:

	2019	2020	Increase/ Decrease	Percent
New Program Clients	297	248	(49)	-16%
Repeat Program Clients	817	747	(70)	-9%
Devices Distributed	991	797	(194)	-20%
Information and Referrals	255	242	(13)	-5%

In 2020, the TED Program initiated three new services:

1. The TED Program distributed interconnectivity devices. These includes accessories, devices, or applications (apps) for which the primary function uses a telecommunication device in order to provide increased access. Examples of interconnectivity devices added to the program are Bluetooth enabled accessories, Smart Speakers for clients with physical disabilities, Smart Displays, universal hearing aid streamers, apps to be used with a tablet or smartphone, an electrolarynx to be used with a wired or wireless telephone by individuals with a speech disability, and Bluetooth enabled earphones.

The TED Program purchased 52 interconnectivity devices and distributed 47 of these to new and existing clients.

2. TED Program staff were trained by Minnesota Public Utilities Commission (PUC) staff on how to complete the paper and electronic Lifeline/TAP application. TED Program staff assisted four clients with completing Lifeline/TAP applications. This number is low because staff were unable to provide this assistance in-person due to the COVID-19 pandemic.
3. An internal assistive technology referral form was developed to determine additional assistive technologies that TED Program clients could benefit from. Eleven TED Program clients were referred to a DHS Deaf and Hard of Hearing specialist for further assistance.

COVID-19 Reduces the TED Program's Ability to Provide In-Person Services

Due to the pandemic and social distancing requirements, TED Program staff were unable to provide in-person visits to clients and were not able to participate in booths, expos, presentations, and other in-person outreach activities.

Minnesota Relay and TED Program Outreach

"I made my first TTY call today. And hopefully soon I'll have the courage to try STS [Speech-to-Speech]," said a new Minnesota Relay user. "This is going to open so many doors for me and I just wanted to say thank you."

TED Program staff provide outreach for both the TED Program and Minnesota Relay from Deaf and Hard of Hearing Services Division offices located in Duluth, Mankato, Moorhead, St. Cloud, and St. Paul.

In 2020, TED Program staff provided information at 23 booths and

presentations reaching 795 Minnesotans. In-person outreach activities were limited this year due to the pandemic. Staff were able to perform some virtual presentations, but the majority of outreach this year was conducted via mailings and advertising. The TED Program sent 59 mass mailings and placed 118 electronic and print advertisements in 2020.

Other Programs Funded Through TAM

In addition to Minnesota Relay and the TED Program, TAM funds six additional programs:

- The Department of Human Services – 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 (MN.IT) receives \$290,000 annually for coordinating technology accessibility and usability.
- MN.IT 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 \$100,000 annually to provide captioning of live legislative activity streaming on the LCC’s website.

TAM Fund Activity in Fiscal Year 2020

Prepaid Wireless Fee Correction

Retailers remit TAM and E911 fees on prepaid wireless telecommunications services to the Department of Revenue (Revenue), which deposits the fees into the appropriate fund.

In 2020, Commerce noted that the TAM/E911 remittance fee split formula appeared to be inaccurate. Revenue conducted an audit and confirmed that they were using an incorrect fee split formula. The error resulted in an over-compensation to the TAM fund, and under-compensation to the E911 fund.

In order to correct the error for FY 2020, TAM returned \$197,225.84 to Revenue, which deposited those fees into the E911 fund.

Revenues

Total Revenue: \$5,036,090.28

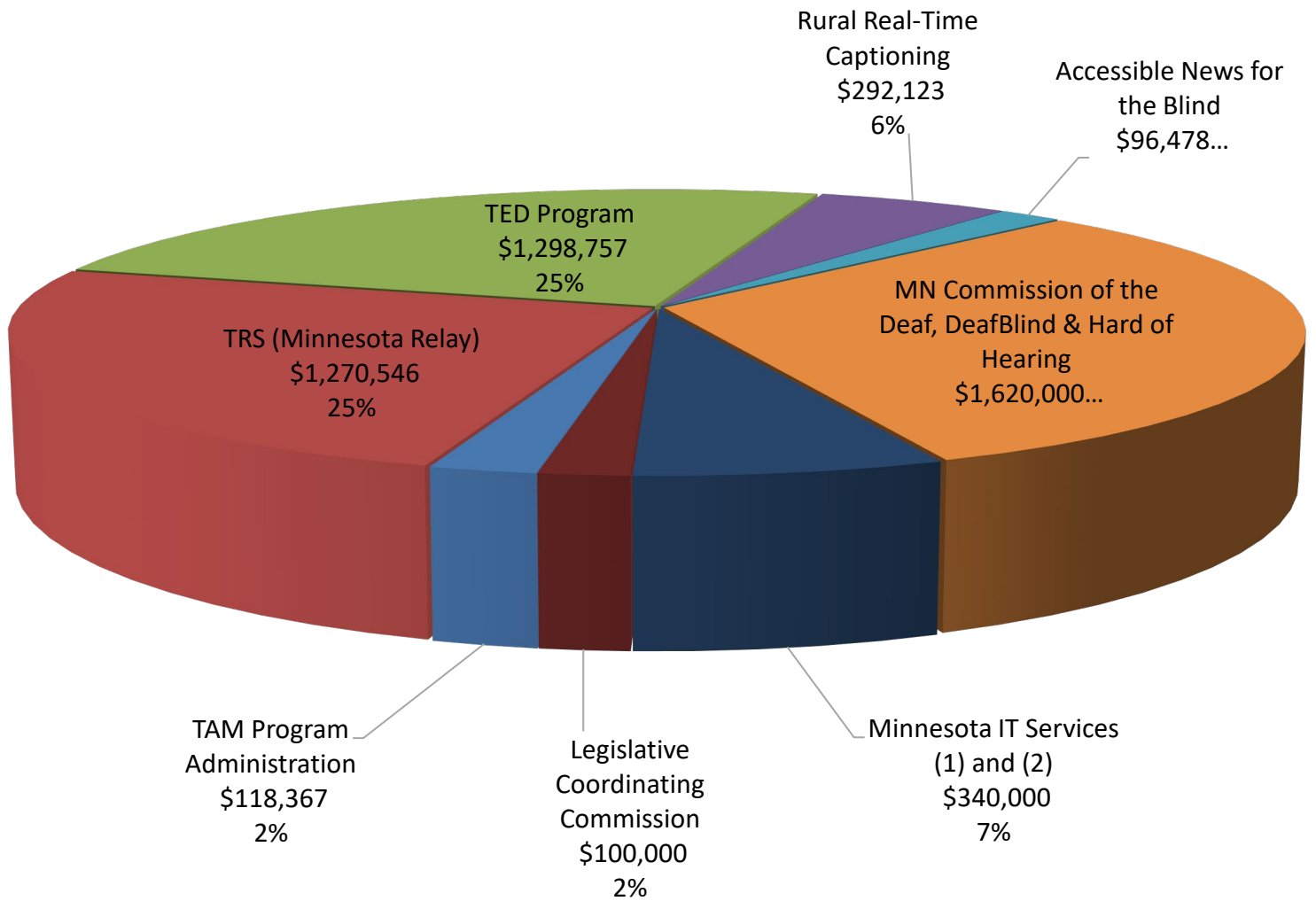
- Wired and Post-Paid Wireless Surcharge Revenue: \$4,514,110.69
- Prepaid Wireless Retail Transaction Revenue: \$508,334.85
- TAM Fund Interest: \$13,644.74

Expenditures

Total Expenditures: \$5,136,271.88

- | | |
|--|--|
| • TAM Administration: \$118,366.83 | • Accessible News for the Blind: \$96,478.00 |
| • Minnesota Relay Services: \$1,270,546.43 | • MNCDHH: \$1,620,000 |
| • TED Program: \$1,298,757.34 | • MN.IT (1): \$300,000 |
| • Rural Real-Time Captioning: \$292,123.28 | • MN.IT (2): \$50,000 |
| | • LCC: \$100,000 |

Fiscal Year 2020 TAM Fund Expenditures



TAM Program History

In 1987, the Legislature passed legislation creating the Telecommunications Access for Communication Impaired Persons (TACIP) Board, which was tasked with ensuring that people who have difficulty hearing or speaking on the telephone have access to telephone service. Two programs were established to accomplish this goal: 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.

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 Minnesota Statutes sections 237.50 to 237.56.

There have been significant changes and improvements to Minnesota Relay since it began operations. When Minnesota Relay began providing services in 1989, the State owned and maintained all the relay equipment, and contracted with the Deafness, Education and Advocacy Foundation for the operation of the call center. Minnesota Relay services are now provided to the State of Minnesota under contract with Sprint Communications Company L.P.

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.

Historical TAM Program Highlights

- In 1995, the Legislature eliminated the Telecommunications Access for Communication Impaired Persons board and transferred the responsibilities for administering the Telecommunications Access for Communication Impaired Persons fund and Minnesota Relay to the Department of Public Service.¹ The Department of Human Services, through an interagency agreement with Commerce, administers the TED Program (Minnesota Statutes section 237.51, subd. 1).

¹ The Departments of Public Service and Commerce merged on September 15, 1999.

- In 1996, the Minnesota Relay facility and its equipment had become severely outdated. The Telecommunications Access for Communication Impaired Persons program decided to provide comprehensive and cost-effective relay services in Minnesota using a qualified TRS vendor to furnish continually upgraded equipment and software, as well as specially trained call center staff.
- On July 1, 1996, the Telecommunications Access for Communication Impaired Persons program contracted with Communication Service for the Deaf (CSD) and Sprint Communications Company, L.P. (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 and 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 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.
- In 2005, the Minnesota Legislature created two new state programs, Accessible News for the Blind and Rural Real-Time Captioning, both of which are funded via the TAM surcharge.

The Accessible News for the Blind program provides an electronic information service (access to daily newspapers and magazines) for individuals who cannot read print materials due to vision loss, dyslexia, or a physical disability. This program is administered by DEED and has a maximum annual budget of \$100,000.

- The Rural Real-Time Captioning program provides real-time captioning of certain live local television news programs in rural areas so that they are accessible to people who are deaf, hard of hearing, or deafblind. This program is administered by the Commissioner of DHS and has a maximum annual budget of \$300,000.
- On October 17, 2005, TAM issued a Request for Proposal for the provision of TRS and associated outreach. The TRS contract was awarded to CSD, with Sprint as a subcontractor, and was effective from July 1, 2006, through June 30, 2011, with the option to renew up to an additional 60 months. TAM extended the basic relay and captioned telephone relay services components of the TRS contract with CSD through June 30, 2014. The Minnesota Relay outreach component was not included in the contract extension.

- In 2006, the Legislature appropriated \$200,000 annually from the TAM fund to MNCDHH for operational expenses. The commission advocates for equality of opportunity for Minnesotans who are deaf, deafblind, and hard of hearing.
- In 2007, the Legislature appropriated an additional \$100,000 annually from the TAM fund to MNCDHH (an increase of 50 percent), for a total direct appropriation of \$300,000 annually.
- In 2008, the Legislature provided for two direct appropriations from the TAM fund in FY 2009: \$85,000 for a state video franchising study and \$175,000 for a broadband mapping project.
- In 2009, the Legislature provided for three one-time direct appropriations from the TAM fund in FYs 2010 and 2011. MN.IT was appropriated \$100,000 each year for technology accessibility and usability. The Legislative Coordinating Commission (LCC) was appropriated \$100,000 each year for captioning of live streaming of legislative sessions. MNCDHH was appropriated \$100,000 each year for American Sign Language website 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.
- In 2011, the Legislature provided for one-time direct appropriations from the TAM fund to MN.IT, LCC, and MNCDHH in FYs 2012 and 2013. MN.IT received \$230,000 each year for coordinating technology accessibility and usability. LCC received \$150,000 each year to provide captioning of live streaming of legislative activity on the LCC's website and for a consolidated access fund for other state agencies. MNCDHH received \$20,000 each year to provide information in American Sign Language on their website and to provide technical assistance to state agencies.
- In 2011, the Legislature approved a transfer of \$1,100,000 from the TAM fund to the General Fund. The transfer was processed in FY 2012.
- In July 2011, Commerce began contracting with DHS for the provision of Minnesota Relay outreach services. With this transition, outreach is provided from five regional Deaf and Hard of Hearing Services offices (in the past, Minnesota Relay outreach was provided from one office located in St. Paul). The contract saves the TAM fund thousands of dollars annually.

- In 2013, the Legislature modified the direct appropriations from the TAM fund to MN.IT, LCC, and MNCDHH. In FY 2014, MN.IT's funding increased to \$290,000 (an increase of 26.1 percent) and became a permanent annual allocation. The LCC's \$150,000 appropriation also became a permanent annual allocation. MNCDHH's appropriation increased to \$500,000 in FY 2014 (an increase of 56.3 percent) and to \$800,000 in FY 2015 (an increase of 60 percent), and became a permanent annual allocation.
- In 2013, new legislation imposed a TAM fee on each retail transaction for prepaid wireless telecommunications services, in the amount of the monthly charge provided for by Minnesota Statutes section 237.52, subdivision 2. The prepaid wireless fee became effective on January 1, 2014.
- On March 5, 2014, Commerce issued a Request for Proposal for the provision of TRS. The TRS contract was awarded to Sprint Communications Company L.P. and is effective from July 1, 2014, through June 30, 2021.
- In 2015, the Legislature modified the direct appropriations from the TAM fund to MN.IT and the LCC. In FY 2016, the \$50,000 funding for a consolidated access fund to provide grants to other state agencies related to accessibility of their web-based services was moved from the LCC to MN.IT.
- In 2017, the Legislature increased the direct appropriation for MNCDHH to \$1,170,000 (an increase of 46.3 percent).
- In 2019, the Legislature increased the direct appropriation for MNCDHH to \$1,620,000 (an increase of 38.5 percent).

Telecommunications Access Minnesota (TAM)

TAM Administration

Commerce administers the TAM fund and manages vendor contracts and interagency agreements. Minnesota Relay services are provided to the State of Minnesota under contract with Sprint Communications Company L.P. 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 Funding Sources

- Monthly surcharge on all wired and post-paid wireless telephone access lines in the state of Minnesota.²
- Fee on each Minnesota retail transaction for prepaid wireless telecommunications services.

TAM surcharge revenue is deposited into a dedicated account. The surcharge is capped at \$0.20 per access line per month, or per retail transaction.

Current TAM Surcharge

In May 2020, the PUC approved TAM fund fiscal year 2020 budgets and Commerce’s recommendation that the TAM surcharge remain at \$0.07 per wired and post-paid wireless access line and prepaid wireless retail transaction.

TAM Surcharge Funded Programs

- Telecommunications Access Minnesota Program Administrative Expenses
- Minnesota Relay Services
- Minnesota Relay 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
- MN.IT (for coordinating technology accessibility and usability)
- MN.IT (for a consolidated access fund for other State agencies)
- Legislative Coordinating Commission (for captioning of live streaming of legislative activity)

² 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.

Telecommunications Relay Services (TRS) Jurisdictional Separation of Costs

Minnesota's TRS program observes all jurisdictional separation of costs as required by Code of Federal Regulations, title 47, section 64.604 (c)(5), section 410 of the Communications Act of 1934, Minnesota Statutes section 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 the TRS vendor.

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. The Interstate TRS Fund reimburses 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).³

Population Served

The Minnesota Relay and TED Program serve Minnesotans who have a hearing, speech, vision, or physical disability that makes it difficult or impossible to use standard telecommunications services and equipment. They also serve people who communicate by phone with these individuals.

Maps detailing where Minnesota Relay TTY/Speech-to-Speech calls and CapTel calls originated from for the month of May 2020 are included in **Appendix A**.

Role of the Public Utilities Commission (PUC)

Commerce must submit an annual budget and surcharge recommendation to the PUC for approval. The PUC reviews the recommendation for reasonableness, may modify the budget to the extent it is determined unreasonable, and sets the annual TAM surcharge amount (Minnesota Statutes section 237.52, subdivision 2).

³ Interstate TRS is funded by contributions from every carrier providing interstate telecommunications services (including VoIP service providers) based on interstate end-user revenues. The fund administrator is currently Rolka Loube.

Minnesota Relay Progress in 2020

Audit by the Office of the Legislative Auditor

In March 2019, the Office of the Legislative Auditor (OLA) notified Commerce that it was planning an audit of services for persons with disabilities, including Minnesota Relay. The OLA conducted an internal controls and compliance audit of Minnesota Relay for the period of July 2016 through February 2019.

The objectives of the audit were to determine if the included programs had adequate internal controls over selected financial activities and complied with significant finance-related requirements. The OLA released their audit report on June 26, 2020. A copy of the OLA audit report was provided to the PUC (via eDockets) on July 2, 2020.

The OLA audit finding and recommendation for Minnesota Relay, and Commerce's resolution, included:

Finding

Commerce did not document its performance of internal controls designed to verify the accuracy of fees paid for relay services.

OLA Recommendation:

Commerce should document its performance of internal controls designed to verify the accuracy of fees paid for relay services.

Commerce Resolution:

The TAM Administrator tracks and reviews monthly call activity, costs, and usage trends and will work to further document the current monthly review process and steps taken to identify any anomaly or variance, as well as identify variance thresholds and follow up.

