FINAL DRAFT OF SURVEY QUESTIONS



Consumer Survey

on

UTILIZATION OF ASSISTIVE COMMUNICATION TECHNOLOGY IN PUBLIC VENUES

Millions of people with hearing loss could benefit from improved communication access in public spaces but often it is missing or, when available, underutilized.

This survey's purpose is to document and quantify the experience and preferences of consumers with hearing loss in the use of various assistive communication technologies currently found in public venues. The results will offer guidance to service providers and decision makers on the furnishing of suitable communication access.

PARTICIPATION

If you are a resident of the USA and have hearing loss or an auditory processing disorder, we cordially invite you to participate in this survey. If you are not a US resident please do not complete this survey.

It should take only 10 to 12 minutes to complete.

Thank you for sharing your valuable time with us.

SOME TERMINOLOGY:

Assistive Communication Technology. Refers to any technology that helps a person with hearing loss or a voice, speech, or language disorder to communicate.

Assistive Listening System - An electronic system that silently, and usually wirelessly, transmits sound to a receiving device that connects to earphones or, using a neckloop, hearing aids or an implant processor. The types of systems currently in use are:

FM/RF- Sound is transmitted by a low power, high frequency radio transmitter to receivers that connect to headsets or neckloops to reproduce the sound.

IR - IR systems transmit sound to receivers using invisible infrared light waves. Headsets or neckloops are connected to the receivers to reproduce the sound.

Hearing Loop – Sound is transmitted by an electromagnetic field that connects to the telecoils in hearing aids or implant processors or other receivers with headsets that reproduce the sound.

Audio WiFi – Sound is transmitted as radio waves by a router to a borrowed receiver or personal smartphone and relayed to hearing aids via a headset, neckloop or streamed by Bluetooth®.

Hard Wired – Sound is transmitted by plugging a headset or neckloop into an audio jack that is hard wired to the public address system.

Bluetooth® - A technology that uses ultra-high frequency (UHF) radio waves to transmit data or sound from an electronic source to hearing aids, a cell phone, personal computer, music player or other such electronic device.

Captioning - Captioning takes the spoken word and transcribes it into text, like closed captions on a TV. In public venues captions most often are in a form transmitted to hand held receivers loaned to participants by the venue.

CART - Communication Access Realtime Translation. A type of captions usually projected onto a reflective screen or a large TV monitor to serve an audience. In a slide presentation they may be incorporated into a section of the slide.

Cochlear Implant - An electronic hearing device implanted in the skull, designed to produce useful hearing sensations to a person with severe to profound hearing loss.

Hearing care provider —Describer for audiologists or hearing aid dispensers (also called hearing instrument specialists) both of whom are licensed to perform hearing tests and fit hearing aids.

Neckloop – A neckloop is a device used in place of a headset or earbuds by people who have receivers called telecoils in their hearing aids or the processor for their implant.

Telecoils – Often called T-coils, are tiny receivers in hearing aids or implant processor and some remote microphones that receive sound transmitted as a silent electromagnetic wave. Activated

using the T-switch on the hearing devices or their remote control, they wirelessly connect the user to a hearing loop assistive listening system.

PLEASE PROVIDE A RESPONSE TO ALL QUESTIONS

You and your hearing loss history

1. What is your age?

Under 30

30 to 45

46 to 60

61 to 75

over 75

Male

2. With which gender do you identify?

<u> </u>	Female
1	Prefer not to say
	ow long have you used hearing aids or an implanted device? Less than 5 years Between 5 and 10 years 11 to 20 years More than 21 years Do not use
4. Ho	ow much hearing loss do you have when not wearing hearing aids or an implant processor? Mile – Can hear/understand speech but it lacks clarity and soft sounds are hard to hear. Moderate – Difficulty hearing and or understanding conversational speech. Severe - Great difficulty hearing and/or understanding any speech without hearing aids. Profound – Impossible to hear and/or understand any speech without hearing aids.
5. Are	e you affiliated with a hearing loss support group?
	Yes
	No
	If yes, what group
\	
	Your hearing devices

 6. What sort of hearing device do you currently use? (Please select all that apply) Hearing aids prescribed by a hearing care professional Cochlear implant Bone anchored implant Hearing aids purchased online Over-the-counter hearing aids or a personal sound amplification product (PSAP) such as Apple AirPods or smartphone-based devices/app None
 7. Which of the following do you have in or with your hearing devices? (Please select all that apply.) Bluetooth capability Smartphone compatibility Smartphone app Disposable batteries Removable rechargeable batteries Built in rechargeable batteries Telecoils/T-switch Volume control Remote microphone Remote microphone or other device that is equipped with a telecoil that can connect to the sound from a hearing loop and stream it to your hearing aids via Bluetooth®? TV listener (Hearing loop, Bluetooth®, FM or Infrared system) I don't know if I have some features I've not checked I do not have hearing aids or an implant
 8. Would telecoils be a "must have" when buying new hearing aids or an implant processor? Yes No Not sure I don't know what telecoils are
 9. Would Bluetooth be a "must have" when buying new hearing aids or an implant processor? Yes No Not sure I am not familiar with Bluetooth
10. If you live in AZ, DE, FL, IN, NM, NY, UT, WA and purchased your hearing aids from a hearing care professional, did that professional talk to you about telecoils prior to recommending and fitting you with your <u>current hearing aids</u> ? Yes

- No
 Don't remember
 Does not apply I live elsewhere

 If you live in some other state, did the commending and fitting you with your
- 11. If you live in some other state, did the hearing care professional talk to you about telecoils prior to recommending and fitting you with your <u>current hearing aids</u>?
 - Yes
 - No
 - Don't remember
 - Does not apply