Sprint Telecommunications Relay Service (TRS) Service Enhancements

In 2020, Sprint made the following enhancements, improving services for Minnesota Relay users:

- Implemented work-from-home capabilities for communications assistants.
- Migrated CapTel centers to the latest Windows systems with the latest switching hardware.
- Implemented the ability for communications assistants to take over calls remotely when working from home or when located in another call center.
- Modified in-center procedures to improve the health and safety of communications assistants, with policies around social distancing and call takeover.

- Rolled out enhanced speech-to-text technologies for CapTel communications assistants.
- Implemented a national wireless short code *787 (STS) for Speech-to-Speech relay users to connect to a communications assistant. This feature makes it easier for the user to place and receive STS calls. The *787 short code is only available to customers on T-Mobile and Sprint wireless networks.

Sprint and T-Mobile Merger

In April 2020, Sprint notified TAM that T-Mobile and Sprint merged, and they will operate under the name of T-Mobile. Sprint Communications Company L.P. is now an indirect, wholly owned subsidiary of T-Mobile US, Inc.

Sprint stated that current TRS contracts, service arrangements, account teams, and customer support will remain unchanged.

Impact of COVID-19 Pandemic on Minnesota Relay Services

As the pandemic escalated and face-to-face interactions were limited, families, friends, businesses, and medical services transitioned to communicating more by telephone – including Minnesota Relay users.

The pandemic also affected staffing levels at TRS centers. Relay communications assistants are sometimes unable to work because of illness, quarantines, caring for children when schools and daycares are closed, and so forth. In addition, when a relay center employee is diagnosed with COVID, the center closes for deep cleaning.

The increase in the number of phone calls and reduced relay center staffing levels are sometimes resulting in long wait times for relay calls to be processed. TRS providers, relay center staff, the Federal Communications Commission, and state TRS administrators are working together to ensure accessible telecommunications services remain available to consumers with disabilities so that they have access to vital services, family, and friends.

Call Volumes

Due to the pandemic, Minnesota Relay experienced a notable increase in CapTel conversation minutes between March and May 2020. Usage began to return to normal levels in the summer months, but started increasing again in late fall. TTY-based relay conversation minutes also increased at the start of the pandemic, and remained elevated through September, when they began decreasing. Speech-to-Speech experienced a decline in conversation minutes in 2020.

Temporary Waiver of TRS Requirements

On March 16, 2020, the Federal Communications Commission (FCC) released an Order granting temporary waivers of certain TRS rules in order to ensure the uninterrupted availability of TRS during the public health emergency caused by COVID-19. The Order included the following:

Waivers applicable to non-VRS forms of TRS. Due to the recent sharp increase in TRS traffic and the continuing challenge of maintaining CA staffing during this national emergency, it may be temporarily infeasible for TRS providers to comply fully with the daily speed-of-answer standard applicable to all forms of TRS other than VRS. Based on these circumstances, the Bureau finds good cause to waive, from March 1, 2020, through May 15, 2020, the requirement that non-VRS TRS providers answer 85% of calls within 10 seconds, measured on a daily basis, conditional on the TRS provider ensuring that 85% of calls are answered within 120 seconds, measured on a monthly basis. We grant a conforming waiver of the rule requiring adequate TRS facility staffing to provide callers with efficient access under projected calling volumes, to the extent necessary to conform to the specific speed-of-answer waiver granted above.

The FCC extended the waivers several times. Currently, the waivers are set to expire February 28, 2021.

On December 18, 2020, the FCC released an Order granting Hamilton Relay, Inc. (Hamilton) and Sprint partial waivers, through February 28, 2021, of the FCC's rule prohibiting early termination of TRS calls and refusing sequential calls. The Order included the following:

[W]e find good cause to partially waive section 64.604(a)(3)(i), with respect to the prohibition on "limiting the length of calls," for Hamilton and Sprint's offerings of IP CTS, one-line and two-line CTS, traditional (TTY-based) TRS, and Sprint's IP Relay service, through February 28, 2021, to the extent necessary to address the foregoing technical issues faced by Hamilton and Sprint, which arise as a result of social-distancing requirements necessitated by the COVID-19 pandemic. For the same reason, we partially waive the rule's prohibition on "refusing . . . sequential calls."

The waivers were granted retroactively to March 16, 2020.

TRS Center Closures for Cleaning

One of the most significant impacts to TRS during the pandemic has been the need to close relay centers temporarily to perform deep cleaning any time a staff person is found to have COVID-19 or is exposed to someone with COVID-19. Initially, relay centers (including the Moorhead center) were shut down for 14 days anytime a staff person was COVID-19 positive.

As the pandemic progressed, cleaning techniques improved, CDC guidelines changed and, currently, centers are only closed long enough for a cleaning company to disinfect the center and wait four hours; staff can then return to the center.

Any time a Sprint relay center is closed for cleaning, relay calls are routed to other Sprint call centers and to communications assistants who are working from home.

Communications Assistants Working from Home

At the beginning of the pandemic, Sprint began working to implement a solution that would allow relay communications assistants to work from home. The work-from-home solution allows Sprint to maintain social distancing for the communications assistants who are working at call centers, and increases flexibility when a call center is required to close for sanitization.

Sprint requires communications assistants to be evaluated in order to qualify to work from home. Communications assistants must:

- Be in their position for at least six months.
- Be able to work independently.
- Have a secure, safe, environment at home with no distractions (e.g. no children at home that they need to care for).
- Have a workspace with walls and a door that closes and locks.
- Have fast enough internet speed to support processing relay calls.
- Have appropriate equipment and be able to connect through a virtual private network.

Communications assistants are required to follow the same procedures and policies as they would in the call center. Sprint monitors communications assistants working from home to ensure that their job performance is equal to those who are working from the call center.

Quality Assessments

Sprint suspended all forms of relay quality assessments and test calls (i.e. typing and spelling tests) that divert communications assistants away from handling calls. This was necessary due to the overall impact of COVID-19 on call centers including, among other things, an increase in the number and the length of relay calls.

Relay center supervisors and coaching staff continue to monitor calls to make sure that communications assistants are still maintaining expected quality levels.

CapTel On-Screen Alert Messages

In March, in order to minimize frustration, an on-screen alert message was deployed to all CapTel users' phones to inform the users of the long queue times and advise users not to hang up. Sprint subsequently became aware that some customers found this on-screen message intrusive. In response, in early April 2020 Sprint implemented a solution where the alert message automatically clears from the user's screen following their first call.

Anticipated TRS Enhancements in 2021

In 2021, Sprint intends to make the following enhancements:

- Implement remote workstation upgrades for communications assistants working from home, so that upgrades can be done without staff having to bring their workstations into the call center.
- Apply for automated speech recognition (ASR) certification with the FCC for CapTel relay service.
- Implement additional work-from-home capabilities.

Minnesota Relay Services

Minnesota Relay is a free service that provides telephone accessibility to persons who are deaf, deafblind, hard of hearing, or speech disabled. A specially trained communications assistant (CA) facilitates the telephone conversation between a person who has hearing loss or a speech disability and other individuals. Calls can be made to anywhere in the world, 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 records of conversations are not kept.

TAM aims to be proactive in monitoring trends and advances in telecommunications technology. The program strives to provide services and equipment that allow people with disabilities to independently access telecommunications services to stay connected with family, friends, businesses, and services.

Minnesota Relay Features

- *800/877/888 Numbers:* Minnesota Relay users can reach regionally-directed and 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.
- *Answering Machine Retrieval:* Text telephone (TTY) users can request the relay CA to retrieve messages from the user's voice answering machine or voicemail.
- *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 the relay user and the voice party the ability to interrupt when appropriate.
- *CA Gender Request:* The relay user can request the CA gender that they would prefer to handle their call (either on a call-by-call basis or permanently through their Customer Profile). Every effort is made by the relay service to fulfill this request.

- *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. The relay provides the calling parties 10-digit telephone number to the called party (if not blocked by the calling party).
- *Customer Profile Database:* Offers relay users numerous automatic ways to expedite the initiation of custom calls. These pre-selected customer calling features include, but are not limited to, communication modes (TTY, voice, and ASCII), frequently dialed numbers, emergency numbers, and customer notes for call processing.
- *Directory Assistance:* A CA will relay directory assistance calls between a relay user and the Local Exchange Carrier directory assistance operator. Once the caller makes a request for directory assistance, the CA will contact a Local Exchange Carrier directory assistance 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).
- *DeafBlind Transmission Speed:* This is a modification of the default transmission speed for Telebraille users. Relay users who are deafblind can set their transmission speeds anywhere from 15 through 60 words-per-minute.
- *Emergency Assistance:* Although relay users are discouraged from placing 911 calls through the relay, calls to 911 are placed at the caller's request. Through Sprint's E911 database, the CA uses a "hot button" to automatically place a call to the most appropriate Public Safety Answering Point.
- *Enhanced Turbo Code (E-Turbo™):* Allows a TTY user to automatically submit dialing and call set-up instructions when they call 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.
- *Intelligent Call Router:* This technology automatically and seamlessly routes relay calls to the first available CA in the network.
- *Last Number Redial:* Allows the relay user to call the last person that he or she dialed through the relay, without having to provide the telephone number 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.
- *Three-Way Calling Feature:* Allows more than two parties to be on the telephone line at the same time with the CA.
- *Transfer Capabilities:* Allows the CA to transfer a caller to another form of relay service (i.e. CapTel, Hearing Carry-Over, Speech-to-Speech, etc.), to customer service, or to a relay center manager.

- *TTY to TTY Call Release:* Allows the CA to be "released" from the telephone line after the CA has set up a telephone call between an originating TTY caller and a called TTY party, such as when a TTY user must go through the relay to contact another TTY user because the other TTY party can only be reached through a voice-only interface, such as a switchboard.
- *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) Gated Calling:* 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:* Allows a VCO caller 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 Hearing Carry-Over callers to listen during call set-up (i.e. ringing or busy).

Speech-to-Speech (STS) Features

- *Called Numbers:* STS users can store up to 30 frequently called telephone numbers in their Customer Profile. When the STS user calls into the relay center, he or she can provide the CA the name of the person he or she wishes to call.
- *Contact Information:* Communicating telephone numbers may be difficult for some STS users. This feature allows STS users to let friends, family, and others know to dial 711 to reach them. Once connected, the person can provide the STS user's name to the STS CA. The STS CA will use the STS user's profile information provided for this purpose to connect to the STS user based on the registered STS user's hours and days of availability.
- *Customer Service:* A dedicated customer support for STS users. Staff is available to assist STS users or organizations serving STS users with basic information about STS, filling out Customer Profiles, and other features designed to support STS customers and their callers. The Sprint STS *My Support* number is 1-877-787-1989 (available 24 hours a day, 7 days a week).
- *Email Set-Up:* STS users can email call instructions or information to the relay center 2 to 24 hours prior to the call. The email can include information such as the number to dial, the name of the person being called, the subject of the call, any special instructions, or anything that makes it easier for the STS user to complete the call.
- *Privacy Option:* STS users have the ability to communicate without the CA hearing the voice party. If this option is selected, the CA simply listens to the voice of the STS user and repeats messages according to the STS user's preference.

- *Saved Messages*: If the STS user dictates a message to the CA to use for a call, and the STS user is not able to complete the call due to a busy signal, or the called party is not available, the STS user can request that the STS CA copy the message onto the STS user’s Customer Profile. When the STS user wants to place the call again, he or she simply redials STS and asks the CA to retrieve the saved message. After 24-hours, the message copied into the profile is automatically deleted from the system.
- *Wireless Access – STS (*787)*: While the 711 dialing shortcut is available nationwide, it is often difficult or time consuming for consumers to reach STS when not at home. Sprint wireless customers can dial *STS (i.e., *787) to reach an STS CA quickly and easily from anywhere in the nation (this includes voice callers needing to place a call to an STS user).

Call Volumes

In 2020, Minnesota Relay processed 230,287 calls.

Service	Total Calls
Text Telephone (TTY) Based TRS ⁴	84,870
Speech-to-Speech	6,024
CapTel	139,393

Overall, Minnesota Relay experienced the following changes from 2019 to 2020:

		2019	2020	Change	Percent of Change
CapTel	Total Calls	175,902	139,393	(36,509)	-21%
	Conversation Minutes	524,823	519,059	(5,764)	-1%
TTY-Based	Total Calls	84,362	84,870	508	1%
	Conversation Minutes	119,410	103,146	(16,264)	-14%
STS	Total Calls	6,669	6,024	(645)	-10%
	Conversation Minutes	8,156	4,039	(4,117)	-50%

Telecommunications Relay Services (TRS) are currently split into two categories:

1. Those administered and funded on a state level, which include local and intrastate minutes of service for TTY-based, Speech-to-Speech, and CapTel relay services.
2. Those under the FCC’s jurisdiction and paid for by the Interstate TRS Fund, including all minutes for internet-based relay services, which are composed of Video Relay Service, Internet Protocol Relay, and Internet Protocol Captioned Telephone Relay Service.

⁴ Includes TTY, Voice Carry-Over, and Hearing Carry-Over relay services.

The FCC authorized the recovery of the cost of both interstate and intrastate minute of use for internet-based relay services from the federal Interstate TRS Fund, but stated that the funding arrangement is temporary.

This category also includes interstate and international minutes of service for TTY-based, Speech-to-Speech, and CapTel relay services.

In recent years, many relay users have migrated from TTY-based, Speech-to-Speech, and CapTel relay services to internet-based services such as Video Relay Service, Internet Protocol Relay, and Internet Protocol Captioned Telephone Service – services under the FCC’s jurisdiction and 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.

Although there is a notable shift to internet-based relay services, until all consumers have access to high-speed internet at an affordable price, there will still be many Minnesotans who rely on non-internet based relay services.

The following Minnesota Relay call charts can be found in **Appendix B**:

- 2020 Minnesota Relay Conversation Minutes by Type
- 2011 – 2020 Minnesota Relay Call Volume
- TTY-Based⁵ Call Volume
- Speech-to-Speech Call Volume
- CapTel Call Volume

Accessibility of the Telecommunications Network – Minnesota Relay Services

Uninterruptible Power System

Sprint utilizes both an Uninterrupted Power Supply (UPS) and backup power generator to ensure that all Data Centers and Sprint relay centers have uninterrupted power, even in the event of a power outage. UPS is used only long enough for the backup power generator to come online – a matter of minutes. Backup power generators are supplied with sufficient fuel to maintain operations for at least 24 hours. Generators can stay in service for longer periods, as fuel availability permits.

In the event of a power outage, the UPS and backup power generator ensure seamless power transition until normal power is restored.

⁵ Includes TTY, Voice Carry-Over, and Hearing Carry-Over relay services.

While this transition is in progress, power to all basic equipment and facilities essential to the center's operation is maintained. This includes:

- Switch system and peripherals
- Switch room environmental factors
- Communication Assistant positions (consoles/terminals and emergency lights)
- Emergency lights (self-contained batteries)
- System alarms
- Call Detail Record recording

As a safety precaution (in the event of a fire during a power failure), the fire suppression system is not electric powered. Once the back-up generator is online, stable power is established and maintained to all TRS system equipment and facility environmental control units until commercial power is restored.

Switching System Configuration

All Sprint relay call centers use a digital switching system that is an integral part of the relay platform. The system offers availability in excess of 99.99%, redundancy of all major system components (including the Central Processing Unit) and catastrophic fault recovery that provides for call continuity in the event of a switch failure. Sprint's Intelligent Call Manager ensures that required levels of service are maintained in the event of a processor failure. If a center shuts down for any reason, all calls are automatically re-routed around the affected center to the remaining operating centers in the Sprint Network.

Sprint's switch is fully redundant to provide a non-stop environment for the relay call center. The switch is designed to allow maintenance without interrupting service and incorporates a back-up processor, memory, and disk subsystems. All Sprint relay call centers also include fully redundant power systems incorporating a combination of battery and generator Uninterrupted Power Supply systems to condition and maintain electrical power in case of a power outage from the local electrical provider.

If a failure of the switch or supporting systems occurs, the Sprint Telecommunications Relay Services dynamic call routing will, within seconds of detecting the outage, route all new Minnesota Relay calls to another call center until the failing system is repaired and the call center is returned to service. Sprint's call center and relay system design permits the maximum availability with minimal loss of service to users.

All the system preventive maintenance functions can be performed online, with no effect on call processing. In addition, online and off-line diagnostic routines will identify system faults or failures at the individual board level. Diagnostic procedures are continually processed by the switching system software to detect defective components before they are used.

Manual online diagnostics can be launched at any time from the maintenance and administrative terminal located within the unit, without affecting call processing, calls in progress, or calls waiting in queue. The maintenance and administrative terminal includes a keyboard, screen, and printer capabilities.

Each Sprint relay call center and data center maintains a complete system's spare inventory to meet any malfunction or emergency. In addition to spares for switch components, spare units include communications assistant position units, computer desktop spares, and Local Area Network and modem equipment.

CapTel Switching System

Minnesota Relay's CapTel switching system, provided by CapTel, Inc., includes a redundant Central Processing Unit on "hot standby." This ensures that no calls are dropped due to processor failure.

CapTel, Inc. also provides a full maintenance and administrative terminal with keyboard, screen, and printer capabilities, on-line monitoring, real-time programming capabilities that do not take the system offline, the ability to perform preventative maintenance without taking the system off-line, and an inventory of spare critical components which are maintained on-site to ensure that the required levels of service are met.

Alternate Facilities

Sprint's network of Telecommunications Relay Services (TRS) call centers use three centralized Avaya Automatic Call Distributors. If the TRS platform experiences an outage situation with one of the Avaya Automatic Call Distributors, the Peripheral Gateways connected to the Avaya experiencing the issue would go offline notifying Intelligent Call Management to stop routing traffic to that Avaya Automatic Call Distributors. The traffic that was once being routed to that Avaya Automatic Call Distributor would be alternately routed to all other functioning Avaya Automatic Call Distributors.

"Sprint TRS services are supported by six geographically dispersed centers, including the center in Moorhead, Minnesota."

Simultaneously, the Traffic Management Control Center contacts all other Sprint TRS centers notifying them of technical issues affecting other centers, and requests additional staffing at all other functioning centers. Any center

employees who are conducting ongoing training or other meetings will be requested to return to the call center floor to assist in handling calls.

The Traffic Management Control Center will also notify the Program Management team so that all states impacted receive appropriate updates. The Call Center Service Assurance group manages the coordination of technical resolutions. The Call Center Service Assurance group will be notified via the Call Center Services alarming platform, which monitors the Avaya Automatic Call Distributors, and the Intelligent Call Manager platform.

Sprint TRS services are supported by six geographically dispersed centers, including the center in Moorhead, Minnesota. The TRS centers are managed by a 24/7 control center that dynamically monitors and manages the centers for all operational issues. If an event occurs which impacts a center's ability to handle TRS calls, the Control Center re-routes incoming traffic to other TRS centers. All re-routing is transparent to relay users.

In addition, Sprint provides a redundant CapTel solution with seven CapTel-dedicated call centers and four co-located CapTel centers with Business Continuity programs to ensure that any issues are resolved quickly with minimal customer impact.

Transmission Circuits

Sprint is a certified interexchange carrier in all 50 states. Using Sprint's nationwide all-digital fiber-optic network, transmission circuits meet or exceed, Federal Communications Commission 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.

711 Dialing Access

On August 9, 2000, the FCC released a *Second Report and Order*⁶ concerning nationwide 711 dialing access to Telecommunications Relay Services. The Order required all common carriers, wireless providers, payphone vendors, and Private Branch Exchange (PBX) vendors to provide 711 dialing access to relay services on or before October 1, 2001. Relay users are also able to access Minnesota Relay by dialing the 10-digit toll-free access numbers.

Handling of Emergency Calls

Minnesota Relay encourages users to dial 911 or other existing emergency numbers directly in an emergency as using relay may result in a delay in getting their call through. However, some consumers are more comfortable using relay to access emergency services.

Minnesota Relay automatically and immediately transfers emergency relay calls to the appropriate Public Safety Answering Point (PSAP) that the caller would have reached by dialing 911 directly, or to a PSAP that is capable of dispatching emergency services in an expeditious manner. An emergency call is considered to be one in which the relay user indicates the need for police, fire department, paramedics, or ambulance. Minnesota Relay utilizes a standard E911 database that serves all of the United States.

Speed of Answer

Minnesota Relay meets the FCC's mandatory minimum standard for Telecommunications Relay Services (TRS) speed of answer (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."

On March 16, 2020, the FCC released an Order granting temporary waivers of certain TRS rules due to COVID-19. Due to increased relay call volumes and the challenge of maintaining CA staffing levels during the pandemic, the FCC waived the TRS speed of answer requirement conditional on TRS providers ensuring that 85% of calls are answered within 120 seconds, measured on a monthly basis; Sprint met the requirement for all months in 2020.

Minnesota Relay is equipped with sufficient facilities to provide a Grade of Service (GOS) of P.1 or better for calls entering the relay call center(s) switch equipment.

⁶ *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.

Consumer Complaints

Minnesota Relay received 49 complaints in 2020. The majority of complaints were received in March and April, and were due to long wait times to connect to a relay communications assistant for CapTel relay service. The long connection wait times are due to higher call volumes as a result of the pandemic.

Minnesota Relay users have many options for filing a complaint or commendation. The relay communications assistant has the capability to transfer the caller directly to the Sprint or CapTel 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 the TAM administrator or the FCC.

All complaints and commendations are recorded electronically by Sprint on a Customer Contact form. Sprint provides copies of each Customer Contact form to the TAM administrator monthly. If TAM and the relay 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 deadline for complaint resolution may adversely affect the continued certification of Minnesota Relay (47 C.F.R. § 64.606).

TAM submits an annual Complaint Log Summary to the FCC in accordance with Code of Federal Regulations, title 47, section 64.604 (c)(1).

Telephone Equipment Distribution Program

TED Program Administration

The TED Program is responsible for:

- Distributing specialized telecommunications devices and interconnectivity products to income eligible Minnesotans.
- Informing 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).

The TED Program is administered through an interagency agreement between the DHS and Commerce. The DHS Deaf and Hard of Hearing Services Division (DHHSD) has seven regional offices around the state staffed with professionals experienced in working with people who are deaf, hard of hearing, deafblind, speech disabled, or physically disabled. TED Program services are provided through five of the DHHSD regional offices: Duluth, Mankato, Moorhead, St. Cloud, and St. Paul.

Authority to Provide Equipment

Minnesota Statutes § 237.51, subdivision 5(a)(3) provides DHS with the authority to establish specifications for telecommunications devices and interconnectivity products.

The types of equipment distributed include:

- Amplified Telephones (Both Hearing and Voice)
- Bluetooth Cordless Amplified Phones
- Captioned Telephones
- Remote Control Speaker Phones
- Text Telephones (TTYs)
- Braille Phones
- Hearing Carry Over Phones
- Voice Carry Over Phones
- Amplified Cell Phones
- Basic Smartphone
- iOS Tablets and Smartphones
- Smart Displays
- Bluetooth Enabled Earphones
- Bluetooth Steamers to be Used with Hearing Aids
- Electrolarynx Used with a Landline or Cell Phone
- Wireless Accessories (Bluetooth Neckloop, Cell Phone Amplifier, and Visual Signaler)
- Ring Signaling Devices (Auditory, Visual, and Tactile)
- Special Needs Devices (for Multiple Disabilities)

Population Served

The TED Program serves a wide range of individuals with a variety of communication needs. Currently, the oldest TED Program participant is 104 years old, and the youngest is 24 years old. The average program participant's profile is a female who is 83 years old and is hard of hearing. In 2020, 70 percent of TED Program participants were female, and 71 percent lived outside of the seven-county metropolitan area. Seventy percent of clients were white, and six percent were persons of color. The remaining races served were not self-disclosed.

New TED Program Clients Disabilities Served	Number of Program Participants	Percentage of Program Participants
Hard of Hearing	162	65%
Hard of Hearing with Vision Loss	46	19%
Physical Disability	20	8%
Other Disabilities (e.g. deafblind or speech disability)	17	7%
Deaf	3	1%

Many clients with multiple disabilities utilize the TED Program. In 2020, 26 percent of TED Program participants had two or more disabilities, such as a speech and physical disability or hearing loss and physical disability.

Statistical Information

A report of TED Program’s services and activities is submitted quarterly to the TAM administrator. The report documents outreach activities, the number of individuals served, and the types of equipment distributed. The charts provided in **Appendix C** demonstrate TED Program activities in 2020.

In 2020, the TED Program distributed 261 devices to 248 new program participants and provided services to 747 repeat program participants. Repeat services include providing further assistance to a TED Program participant after equipment is initially distributed to them.

Program participants often contact the TED Program 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). Program specialists also provided information and referrals to 242 consumers and agencies for a total of 1,237 Minnesotans receiving TED Program services in 2020.

Annual Comparison of Services Provided

	2019	2020	Increase/ Decrease	Percent
New Program Clients	297	248	(49)	-16%
Repeat Program Clients	817	747	(70)	-9%
Devices Distributed	991	797	(194)	-20%
Information and Referrals	255	242	(13)	-5%

*Due to impacts of the COVID-19 pandemic, the number of clients served in 2020 decreased from 2019. Staff were unable to provide in-person visits to clients or participate in outreach activities in person.

TED Program Progress

TED Program’s Outreach Metrics and What is Being Learned From Them

Outreach activities were limited in 2020 due to the COVID-19 pandemic. For safety reasons, staff were prohibited from providing presentations and hosting booths in-person. Most outreach activities were focused on cold calls, mass mailings, and printed advertisement.

In 2020, the TED Program simplified and streamlined outreach performance measures. The measures were updated based on the value of data from the TED Program’s 2019 performance measures. The outreach activities measured were Presentations, Booths, and Print Advertisements. The number of activities completed, audience count, and applications received were recorded for Mass Mailings, Drop-in and Cold Calls, and In-home Relay Training.

Each TED Program application distributed had a specific written code to track the effectiveness of the outreach effort. In addition, any time a caller requested a TED Program application, staff collected information on how they heard about the program (the referral) and updated these through the TED Program’s AgileApps database. Accurately tracking referrals is a challenge because staff depend on the caller’s recollection of how they were first referred to the TED Program.

Presentations

TED Program staff host presentations to inform service providers and potential clients about the services the TED Program offers. The type of audience and a survey question were collected during the presentations to measure the success of the event. Due to the COVID-19 pandemic, many pre-arranged presentations were cancelled. In lieu of in-person presentations, TED Program staff offered virtual presentations but not all agencies were receptive to this. In 2020, there were 179 participants at in-person and virtual presentations. The TED Program collected 42 surveys from these participants which represents a 23 percent return rate.

Survey Questions	Number of Surveys Collected	Number of People Responding "Yes"	Percentage
Do you plan on applying or referring people?	42	24	57%

The TED Program distributed 209 applications at presentations during the year. In some instances, surveys were not passed out at presentations as the number of people or the locations of the presentations were not suitable.

Booths

TED Program staff participate at sponsored booths to network with other service providers and interact with potential clients. During 2020, 609 participants attended TED Program booths and staff distributed 166 applications to prospective consumers. Some service providers offered virtual booths, which was a new experience for staff to promote TED Program services virtually. The applications were provided exclusively through an online portal. The performance measures tracked were the audience count and the distribution of applications along with the number of applications received by TED Program staff.

Drop-Ins/Cold Calls

Drop-ins refer to TED Program staff stopping into a service agency and informing staff at the agency about TED Program's services. The same occurs with a cold call when a service agency is contacted through a phone call or via email with no pre-scheduled meetings. There were very few drop-ins due to the COVID-19 pandemic, so staff primarily focused on cold calls.

- TED Program staff provided information to 72 service agency staff during drop-ins and cold calls.
- 1,135 applications were distributed.

It is difficult to track the effectiveness of drop-ins and cold calls but this outreach activity provides positive collaboration and networking opportunities with service providers with the same goal to provide a service that is beneficial for the people we serve. Presentations are often scheduled as a result of this collaborative outreach activity.

Mass Mailings/Email Blasts

Mass mailings refers to letters and program brochures mailed out to service providers. The performance measure established was the audience count, applications distributed, and applications received.

- 949 participants were sent TED Program related mail.
- 683 applications were distributed.
- Mass mailings via email included an electronic application. However, as it was not possible to insert a referral code on electronic applications, staff were unable to track returned applications from email mass mailings.

Telecommunications Relay Services In-Home Training

In-home trainings occur when non-TED Program clients request a demonstration or training on the use of Minnesota Relay services. These trainings are not requested often. The current performance measures are to the number of participants who received training. In 2020, there were no in-home relay trainings.

Print Advertisements

Advertisements are placed in various publications throughout the state. The TED Program tracks the referrals when someone calls for a TED Program application. Many advertisements were placed in 2020 because it was a form of outreach that could be coordinated remotely. A cost analysis was conducted to demonstrate the value and outcomes of an advertisement in 2020.

- TED Program placed 118 advertisements, with a total circulation of approximately 3.5 million readers.
- The total cost of advertisements was \$44,400.
- There were 17 approved applications resulting from advertisements (based on client's indicating they applied as a result of an advertisement).

TED Program staff have noticed that the program receives more referrals from advertisements than any other outreach effort.

Lessons Learned Serving Clients During COVID-19

In March 2020, state employees started teleworking remotely due to the COVID-19 pandemic. Staff were not able to enter client homes or provide presentations in-person. The program had to come up with out-of-the-box solutions to determine the most accessible approaches in providing services. Time was spent contacting current clients to determine if their devices were still working and/or if they needed further assistance or an exchange of equipment. This included former and current clients who were served two years ago, consumers served over two years ago, and clients who still had discontinued equipment models. This allowed the TED Program to provide increased customer service and update client files in the AgileApps database.

The TED Program also observed that consumers needed installation and equipment trainings through a hands-on approach. Since staff were not able to provide home visits and trainings in-person, they relied more on family members and friends to provide trainings to consumers. The TED Program also developed technical reference guides for consumers on using the telecommunications-related equipment and devices.

The Numbers of Each Type of Equipment Purchased, Deployed, Returned, and Retired During the Year

TED Program annually purchases new equipment and distributes both new and refurbished equipment. When equipment is returned by a client, it is either exchanged under warranty for a brand new device or it is refurbished to redistribute to a current client.

At the end of the equipment's life cycle the equipment is retired (either recycled or disposed). This is a standard circulation cycle for TED Program equipment. Below are charts that summarize the number of purchased, distributed, returned, and retired devices per equipment type.

In 2020, the TED Program consolidated telecommunications-related equipment from all regional office inventories and shipped these devices to the program's equipment vendor for storage and distribution. This benefited the TED Program substantially by saving the costs of not purchasing new equipment.

New Equipment Purchased

Equipment Type	Pieces of Equipment
Amplified Telephones	185
Captioned Telephones	84
Auxiliary Equipment (ringers, neckloops, switches)	22
Speaker Phones	7
iPads	0
iPhones	0
Cell Phones	37
TTYs	1
Interconnectivity devices	52
Other (Telitalk Emote, Echo Dot, VCO, Braille)	7
TOTAL	404

Total Equipment Distributed (New and Refurbished)

Equipment Type	Pieces of Equipment
Amplified Telephones	484
Captioned Telephones	161
Auxiliary Equipment (ringers, neckloops, switches)	82
Speaker Phones	15
iPads	2
iPhones	3
Cell Phones	41
TTYs	3
Interconnectivity devices	47
Other (Telitalk Emote, VCO, Braille)	6
TOTAL	844

Returned Equipment

Equipment Type	Pieces of Equipment
Amplified Telephones	552
Captioned Telephones	239
Auxiliary Equipment (ringers, neckloops, switches)	170
Speaker Phones	25
iPads	6
iPhones	14
Cell Phones	18
TTYs	16
Other (Telitalk Emote, VCO, Braille)	11
TOTAL	1,051

Disposed/Recycled Equipment

Equipment Type	Pieces of Equipment
Amplified Telephones	377
Captioned Telephones	185
Auxiliary Equipment (ringers, neckloops, switches)	130
Speaker Phones	20
iPads	5
iPhones	10
Cell Phones	11
TTYs	16
Other (Telitalk Emote, VCO, Braille)	8
TOTAL	762

Advanced Wireless Program

A report of the findings of the TED Program's second iPad/iPhone pilot program was submitted to Commerce in November 2019. Commerce provided feedback to the TED Program on the second pilot and approved the distribution of tablets and smartphones.

The TED Program recently established a workgroup to strategically design an advanced wireless program. Consumers will be carefully vetted and assessed to determine if the advanced wireless equipment option is the best accessible solution for them or if a more cost-effective device would be suitable for them. As the TED Program gets its advanced wireless program's protocols and policies in place, the program will begin the distribution in 2021.

Implementation of New Services

In 2020, the TED Program initiated three new services:

1. The TED Program distributed interconnectivity devices. These includes accessories, devices, or applications (apps) for which the primary function is use with a telecommunication device in order to provide increased access. Examples of interconnectivity devices added to the program are Bluetooth enabled accessories, Smart Speakers for clients with physical disabilities, Smart Displays, universal hearing aid streamers, apps to be used with a tablet or smartphone, an electrolarynx to be used with a wired or wireless telephone by individuals with a speech disability, and Bluetooth enabled earphones.

The TED Program purchased 52 interconnectivity devices and distributed 47 of these to new and existing clients.

Photos and information on interconnected and wireless devices now available through the TED Program are provided in [Appendix D](#).

2. TED Program staff were trained by PUC staff on how to complete the paper and electronic Lifeline/TAP application. TED Program staff assisted four clients with completing Lifeline/TAP applications. This number is low because staff were unable to provide this assistance in-person due to the COVID-19 pandemic.
3. An internal assistive technology referral form was developed to determine additional assistive technologies that TED Program clients could benefit from. Eleven TED Program clients were referred to a DHS Deaf and Hard of Hearing specialist for further assistance.

TED Program Database Development

In 2020, four databases were developed for DHHSD program units. The goal was to generate reports across the Division to create an overarching picture of the Division's services. In the meantime, a workgroup was formed to assess, evaluate, and determine improvements needed for the Phase Two development of the TED Program AgileApps database.

In 2021, the Phase Two development will include future enhancements that will improve the efficiency of TED Program's data collection methods.