Using Assistive Communication Technology:

- 12. If you have telecoils in your devices, where do you use them? (Please select all that apply).
 - Hearing loop Assistive Listening Systems such as those found in theaters, places of worship, courtrooms, museums, community meeting rooms, medical venues, city council chambers, etc.
 - Hearing looped counter(s) such as service counters at grocery stores, pharmacies, etc.
 - FM or Infrared Assistive Listening Systems where I check out a receiver and neckloop.
 - Personal devices such as hearing loop in the home or a personal neckloop
 - Telephone (home or work)
 - I have telecoils in my devices but do not use them
 - Does not apply don't have telecoils
- 13. How did you learn about telecoils? (Please select all that apply)
 - Audiologist or hearing instrument specialist
 - Medical provider (such as primary care doctor, nurse, PA, etc.)
 - Friend or family member
 - Support group (such as HLAA, cochlear implant support group, ALDA, etc.)
 - State agency (such as vocational rehab, commission for deaf and hard-of-hearing, etc.)
 - Internet (searching, blogs, social media)
 - Senior services (such as community center, AARP, Council on Aging, etc.)
 - Newspaper, magazine article, TV news or news magazine
 - Ad on TV or in newspaper or magazine
 - Book on hearing loss
 - Other
 - I knew nothing about telecoils until taking this survey.
- 14. If you have Bluetooth® in your devices, where do you use it? (Please Check select all that apply.)
 - Talking on a cell phone
 - Watching TV
 - Listening to podcasts
 - Streaming sound from iPad/tablet/computer/laptop
 - Listening to others using a remote mic or smartphone app
 - Other_(Please list)

■ Does not apply – I don't have Bluetooth 15. Do you regularly look for and/or request a hearing assistance accommodation such as a hearing loop or receiver for an FM, IR or WiFi system or captioning when you attend a religious service, live theater production, or other public gathering where hearing could be problematic? Always Usually Half the time Seldom Never 16. How often do you find such assistance to be readily available? Always Usually Half the time Seldom Never 17. What type of system or accommodation do you most commonly find to be available? (Pleas select all that apply,) FM with receivers and headsets or earbuds FM with receivers and earbuds or headsets and neckloops ■ IR with receivers and earbuds or headsets ■ IR with receivers and earbuds or headsets and neckloops Hearing loop with receivers and earbuds or headsets Other (audio WiFi, hard wired with headsets etc.) CART – open captioning Captioning with hand-held device loaned by the venue or a personal smartphone with an app I'm not sure what type some of the systems are 18. Do you avoid going to theaters, religious services or other events where you know there are no assistive communication accommodations and you would have difficulty following the proceedings even when wearing hearing aids or an implant?_ Yes Sometimes No Not applicable Your comments welcome here 19. How often do you find problems with the assistive listening system such as batteries not charged on receiver, untrained staff, neckloops do not work well, system not working, no or inadequate signage. Seldom

SometimesHalf the time

	Fairly often Very often Please tell us what problems you encounter
headse	you visit_a place that has an assistive listening system that requires you to borrow a receiver and to hear, how often do you borrow the equipment? Always Usually Sometimes Never Not applicable
	you visit a place that has an assistive listening system that requires you to borrow a <u>receiver and a op</u> to use with your telecoils, how often do you borrow the equipment?
	Always Usually Half the time Sometimes Never Not applicable - I don't have telecoils
procee	You have telecoils and go to a venue that has a hearing loop, how often do you listen to the dings using the telecoils in your hearing aids or an implant device? Always Usually Half the time Sometimes Never I don't have telecoils in my devices I don't go any place that has a hearing loop
smartp Blueto	dio WiFi systems are used in some places for assistive listening. They transmit to your personal hone or to a loaner receiver. The user receives sound via a headset, a neckloop, or streamed to oth capable hearing aids or earbuds. Have you experienced such a system? Yes No If yes, please tell us where you used this system(s)
such sy	you experienced an Audio WiFi system, how did you find the latency (echo effect) inherent in ystems? Not conscious of it Distracting

- Objectionable
- Not applicable
- 25. In some places, either in place of an assistive listening system or to supplement it, they offer CART/captions to help people follow the proceedings. If you attend an event where CART/captions is offered, do you use it?
 - Yes
 - No
- 26. When both CART/captions and an assistive listening system are used in a venue, what do you use? (Please select all that apply)
 - Use only the CART/captions
 - Use both the CART/captions and the assistive listening system
 - Use primarily the assistive listening system
 - Use only the assistive listening system
 - Do not use either
- 27. If you were asked to make a recommendation for an assistive communication technology system in your city council chamber, which <u>one</u> of these would you recommend?
 - FM/RF with headsets and neckloops
 - Infrared with headsets and neckloop
 - Hearing Loop with headsets
 - WiFi audio with headsets and neckloops
 - A wired system with jacks for connecting headsets
 - CART or other captioning for all events
 - I don't feel I'm well enough informed to make a recommendation
- 28. Which, if any, of the following devices or technologies do you use to supplement your hearing aids or implant in your day-to-day activities?(Please select all that apply.)
 - Speech-to-text smartphone app
 - Speech amplifying smartphone app
 - Speech amplifier such as a Pocket Talker
 - Personal FM or other one-way communication system
 - Remote Bluetooth microphone
 - Alerting or other smartphones apps
 - I don't have any of the above

Optional: We welcome comments about your need for and/or use of assistive communication technologies.

Include contact information if you want us to respond (this is NOT required).

Thank you for your participation in our survey, your responses have been recorded.

When the survey is closed and all responses tabulated, the results will be reported online at www.CCAA.name

Should you have any questions about this survey, please email them to: ccainamerica@gmail.com