Audit by the Office of the Legislative Auditor

The Office of the Legislative Auditor (OLA) conducted an internal controls and compliance audit of the TED Program in the spring of 2019. The OLA released the report with its findings in June 2020. A copy of the OLA audit report was provided to the PUC (via eDockets) on July 2, 2020. The TED Program has been collaborating with DHS' Community Supports Administration and Deaf and Hard of Hearing Services Division to move forward on implementing resolutions.

The OLA audit findings and recommendations for the TED Program, and DHS' resolutions, include:

Finding 1

DHHS generally could not provide documentation to prove eligibility of telecommunications equipment recipients.

OLA Recommendations:

- DHHS should reverify eligibility for the recipients for whom we were not able to determine eligibility, if feasible.
- DHHS should enhance its internal controls to ensure the necessary documentation is obtained and retained to support recipients' eligibility.

DHS Resolution:

- The TED Program Administrator is collaborating with DHS' Community Supports Administration and Deaf and Hard of Hearing Services Division to determine which recipients need their eligibility on receiving TED Program equipment to be reevaluated.
- In July 2020, the TED Program implemented formal TED Program policies and procedures to conduct file reviews on client eligibility on a monthly basis. A standard document was created to record the results of the files then submitting it to the regional TED Program specialist for follow-up.
- TED Program specialists were provided two weeks to review and correct any documentation. Once completed, it was provided to the TED Program administrator for review.
- This file review process is added the Deaf and Hard of Hearing Services Division's file retention schedule.

Finding 2

DHHS did not safeguard or accurately record into inventory telecommunications equipment located at the central office.

OLA Recommendations:

- DHHS should implement internal controls to ensure it safeguards and accurately records into inventory telecommunications equipment, as required by state policy.
- DHHS should update its inventory records.

DHS Resolution:

- In January 2020, the TED Program's central office at the Golden Rule Building began locking the door where the equipment is stored to provide an added layer of security to safeguard the equipment.
- A standard document was developed to record what equipment is physically on the staff's shelf compared to what is recorded in the TED Program database.
- TED Program's central office staff are required to attempt to locate any missing devices. The results of the inventory reconciliations will be communicated to the TED Program administrator.

Outreach

Reports containing outreach efforts are compiled monthly by the TED Program and sent to the TAM administrator.

The COVID-19 Pandemic's Impact on Outreach

In 2020, TED Program staff provided information at 23 booths and presentations reaching 795 Minnesotans. Understandably, outreach activities this year were severely limited due to the pandemic. For most of the year, staff were not able to host booths at conferences, conventions, and expos, and were unable to conduct in-person presentations and trainings. Staff performed some virtual presentations, but the majority of outreach this year was conducted via mailings and print advertising. The TED Program sent 59 mass mailings and placed 118 electronic and print advertisements.

In addition, there was an increase in business and health care providers contacting the TAM program with questions and requesting training materials on how Minnesota Relay works.

Minnesota Relay Outreach

Minnesota Relay outreach is provided under an interagency agreement with the Department of Human Services – TED Program. Outreach staff is responsible for providing a comprehensive statewide outreach program to educate people about 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 staff and the TAM administrator serve as points of contact for Minnesota consumers who have questions, concerns, complaints, or commendations. Outreach efforts are tailored to target appropriate demographics, including consumers who are deaf, deafblind, hard of hearing, late deafened, or speech disabled, as well as hearing consumers and businesses.

Outreach activities primarily include:

- Staffing a booth at exhibitions, seminars, and fairs.
- In-person visits to provide training on Telecommunications Relay Services.
- Presenting at senior centers, health care facilities, and social service agencies.
- Providing brochures, instruction sheets, and informational videos.

TED Program Outreach

DHSD is responsible for the promotion and education of TED Program services. Activities and metrics for success were described in the previous section. While websites, emails, and telephone calls can be an efficient, effective, and convenient way of providing information, TED Program specialists find that many clients are more receptive if services are provided in person. As such, TED Program specialists often travel to client homes to conduct equipment needs assessments, set up equipment, and provide training on the complexity of the device. In-home visits help eliminate apprehension and result in a more personal, relaxed, and productive experience for the client. Unfortunately, for most of 2020, staff were unable to provide in-person services.

Outreach includes:

- ✓ *In-Home Visits*
 - ✓ *Booths*
 - ✓ *Presentations*
 - ✓ *Mass Mailings*
 - ✓ *Drop-In Visits*
 - ✓ *Cold Calls*
 - ✓ *Advertisements*
-

2020 outreach efforts included:

- Virtual booths to Veteran conferences.
- Virtual presentations at health care facilities, support group, aging networks, and social services agencies.
- Mass mailings (email) to current clients informing them of services available during COVID-19.
- Cold calls to senior apartments, public health services, American Indian Tribal Government, and Senior Care Centers.
- Advertisements in the *Senior Perspective*, *Sun Newspaper*, *Senior Bluebook*, *DHS GovDelivery*, *St. Cloud Times*, doctor newsletters, *Mankato Free Press*, *Fargo Forum*, *Latino American Today* newspaper, and *Senior Reporter*.
- Translated TED Program poster into five different languages.

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 (TRS) as required by Code of Federal Regulations, title 47, section 64.604(c)(3). In addition to the federal requirement regarding public access to TRS information, Minnesota Rule 7812.1000 requires local service providers to provide their customers with an *Annual Notice of Customer Rights*, which must include information on programs for people who have hearing loss.

TAM provides carriers with a sample *Annual Notice to Customers* for carriers to use in their telephone directory, bill insert, and/or newsletter. TAM also makes a document available with information that carriers should include in their annual notices if they elect not to use the sample annual notice. TRS annual notice information is available on Commerce's website (mn.gov/commerce/industries/telecom/mnrelay/) so that carriers have access to up-to-date information on Minnesota Relay and TED Program services.

TAM requests that carriers complete and return a *Compliance Form for Annual Notices to Customers* to demonstrate compliance. By requesting that carriers complete and return a compliance form and copies of TRS material(s) distributed to their consumers, TAM attains a higher rate of compliance, and is able to identify which carriers may not be distributing TRS materials, or may be distributing incorrect and/or incomplete information to consumers. When TAM receives a copy of a carrier's directory page, newsletter, or bill insert and the item does not comply with annual notice requirements and/or includes incorrect information, TAM submits a letter to the carrier notifying them of their deficiency.

DHHS Regional Advisory Committee Meetings

DHHS has established six (6) 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 administrator attends the Metro advisory committee meetings, and TED Program staff attend a minimum of one advisory committee meeting per region, per year.

Due to the COVID-19 pandemic, some of the winter advisory committee meetings and all the Spring meetings were canceled. The fall meetings were held virtually.

2020 Minnesota Relay and TED Program Outreach

See [Appendix E](#) for a map of outreach activity by county and examples of print advertisements.

Presentations and Booths

Date	Type of Outreach	Name or Location of Event	City	Attendees
1/24/2020	Booth	St. Paul Neighborhood Network Taping and Open House	St. Paul	25
1/24/2020	Booth	Project Community Connect	Rochester	35
2/28/2020	Booth	Hearing Health Providers Conference	Maple Grove	75
10/29/2020	Booth	Virtual Stand Down for Veterans	Virtual	474
1/22/2020	Presentation	Realife Cooperative Bloomington	Bloomington	22
1/22/2020	Presentation	Telephone Assistance Plan Workgroup	St. Paul	6
1/30/2020	Presentation	Northfield Retirement Community	Northfield	15
2/11/2020	Presentation	Apple Tree Court	Breckenridge	6
2/12/2020	Presentation	The Waterview Shores Assisted Living	Two Harbors	21
2/13/2020	Presentation	Hallock Senior Center	Hallock	7
2/18/2020	Presentation	Faith Haven Apartments	Duluth	8
2/18/2020	Presentation	Sherburne County Senior Network	Big Lake	17
2/19/2020	Presentation	The Waterview Shores Assisted Living	Two Harbors	11
2/25/2020	Presentation	CommonBond - Spruce Place	Farmington	6
2/25/2020	Presentation	Faith Haven Apartments	Duluth	4
5/18/2020	Presentation	Age Well Arrowhead	Duluth	6
6/24/2020	Presentation	MN Nursing Home Social Workers Association	St. Cloud	8
7/16/2020	Presentation	Vocalizers Support Group	Duluth	7
9/21/2020	Presentation	Accessibility Support Group	Grand Rapids	6
9/29/2020	Presentation	Essentia Health Polinsky Medical Rehabilitation Center	Duluth	4
10/6/2020	Presentation	Home Health Specialists	Duluth	14
10/6/2020	Presentation	Aging Network	Duluth	12
10/15/2020	Presentation	Vocalizers Support Group	Duluth	6

Print and Electronic Advertisements

Date of Ad	Publication	County	Estimated Audience Count	Cost of Ad
1/1/2020	Senior Perspective	40 Counties	174,500	\$534.92
1/9/2020	DHS Listserv	Statewide	6,596	\$0.00
2/1/2000	Senior Perspective	47 Counties	174,500	\$534.92
2/27 & 2/28 2020	Sun News	7 Counties	73,174	\$1,600.00
3/1/2020	Senior Perspective	42 Counties	174,500	\$569.78
4/1/2020	Senior Perspective	47 Counties	174,500	\$569.78
4/6/2020	GovDelivery	Statewide	7,000	\$0.00
4/6/2020	Facebook	Statewide	9,305	\$0.00
5/7/2020	Pine Journal	NE Area	2,200	\$126.00
5/7/2020	Duluth News Tribune	NE Area	23,000	\$270.00
5/7 & 5/8 2020	SUN Current	7 County Area	20,316	\$200.00
5/7 & 5/8 2020	SUN Sailor	7 County Area	17,978	\$200.00
5/7 & 5/8 2020	SUN Post	7 County Area	12,687	\$200.00
5/7 & 5/8 2020	SUN ThisWeek	7 County Area	25,069	\$200.00
5/7 & 5/8 2020	SUN Focus	7 County Area	8,996	\$200.00
5/8/2020	Lake County News	NE Area	1,500	\$126.00
5/11 & 5/18 2020	Care Options Network News	Statewide	4,000	\$995.00
5/14/2020	Duluth News Tribune	NE Area	23,000	\$270.00
5/14/2020	Pine Journal	NE Area	2,200	\$0.00
5/14 & 5/15 2020	SUN Current	7 County Area	20,316	\$200.00
5/14 & 5/15 2020	SUN Sailor	7 County Area	17,978	\$200.00
5/14 & 5/15 2020	SUN Post	7 County Area	12,687	\$200.00
5/14 & 5/15 2020	SUN ThisWeek	7 County Area	25,069	\$200.00
5/14 & 5/15 2020	SUN Focus	7 County Area	8,996	\$200.00
5/15/2020	Lake County News	NE Area	1,500	\$0.00
5/21/2020	Duluth News Tribune	NE Area	23,000	\$270.00
5/21/2020	Pine Journal	NE Area	2,200	\$126.00
5/21 & 5/22 2020	SUN Current	7 County Area	20,316	\$200.00
5/21 & 5/22 2020	SUN Sailor	7 County Area	17,978	\$200.00
5/21 & 5/22 2020	SUN Post	7 County Area	12,687	\$200.00
5/21 & 5/22 2020	SUN ThisWeek	7 County Area	25,069	\$200.00
5/21 & 5/22 2020	SUN Focus	7 County Area	8,996	\$200.00
5/22/2020	Lake County News	NE Area	1,500	\$126.00
5/28/2020	Pine Journal	NE Area	2,200	\$126.00

5/28/2020	Duluth News Tribune	NE Area	23,000	\$270.00
6/1/2020	Senior Perspective	47 Counties	174,500	\$569.78
6/4/2020	GovDelivery	Statewide	7,366	\$0.00
6/4/2020	Pine Journal	24 Counties	2,200	\$126.00
6/6/2020	Ely Echo	NE Area	3,376	\$223.60
6/10/2020	Pine Journal	24 Counties	2,200	\$0.00
6/13/2020	Ely Echo	NE Area	3,376	\$223.60
6/14/2020	Forum Communications (Fargo/Moorhead)	NW Area	27,000	\$671.05
6/17/2020	MSSeniorsOnline.com	Statewide	10,000	\$0.00
6/20/2020	Ely Echo	NE Area	3,376	\$223.60
6/21/2020	Forum Communications (Fargo/Moorhead)	NW Area	29,000	\$671.05
6/24/2020	St. Cloud Times	East/West	7,200	\$460.00
6/25/2020	St. Cloud Times	East/West	7,800	\$460.00
6/26/2020	Newswire	Statewide	350	\$0.00
6/26/2020	St. Cloud Times	East/West	7,800	\$460.00
6/27/2020	Ely Echo	NE Area	3,376	\$223.60
6/27/2020	Forum Communications (Fargo/Moorhead)	NW Area	29,000	\$402.63
6/28/2020	St. Cloud Times	East/West	9,500	\$460.00
6/29/2020	St. Cloud Times Digital	East/West	70,506	\$460.00
7/1/2020	Senior Housing Sense, Senior Housing Guide Mpls & Online	7 County Area	45,000	\$980.00
7/1/2020	Metro Doctors	Statewide	3,800	\$442.00
7/1/2020	Metro Doctors E- Newsletter	Statewide	3,500	\$199.00
7/2 & 7/3 2020	SUN Current	7 County Area	20,316	\$200.00
7/2 & 7/3 2020	SUN Sailor	7 County Area	17,978	\$200.00
7/2 & 7/3 2020	SUN Post	7 County Area	12,687	\$200.00
7/2 & 7/3 2020	SUN ThisWeek	7 County Area	25,069	\$200.00
7/2 & 7/3 2020	SUN Focus	7 County Area	8,996	\$200.00
7/4/2020	Ely Echo	NE Area	3,376	\$223.60
7/4/2020	Forum Communications (Fargo/Moorhead)	NW Area	27,000	\$671.05
7/5/2020	St. Cloud Times	East/West	9,500	\$460.00
7/8/2020	St. Cloud Times	East/West	7,200	\$460.00
7/9 & 7/10 2020	SUN Current	7 County Area	20,316	\$200.00
7/9 & 7/10 2020	SUN Sailor	7 County Area	17,978	\$200.00

7/9 & 7/10 2020	SUN Post	7 County Area	12,687	\$200.00
7/9 & 7/10 2020	SUN ThisWeek	7 County Area	25,069	\$200.00
7/9 & 7/10 2020	SUN Focus	7 County Area	8,996	\$200.00
7/11/2020	Ely Echo	NE Area	3,376	\$223.60
7/11/2020	Forum Communications (Fargo/Moorhead)	NW Area	27,000	\$671.05
7/12/2020	St. Cloud Times	East/West	9,500	\$460.00
7/16/2020	St. Cloud Times	East/West	7,800	\$460.00
7/16 & 7/17 2020	SUN Current	7 County Area	20,316	\$200.00
7/16 & 7/17 2020	SUN Sailor	7 County Area	17,978	\$200.00
7/16 & 7/17 2020	SUN Post	7 County Area	12,687	\$200.00
7/16 & 7/17 2020	SUN ThisWeek	7 County Area	25,069	\$200.00
7/16 & 7/17 2020	SUN Focus	7 County Area	8,996	\$200.00
7/18/2020	Ely Echo	NE Area	3,376	\$223.60
7/18/2020	Forum Communications (Fargo/Moorhead)	NW Area	27,000	\$671.05
7/19/2020	St. Cloud Times	East/West	9,500	\$460.00
7/22/2020	St. Cloud Times	East/West	7,200	\$460.00
7/23 & 7/24 2020	SUN Current	7 County Area	20,316	\$200.00
7/23 & 7/24 2020	SUN Sailor	7 County Area	17,978	\$200.00
7/23 & 7/24 2020	SUN Post	7 County Area	12,687	\$200.00
7/23 & 7/24 2020	SUN ThisWeek	7 County Area	25,069	\$200.00
7/23 & 7/24 2020	SUN Focus	7 County Area	8,996	\$200.00
7/25/2020	Ely Echo	NE Area	3,376	\$223.60
7/26/2020	St. Cloud Times	East/West	9,500	\$460.00
7/30/2020	St. Cloud Times	East/West	7,800	\$460.00
7/30/2020	Newswire	Statewide	350+	\$0.00
8/1/2020	Senior Perspective	47 Counties	174,500	\$569.78
8/1/2020	Senior Reporter	Aikin, Carlton, Cook, Itasca, Koochiching, Lake, & St. Louis	91,600	\$550.00
8/21/2020	Mankato Free Press	Southern	20,000	\$565.28
8/22/2020	Mankato Free Press	Southern	20,000	\$565.28
8/23/2020	Mankato Free Press	Southern	20,000	\$565.28
8/26/2020	Mankato Free Press	Southern	20,000	\$565.28
9/1/2020	Senior Perspective	47 Counties	174,500	\$569.78
9/1/2020	Metro Doctors Magazine	Statewide	3,800	\$442.00

9/1/2020	Metro Doctors E-Newsletter	Statewide	3,500	\$199.00
9/1/2020	Seniors BlueBook	Metro	45,000	\$1,100.00
9/1/2020	Senior Reporter	Aikin, Carlton, Cook, Itasca, Koochiching, Lake, & St. Louis	91,600	\$550.00
9/22/2020	GovDelivery	Statewide	8,013	\$0.00
10/1/2020	Senior Perspective	47 Counties	174,500	\$569.78
10/1/2020	Senior Reporter	Aikin, Carlton, Cook, Itasca, Koochiching, Lake, & St. Louis	91,600	\$550.00
10/5/2020	GovDelivery	Statewide	7336	\$0.00
10/15/2020	GovDelivery	Statewide	7336	\$0.00
10/18 -10/30 2020	St. Cloud Times	East/West	64,400	\$3,680.00
11/1/2020	Senior Reporter	Northeast	91,600	\$550.00
11/1/2020	Metro Doctors Magazine	Statewide	3800	\$442.00
11/1/2020	MN Academy of Audiology E-Banner	Statewide	86,400	\$17.00
11/1/2020	Latino American Today	Statewide	10,000	\$552.97
11/1 - 11/14 2020	St. Cloud Times	East/West	64,400	\$3,680.00
11/11/2020	GovDelivery	Statewide	7336	\$0.00
11/16/2020	Latino American Facebook	Statewide	392	\$0.00
12/1/2020	Senior Reporter	Aikin, Carlton, Cook, Itasca, Koochiching, Lake, & St. Louis	91600	\$550.00
12/1/2020	Metro Doctors E-Newsletter	Statewide	3500	\$199.00

TAM Fund Budget Summary - FYs 2020 & 2021

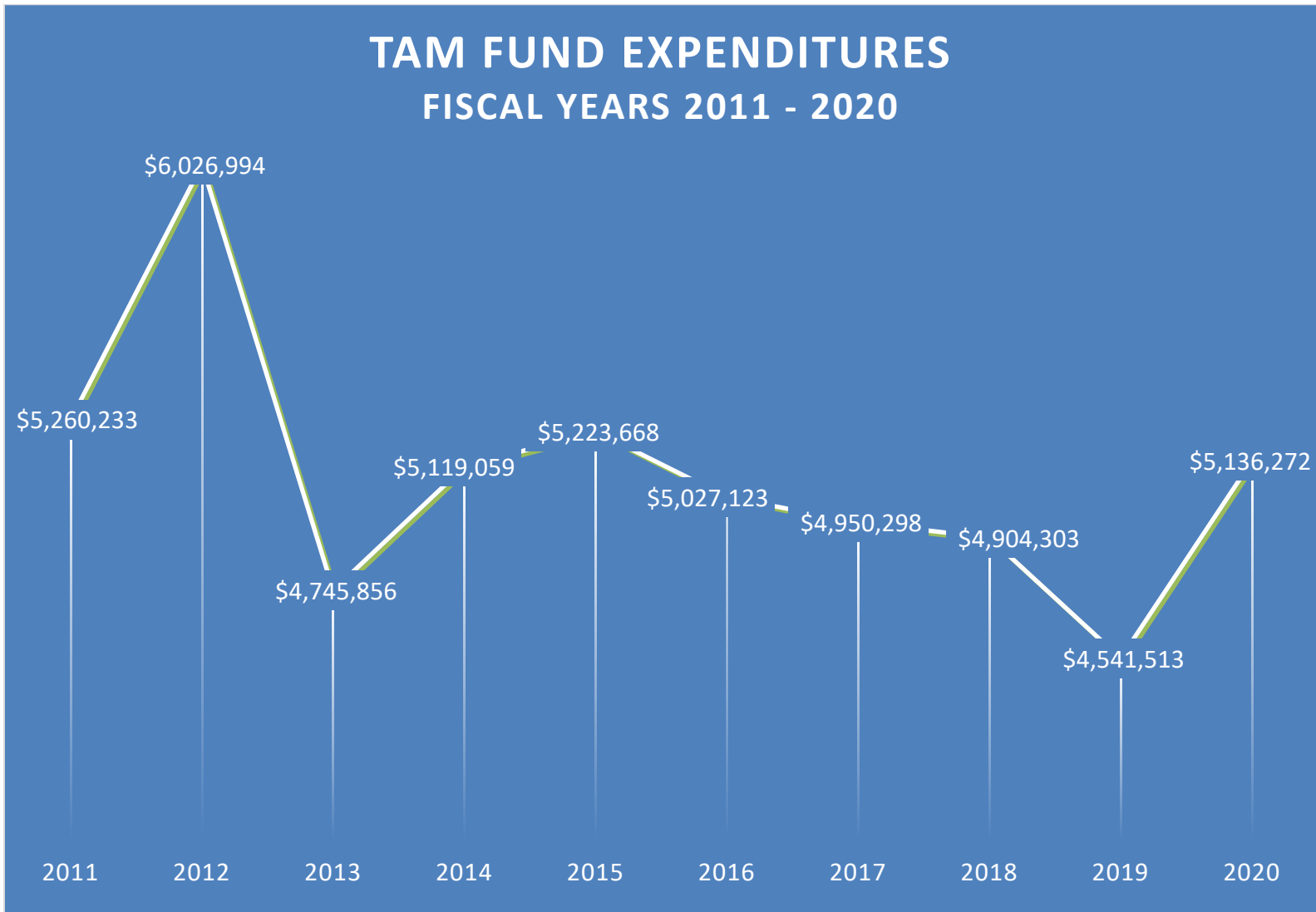
REVENUE	FY 2020 Actual	FY 2021 Budgeted
Per Wired/Post-Paid Wireless Customer Access Line (FY 2020=\$0.05 for 2 months and \$0.07 for 10 months; FY 2021=\$0.07)	\$ 4,514,110.69	\$ 4,891,750.30
Prepaid Wireless Retail Transactions	\$ 508,334.85	\$ 1,005,072.89
TAM Fund Interest	\$ 13,644.74	\$ 29,900.00
Total TAM Fund Revenue	\$ 5,036,090.28	\$ 5,926,723.19

EXPENDITURES	FY 2020 Actual	FY 2021 Budgeted
TAM Program Administration	\$ (118,366.83)	\$ (144,550.00)
Telecommunications Relay Services	\$ (1,270,546.43)	\$ (1,261,147.81)
DHS-TED Program	\$ (1,298,757.34)	\$ (1,512,430.00)
DHS-Rural Real-Time Captioning	\$ (292,123.28)	\$ (300,000.00)
DEED-Accessible News for the Blind	\$ (96,478.00)	\$ (100,000.00)
MN Commission of the Deaf, DeafBlind and Hard of Hearing	\$ (1,620,000.00)	\$ (1,620,000.00)
MN.IT Services (1)	\$ (290,000)	\$ (290,000.00)
MN.IT Services (2)	\$ (50,000)	\$ (50,000.00)
Legislative Coordinating Commission	\$ (100,000.00)	\$ (100,000.00)
Total TAM Fund Expenditures	\$ (5,136,271.88)	\$ (5,378,127.81)

REVENUE VS. EXPENDITURES	\$ (100,181.60)	\$ 548,595.39
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STATEMENT OF TAM FUND BALANCE	FY 2020 Actual	FY 2021 Budgeted
TAM Fund Balance at Beginning of Fiscal Year	\$ 1,785,461.92	\$ 1,259,901.51
TAM Fund Revenue & Interest	\$ 5,036,090.28	\$ 5,926,723.19
TAM Fund Expenditures	\$ (5,136,271.88)	\$ (5,378,127.81)
TAM Fund Balance at Close of Fiscal Year	\$ 1,685,280.32	\$ 1,808,496.89

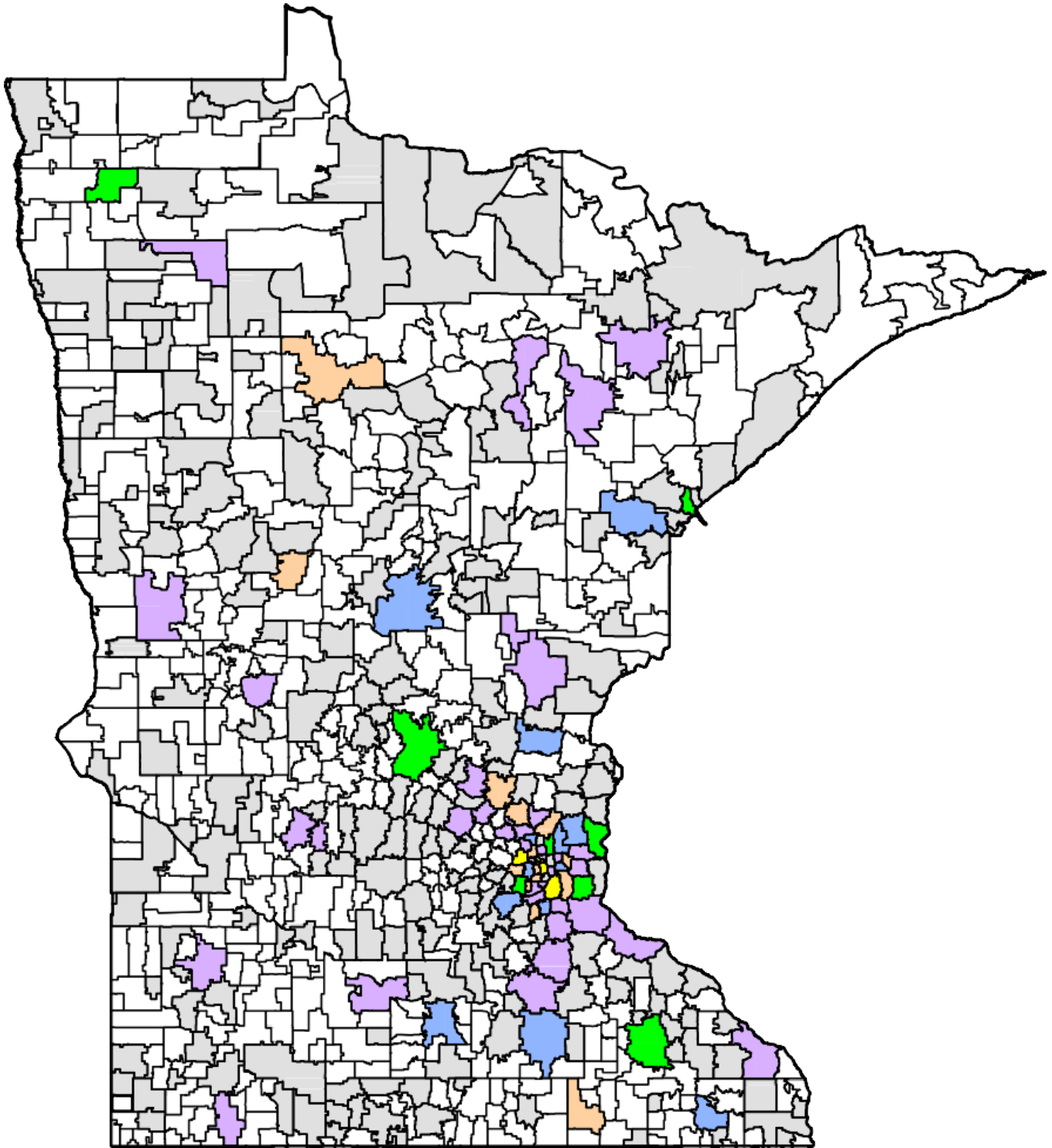
TAM Fund Expenditures for FYs 2011 - 2020



Appendices

Appendix A – Minnesota Relay Call Origination Maps

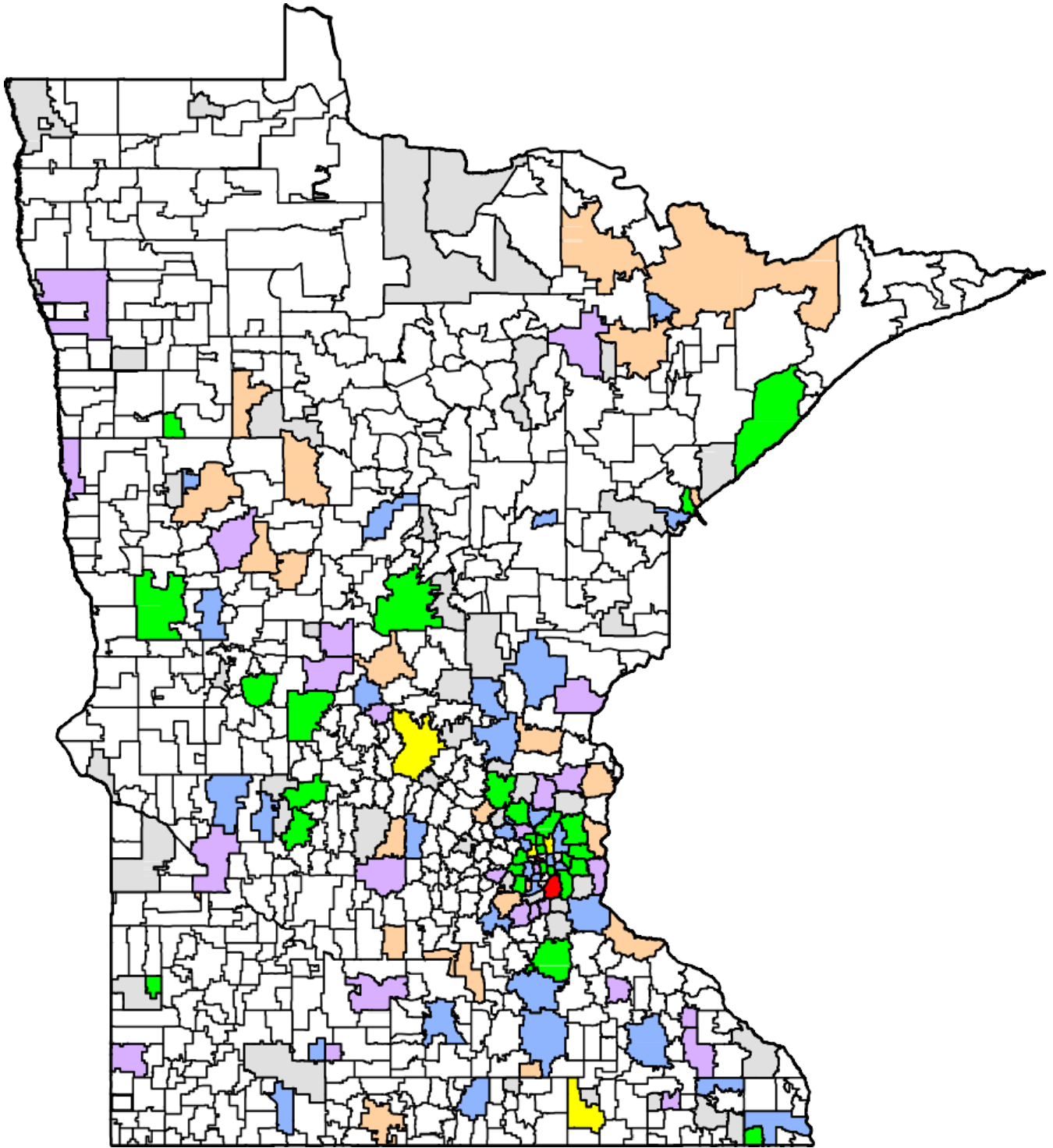
Snapshot of Minnesota Relay TTY and Speech-to-Speech Calls for May 2020



Legend

1 - 10	11 - 25	26 - 50	51 - -100	101 - 250	251 - 500
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Snapshot of Minnesota Relay CapTel Calls for May 2020

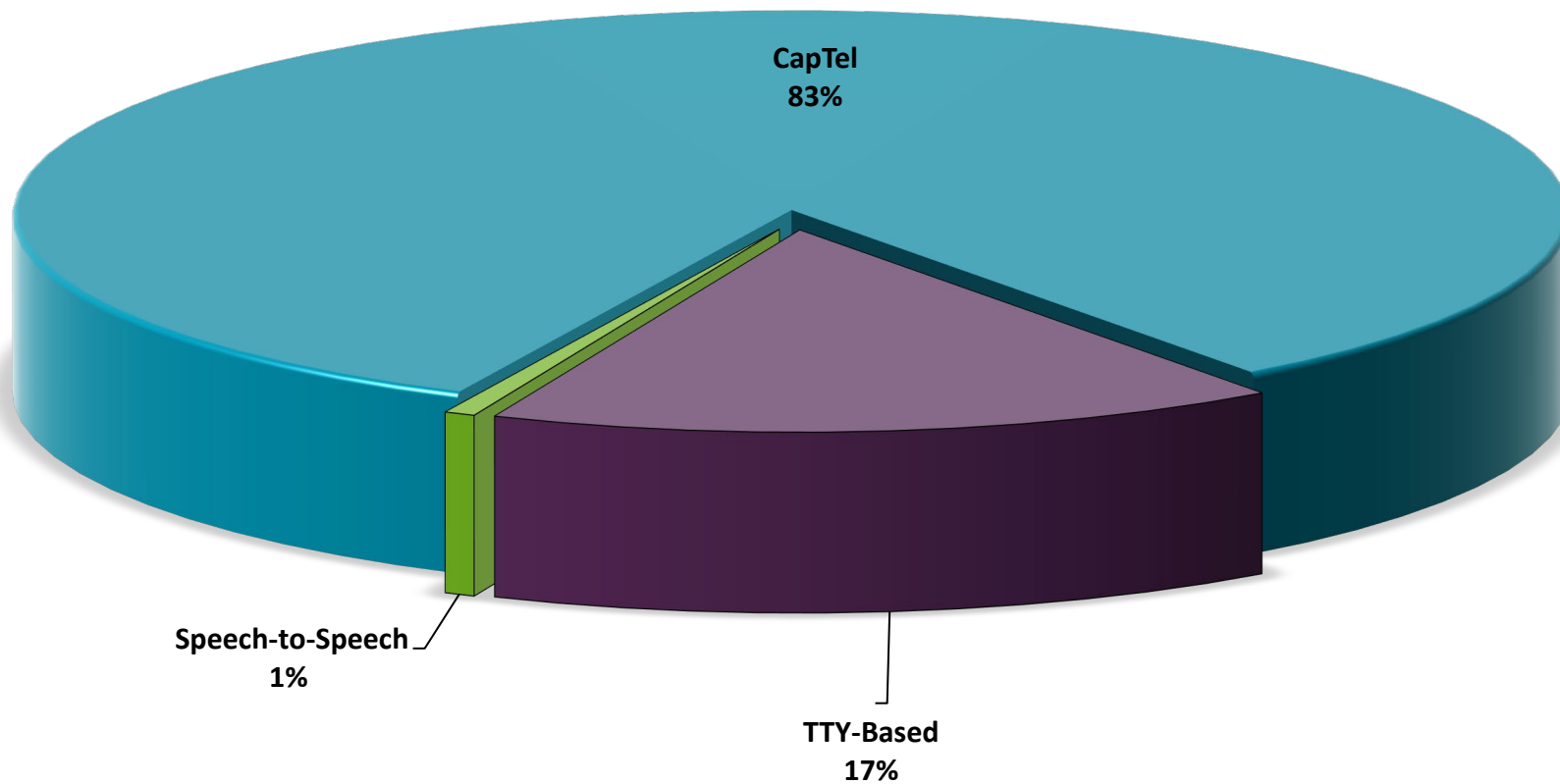


Legend

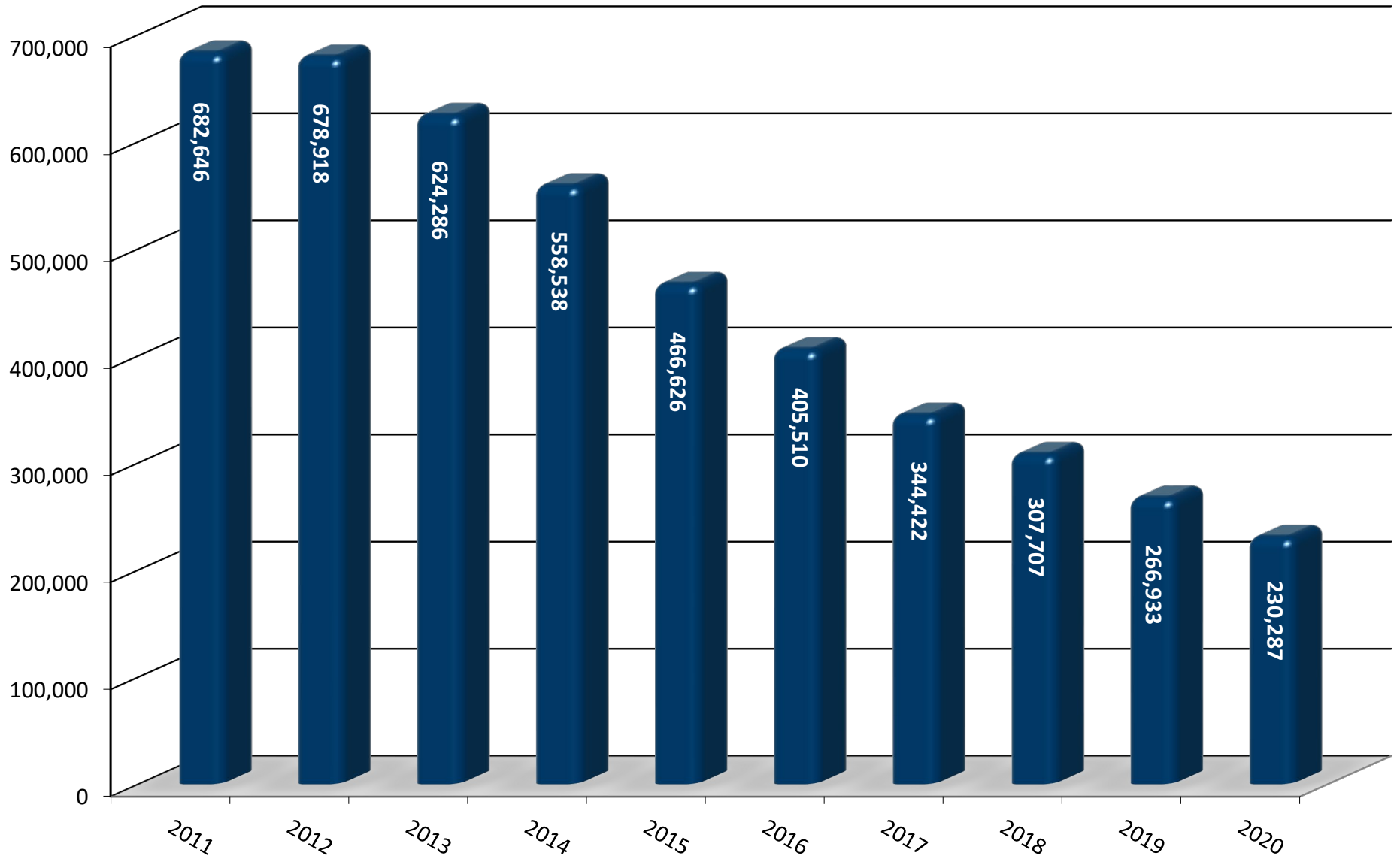
1 - 10	11 - 25	26 - 50	51 - 100	101 - 250	251 - 500	501 - 1090
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Appendix B – Minnesota Relay Call Charts

2020 Minnesota Relay Conversation Minutes by Type

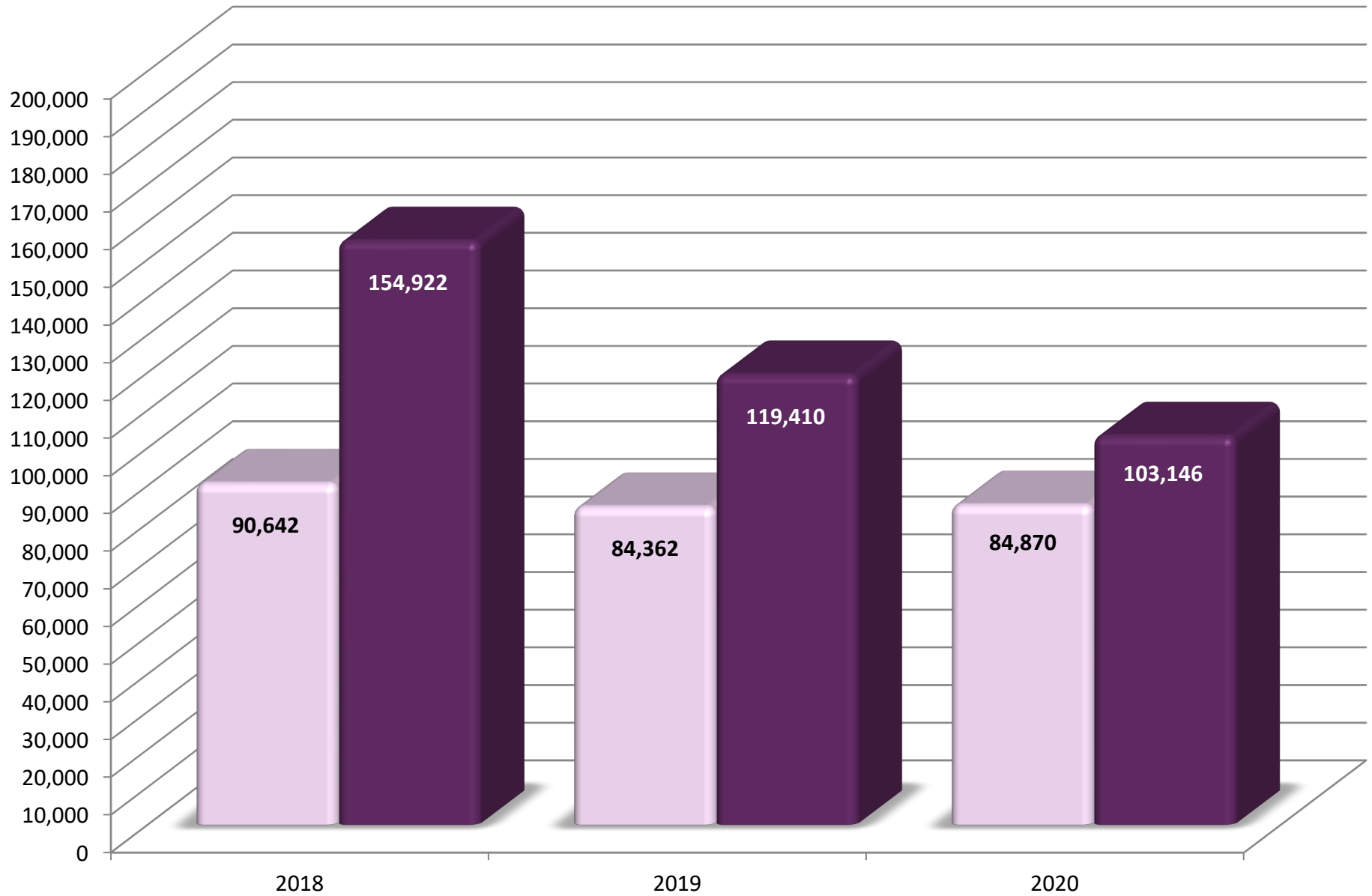


2011 - 2020 Minnesota Relay Call Volume (total number of TTY-Based, STS, and CapTel calls)



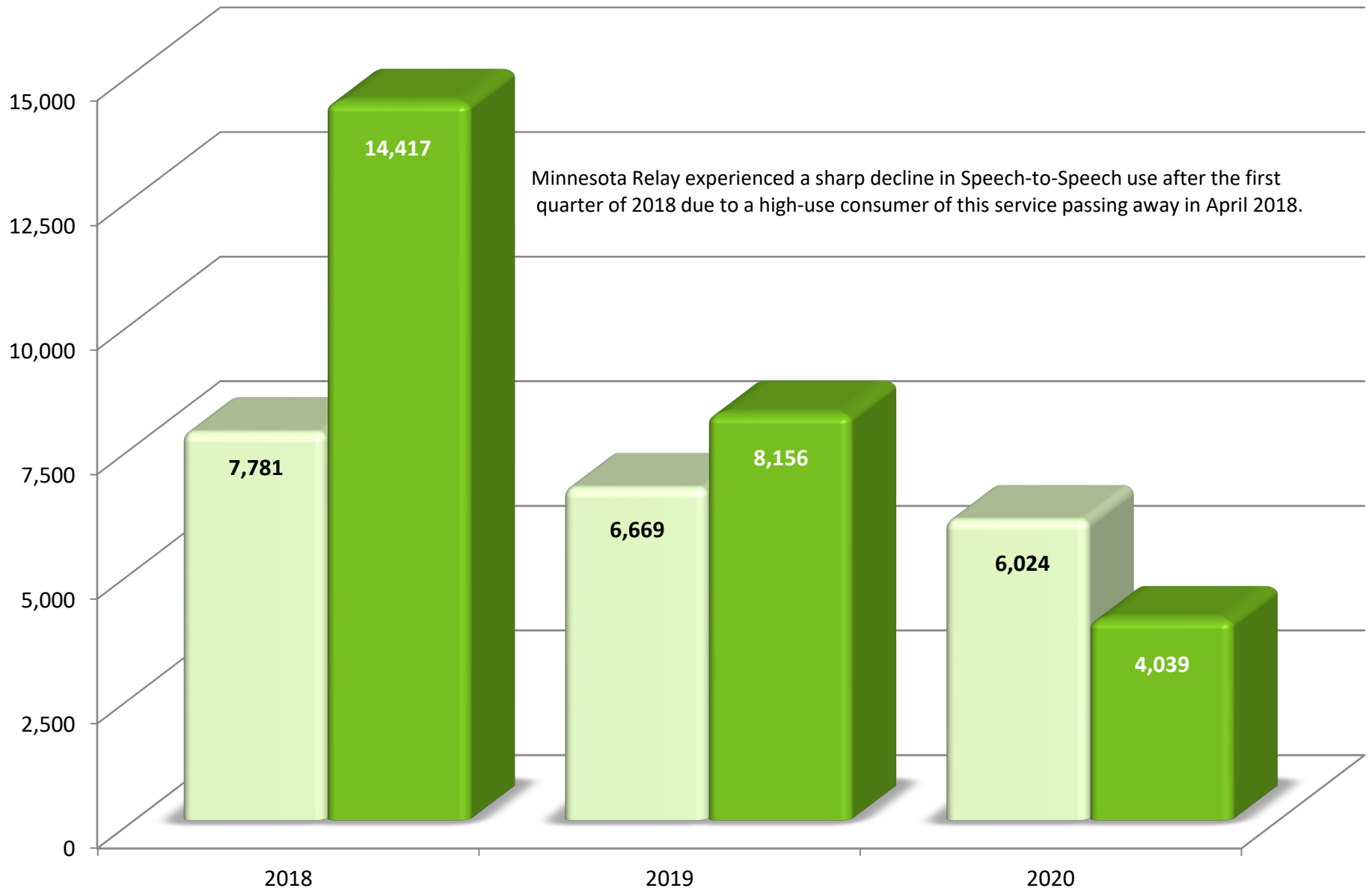
TTY-Based TRS Call Volume

■ Total Calls ■ Conversation Minutes



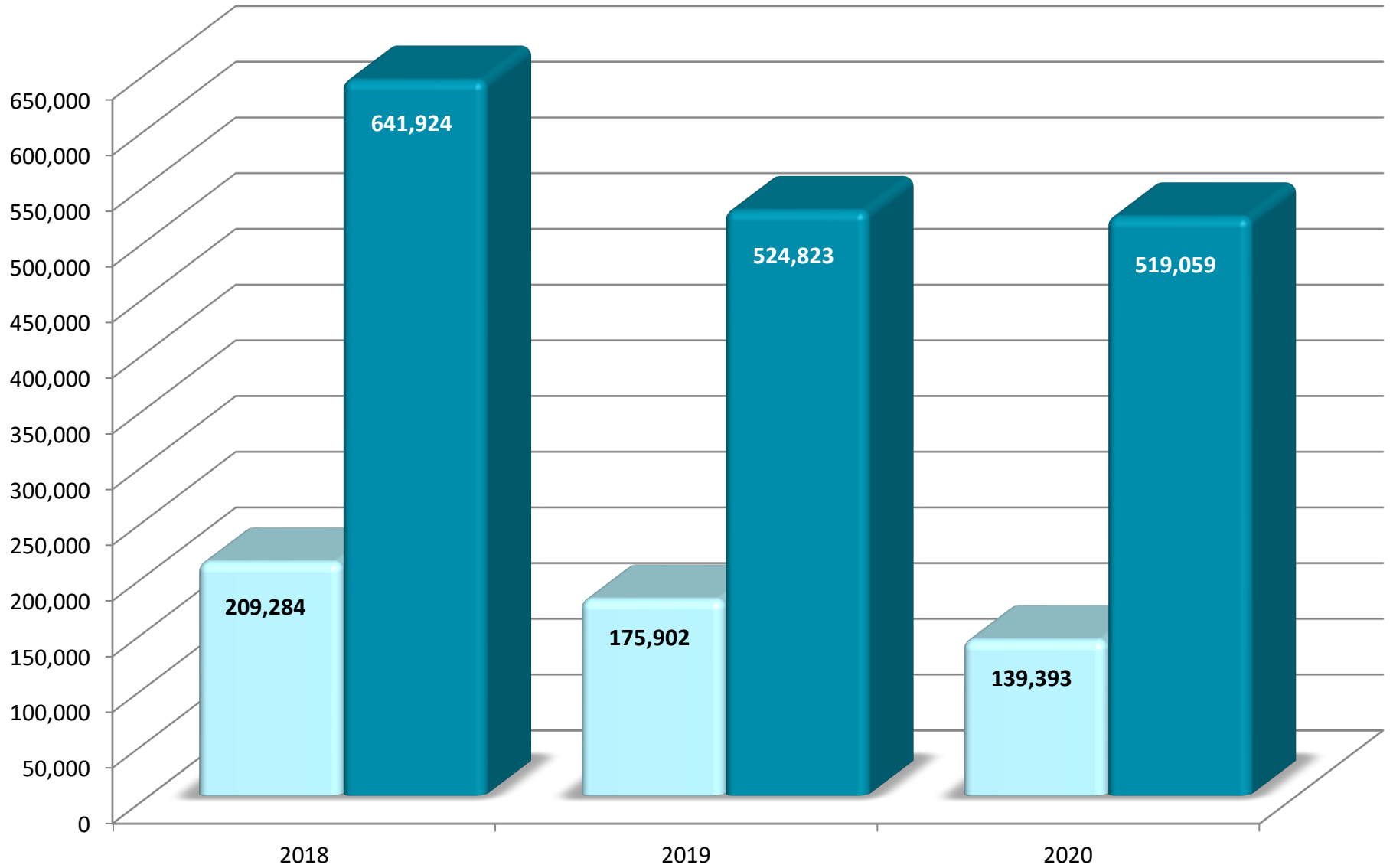
Speech-to-Speech Call Volume

■ Total Calls ■ Conversation Minutes



CapTel Call Volume

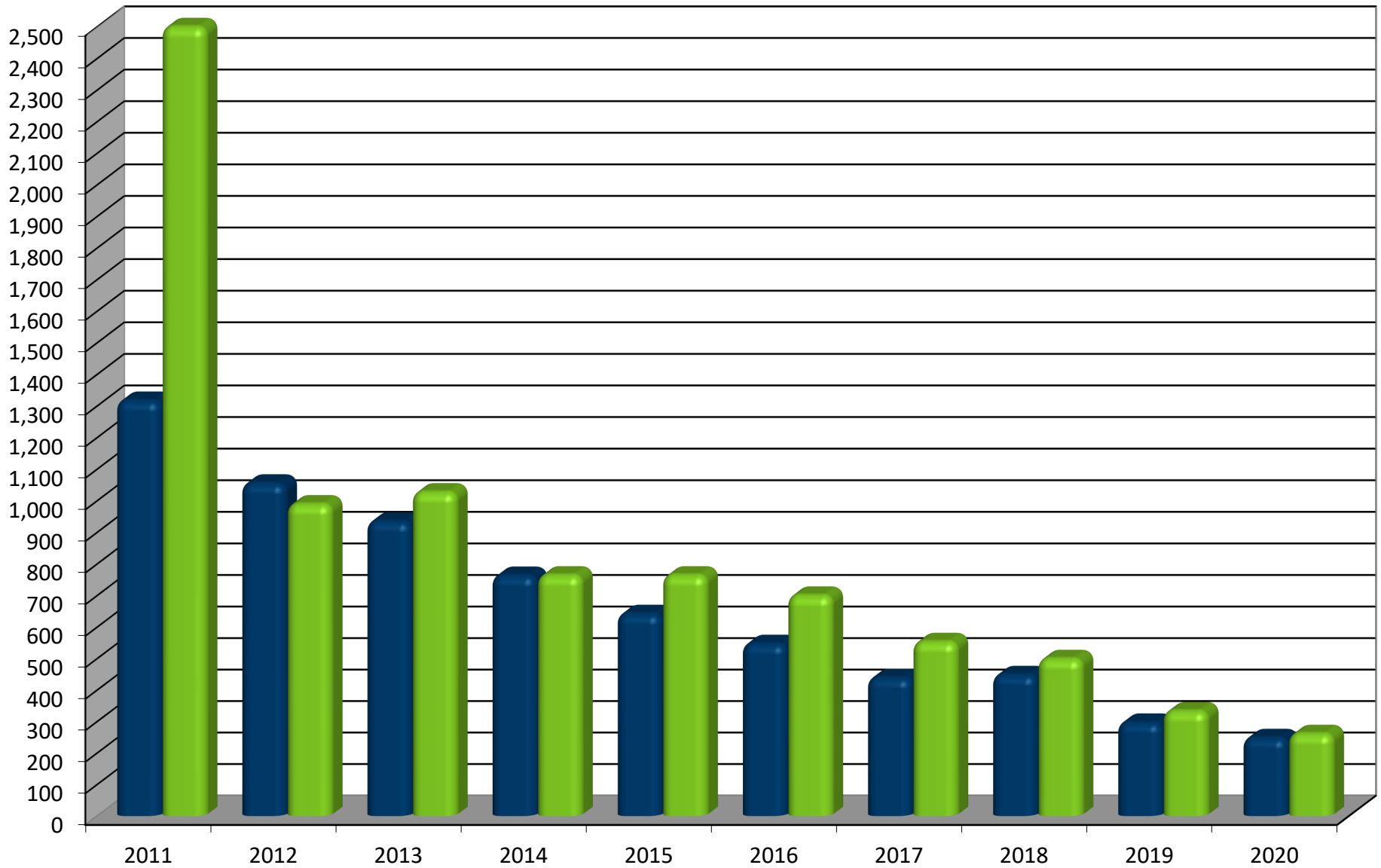
■ Total Calls ■ Conversation Minutes



Appendix C – TED Program Activities

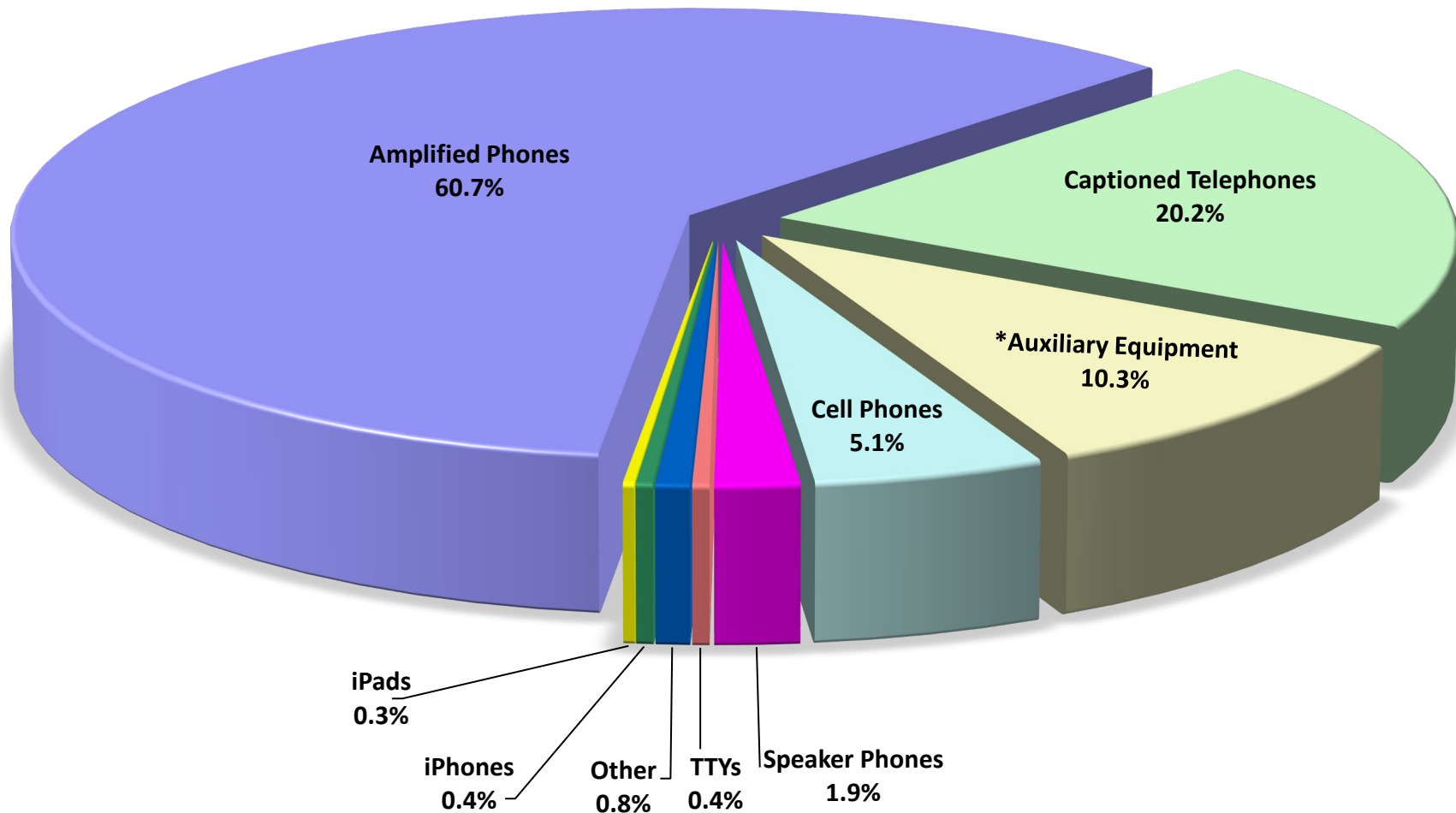
2011 - 2020 New TED Program Participants

■ New Program Participants Served ■ Devices Distributed to New Program Participants



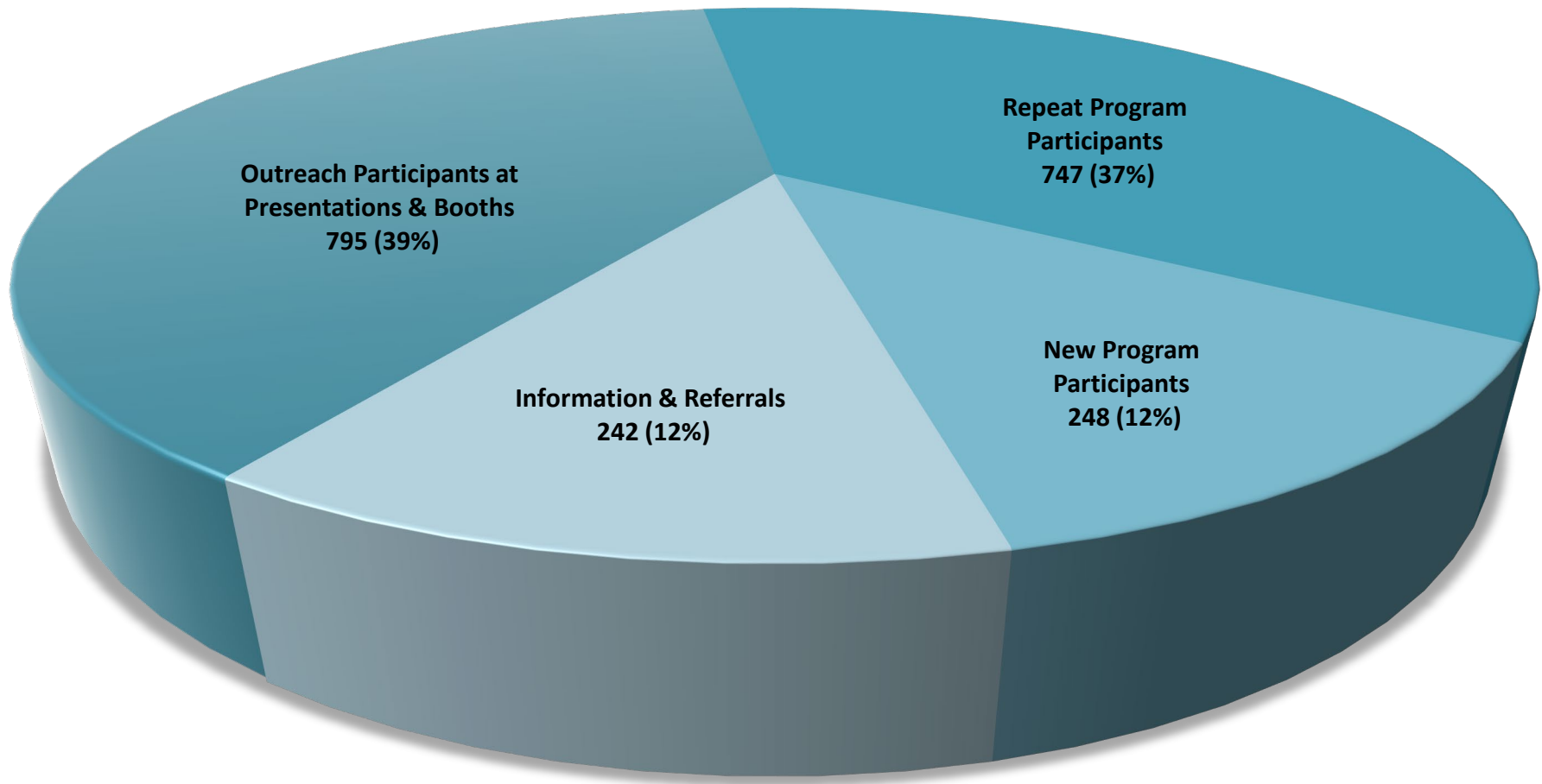
TED Program

Types of Equipment Distributed in 2020

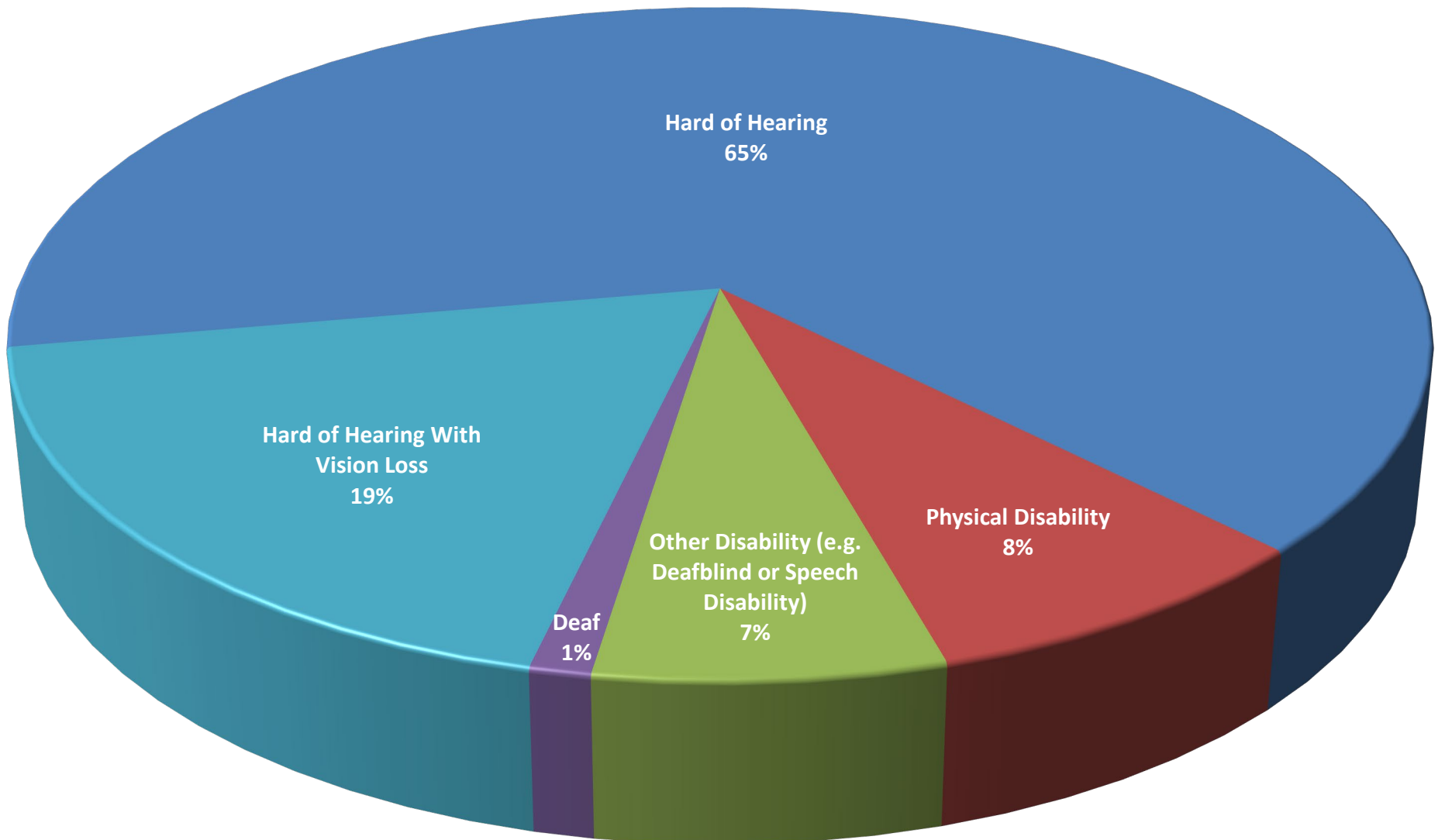


*Auxiliary equipment includes ring signalers, neck loops, headsets, pendants, switches, etc.

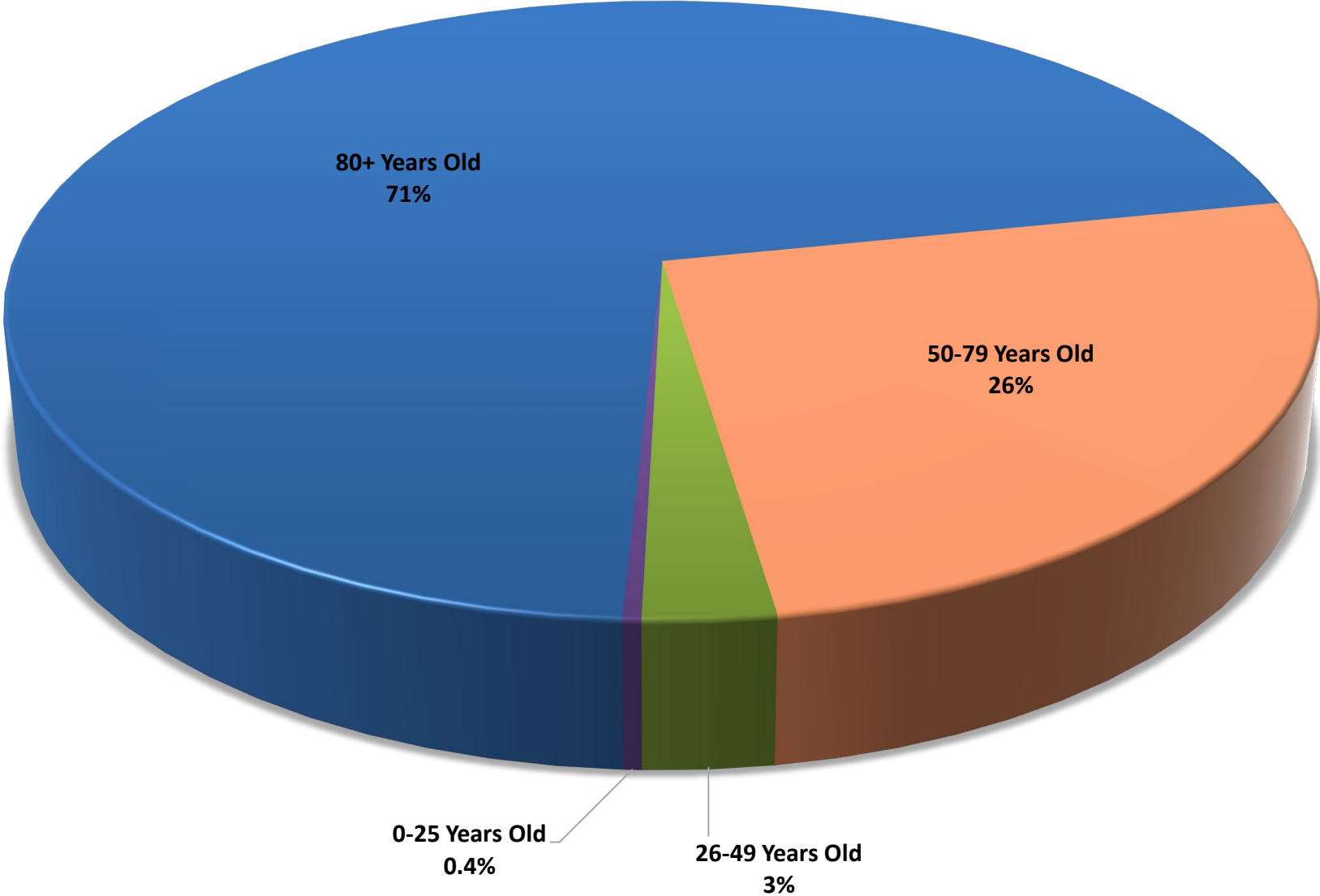
Minnesotans Being Served by the TED Program in 2020



2020 New TED Program Clients By Type of Disability








2020 New TED Program Clients by Age



Appendix D –Interconnected and Wireless Devices Available Through the TED Program

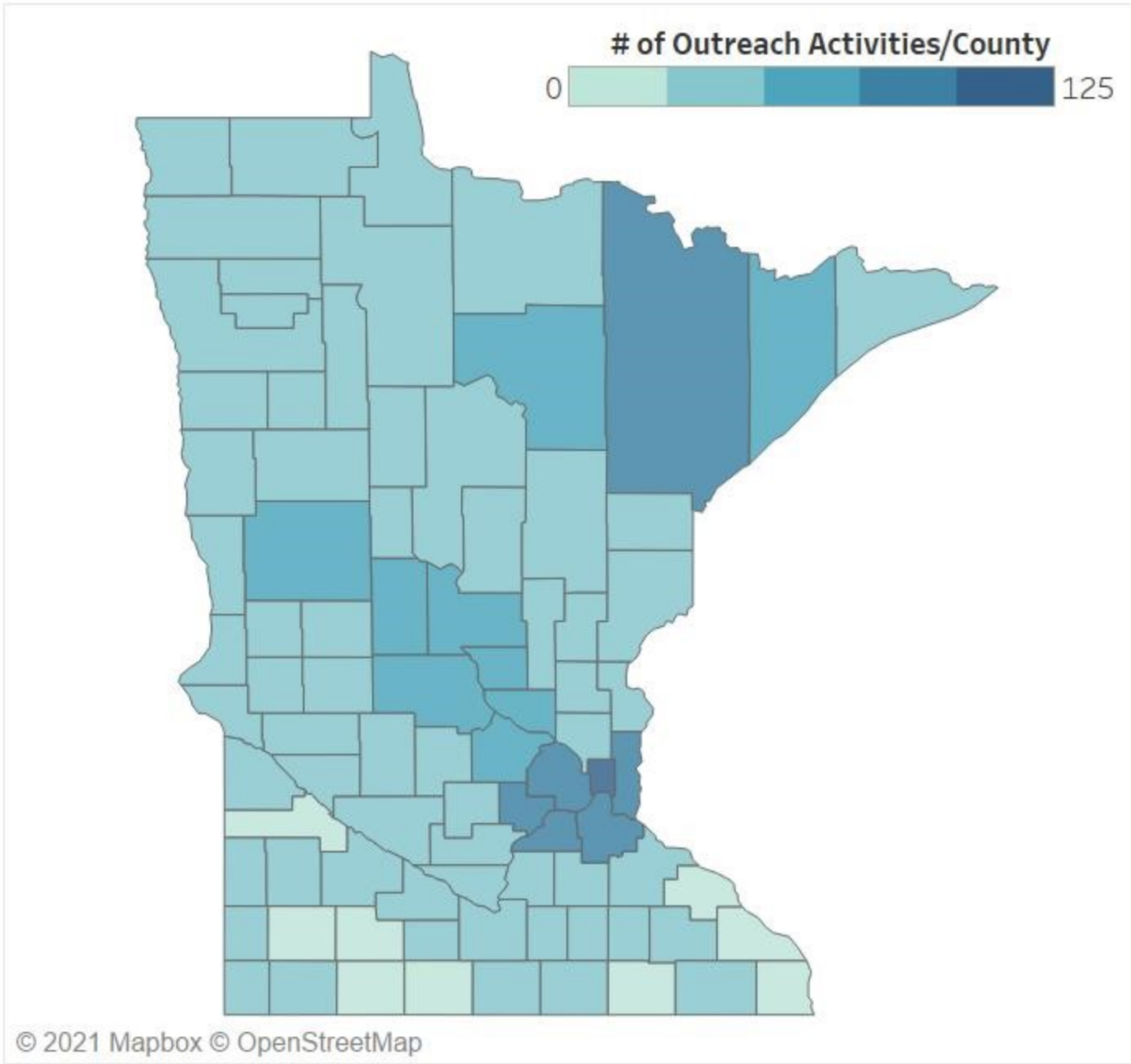
Interconnectivity and Wireless Devices Available Through the TED Program

Photo of Device	Name	Description	Disability
	Amazon Echo Connect	For clients who have a landline and internet (Wi-Fi). The Echo Connect is used in conjunction with an Echo smart speaker to facilitate answering and placing phone calls.	Person with a physical disability, hearing loss, or speech disability.
	Amazon Echo Dot	A smart speaker that allows the client to control their smartphone using their voice.	Person with a physical disability, hearing loss, or speech disability.
	Amazon Echo Show Smart Display	A high definition smart display with Alexa allows the client to use their voice to navigate the system. The client can place video calls on this device.	Person with a physical disability, hearing loss, or speech disability.
	Motorola Moto X4 Cell Phone with Sesame Software	Sesame software is used with the Moto X4 (unlocked) cell phone. This phone uses eye tracking technology that provides hands-free dialing and answering of calls.	Person with a physical disability.

	<p>TrueTone Emote Electrolarynx</p>	<p>A device used to produce clearer speech by individuals who have lost their voice box. Clients use their personal cell phone or landline with this device.</p>	<p>Person with a speech disability.</p>
	<p>Artone 3 MAX Bluetooth Neckloop</p>	<p>This neckloop pairs with any Bluetooth-enabled device, such as a cell phone. It transmits sound from the paired device directly to the person's t-coil enabled hearing aids, providing clear, amplified sound.</p>	<p>Person who is severely hard of hearing.</p>
	<p>Apple Airpods Pro</p>	<p>Active Noise Cancellation ear buds with a charging case to use with the client's smartphone.</p>	<p>Person who is hard of hearing.</p>
	<p>Neckloop for Sempre Mini</p>	<p>This neckloop is used with a cell phone to amplify phone calls. Client must have t-coil enabled hearing aids. This can be plugged into a Sempre Mini connected to the cell phone via Bluetooth.</p>	<p>Person who is hard of hearing.</p>
	<p>Sempre Mini Kit</p>	<p>A cell phone amplifier. This can be paired via Bluetooth to the phone (client must have T-coil hearing aids). Or, a person without hearing aids can use the earbuds included with this kit.</p>	<p>Person who is hard of hearing.</p>

 <p>A blue Lucia Cell Phone with a large screen displaying 'Edit number +1-7037' and a numeric keypad with large buttons.</p>	<p>Lucia Cell Phone through RAZ Mobility</p>	<p>An amplified cell phone that speaks everything on the screen, speaks the keys that are pressed, and prompts the user to perform certain functions. This phone is unlocked for AT&T, T-Mobile, and compatible GSM networks such as Cricket Wireless, Red Pocket Mobile, Straight Talk, and Metro by T-Mobile.</p>	<p>Person who is hard of hearing and/or has vision loss.</p>
 <p>Two views of a black Snapfon ezTWO 3G phone: one showing the front with a large keypad and a small screen, and one showing the back with a large red circular button.</p>	<p>Snapfon ezTWO 3G</p>	<p>An amplified unlocked GSM cell phone that has a speaking keypad, oversized buttons for ease of use, and an enhanced volume. It is also Bluetooth compatible for use with a mobile receiver or other portable device.</p>	<p>Person who is hard of hearing and/or has vision loss.</p>
 <p>A black Jethro CS330 flip phone shown closed, with a small screen and a camera lens visible at the top.</p>	<p>Jethro CS330</p>	<p>3G hearing aid compatible flip phone. This phone is unlocked for AT&T, T-Mobile, and compatible GSM networks.</p>	<p>Person who is hard of hearing and/or has vision loss.</p>

Appendix E –Map of Outreach by County and Examples of Print Advertisements



Do you have trouble using your phone due to a hearing loss, speech or physical disability?

Do not miss important phone conversations!

Contact the Telephone Equipment Distribution Program for easier ways to use the phone.

We provide assistive phone devices at NO COST to those who qualify.

Learn more about easier phone access

800-657-3663

mn.gov/deaf-hard-of-hearing



هل تواجه صعوبة في استخدام هاتفك بسبب فقدان السمع أو إعاقة كلامية أو جسدية؟



لا تفوت على نفسك المكالمات الهاتفية الهامة!

اتصل ببرنامج توزيع معدات الهاتف للوصول إلى طرق أسهل لاستخدام الهاتف.

نحن نوّمن أجهزة هاتفية مساعدة من دون أي كلفة للأشخاص الذين يتأهلون.

لهس ألو وصولا ن ع ديزملا فرع إ فتاهلا تامدخ ي لإ

800-657-3663

mn.gov/deaf-hard-of-hearing

برنامج توزيع معدات الهاتف ممول من قبل وزارة التجارة - الوصول إلى الاتصالات في مينيسوتا (TAM) ويتم إدارته من قبل وزارة الشؤون الإنسانية في مينيسوتا.



DEPARTMENT OF HUMAN SERVICES
DEAF AND HARD OF HEARING SERVICES DIVISION

Imate li poteškoća u korištenju telefona zbog gubitka sluha, govora ili tjelesne invalidnosti?

Nemojte propustiti važne telefonske razgovore!

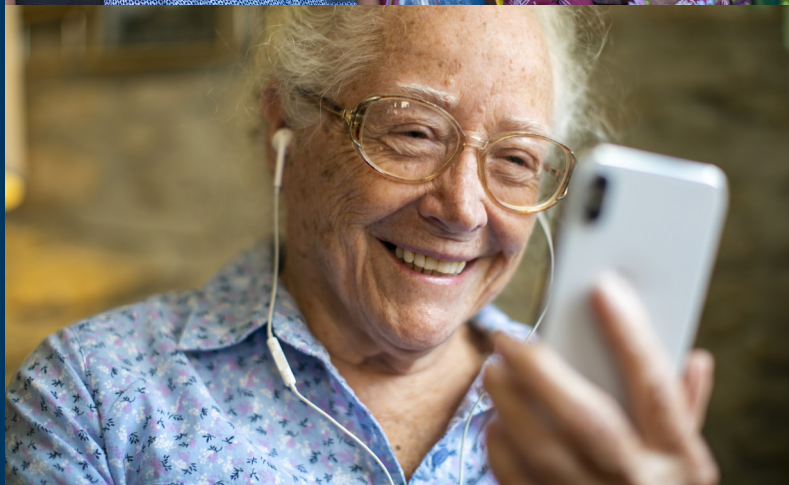
Da biste koristili telefon na lakši način, obratite se Programu za distribuciju telefonske opreme (Telephone Equipment Distribution Program).

Dajemo pomoćne telefonske uređaje BESPLATNO za osobe koje se kvalificiraju.

Saznajte više o lakšem pristupu telefonu

800-657-3663

mn.gov/deaf-hard-of-hearing



ئەرى تە ئارىشە ھەيە بكار ئىنانا تەلەفوناخو شېەر نەشيانا گولپونى يان ئاخفتى يان نەشيانەكا لەشى؟



بلا شتە نەچىت چ گفتو گوويىت
تەلەفونى!

پەيوەندىي بە (بەرنامەي
دابەشکردنى ئامرازى تەلەفون)
بکە بو ريگايىت ئاسان بو
بكار ھىنانا تەلەفونى.

ئەم ئامرازى ھارپىكارى تەلەفون
دەستەبەر دەكەين لە ھىچ خەرجى
بو ئەوانە كە لى ھاتن.

زىاتر فير ببه دەر بارەي ئاسانتر
تەلەفون گەيشتن

800-657-3663

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بەرنامەي دابەشکردنى ئامرازى تەلەفون پارە دەدرىت بەناو ھەكە
لقى بازارگانى – پەيوەندى-تەلەفونى گەيشتنى مينيستوتا (تام) و
بەرپو ھەي برد لەلايەنەكە مينيستوتا لقى مرؤف خزمەتگوزارى.

कान कम सुन्ने, बोल्न नसक्ने वा शारीरिक असक्षमता भएको कारणले के तपाईंलाई फोन प्रयोग गर्न समस्या हुन्छ?

फोनमा गरिने महत्त्वपूर्ण कुराकानी अब नछुटाउनुहोस्!

फोन गर्न सजिलो पार्ने उपकरणहरूको लागि “टेलिफोन उपकरण वितरण कार्यक्रम” मा सम्पर्क गर्नुहोस।

हामीले योग्य व्यक्तिहरूलाई फोन संग प्रयोग गरिने सहयोगी उपकरणहरू पैसा नलिकन प्रदान गर्दछौं।

फोन गर्न सजिलो पार्ने कुराहरूको बारेमा अधिक जानकारी यहाँ लिनुहोस

800-657-3663

mn.gov/deaf-hard-of-hearing



Miyaad dhibaato ku qabtaa isticmaalka taleefankaaga sababta oo ah maqalka oo kaa lumay, hadalka ama naafonimada jirka?

Ha seegin sheekooyinka taleefanka ee muhiimka ah!

La soo xiriir Barnaamijka Lagu Qeybinayo Qalabka Talefoonka si aad u hesho siyaabo fudud oo aad taleefanka u isticmaasho.

Waxaanu bixinaa qalabka caawinta taleefanka oo **AAN QIIMO** ku joogin dadka u qalma.

Baro wax badan oo ku saabsan isticmaalka taleefanka oo fudud

800-657-3663

mn.gov/deaf-hard-of-hearing



Barnaamijka Lagu Qeybinayo Qalabka Talefoonka waxaa laga maalgaliyaa Wasaaradda Ganacsiga - Helitaanka Isgaarsiinta Minnesota (TAM) oo waxaa maamusha Waaxda Adeegyada Aadanaha ee Minnesota.

¿Tiene usted dificultad para usar el teléfono debido a una pérdida auditiva, o una discapacidad del habla o física?

¡No se pierda conversaciones telefónicas importantes!

Para acceder a maneras más fáciles de usar el teléfono, comuníquese con el Telephone Equipment Distribution Program (Programa de Distribución de Equipos Telefónicos).

Proporcionamos aparatos telefónicos de asistencia **SIN COSTO** a quienes califican.

Obtenga más información sobre el acceso telefónico facilitado

800-657-3663

mn.gov/deaf-hard-of-hearing



DEPARTMENT OF HUMAN SERVICES
DEAF AND HARD OF HEARING SERVICES DIVISION

El Telephone Equipment Distribution Program es financiado mediante el Programa de Acceso a Comunicaciones en Minnesota (TAM, por las siglas de Telecommunications Access Minnesota) del Departamento de Comercio (Department of Commerce) y administrado por el Departamento de Servicios Humanos de Minnesota (Minnesota Department of Human Services).

Do your patients have trouble using the phone due to a hearing loss, speech or physical disability?

The Telephone Equipment Distribution Program offers easier ways to use the phone.

Phone: 800-657-3663

Email: dhs.dhhsd@state.mn.us

Web: mn.gov/deaf-hard-of-hearing



The Telephone Equipment Distribution Program is funded through the Department of Commerce – Telecommunications Access Minnesota (TAM) and administered by the Minnesota Department of Human Services.

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