

Federal Communications Commission



Section 504

Programs & Activities Accessibility Handbook

5th Edition

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Introduction

Section 504 Overview

Section 504 of the Rehabilitation Act of 1973, as amended, prohibits federal agencies, and programs and activities receiving federal financial assistance, from discriminating against individuals with disabilities.¹

The Rehabilitation Act is sometimes confused with the Americans with Disabilities Act (ADA)² which was passed in 1990. While there are many parallels between the Rehabilitation Act and the ADA, there are some fundamental differences. Both laws are designed to prohibit discrimination against individuals with disabilities. Both share many of the same definitions and provisions. However, the Rehabilitation Act covers federal agencies and entities receiving federal funding, while the ADA applies to state and local governments, public accommodations, commercial facilities, transportation, telecommunications, and the U.S. Congress.³

The 5th edition of the Federal Communications Commission Section 504 Programs & Activities Accessibility Handbook (Section 504 Handbook) continues to be a collection of guidelines, information, and procedures intended to help Commission personnel in their efforts to ensure that the FCC's programs and activities are accessible to individuals with disabilities.

It would be impossible to list all the aspects of the Commission's work that may require reasonable accommodation for individuals with disabilities, but the following sections can provide general guidance and reminders to assist Commission staff in promoting awareness of the Commission's commitment to accessibility and fostering an attitude of inclusion in all FCC activities.

¹ The FCC Order implementing Section 504 can be found at <https://www.fcc.gov/document/matter-amendment-part-1-subpart-n-commissions-rules>. It includes definitions of terms and rules governing access to the Commission's programs and activities.

² 42 U.S.C. § 12101 *et seq.*

³ U.S. Department of Justice, Civil Rights Division, Disability Rights Section, "A Guide to Disability Rights Laws," <http://www.usdoj.gov/crt/ada/cguide.htm>

Access Philosophy

The starting point for providing access is courtesy and common sense. In order to ensure that all interested individuals with disabilities have access to the Commission's programs and activities, we must first be alert to the access needs of people with disabilities. Once an accessibility issue is recognized, we can focus on providing an appropriate accommodation. It is when people with disabilities are overlooked as potential or actual consumers that barriers are raised. And, ironically, it is these often unintended barriers that can be the hardest to overcome. Remembering the following principles, when planning and implementing Commission activities and programs, can help ensure that access is available to all who want to participate.

- The Commission, its programs, and its activities **MUST** be accessible. This is mandated by statute and by FCC rules.⁴
- When meetings or events are scheduled, the event planner, or person calling the meeting, is responsible for ensuring accessibility. The Commission's Section 504 Officer⁵ is available for consultation and can assist in determining accessibility needs.
- Individuals attending events or meetings who need reasonable accommodations must inform the meeting/event planner of their needs. It is the meeting/event planner's obligation to announce events with sufficient lead time to give attendees an opportunity to ask for such accommodations.
- Individuals with disabilities are the best sources of information regarding the accommodations they will need. If you are unsure of what to do, ask the person with a disability about his or her preferences.
- Accommodations do not ensure accessibility. Hiring an access provider or supplying technology can only go so far to ensuring that people with disabilities have access. Flexibility is a critical factor in creating an inclusive environment. Sometimes the most important "accommodations" are simply adjustments to the way that a meeting is run or a process is carried out.

⁴ Rehabilitation Act as amended, section 501, 29 U.S.C. § 791; section 503, 29 U.S.C. § 793; section 504, 29 U.S.C. § 794; section 508, 29 U.S.C. § 794d. Enforcement of Non-discrimination on the Basis of Handicap in Programs or Activities Conducted by the Federal Communications Commission.

⁵ For specific contact names, phone numbers, and e-mail addresses, see [FCC Points of Contact](#) on page 4 of this *Handbook*.

FCC Points of Contact

Requests for reasonable accommodations for individuals with disabilities (for FCC programs and activities) should **immediately** be forwarded to the Section 504 Officer, Gerard.Williams@fcc.gov, 202-418-1505 / 202-418-0432, TTY. Be sure to provide the requestor's contact information (name, telephone number, and/or e-mail address) as well as a description of the specific accommodation requested.

The Commission's general point of contact for reasonable accommodation requests is:

E-mail: FCC504@fcc.gov
Phone: 202-418-0530
TTY: 202-418-0432

General Access and Section 504 Issues

Sign language interpreters, CART, physical access, translation of sign language video into English, reasonable accommodations for people with disabilities, information about disabilities

Gerard Williams
Section 504 Officer
Consumer & Governmental Affairs Bureau
202-418-1505 / 202-418-0432 TTY
Gerard.Williams@fcc.gov

Alternate Formats

Braille, large print, electronic files, audio formats, and transcription of documents submitted in accessible format to print.

Terry Pacheco
Accessible Formats Specialist
Consumer & Governmental Affairs Bureau
202-418-7512
Terry.Pacheco@fcc.gov

Audio Visual Support

Captioning, Assistive Listening Devices

Jeffrey Riordan
Audio Visual Production
Office of Media Relations
202-418-0460

Jeffrey.Riordan@fcc.gov or CMRstaff@fcc.gov

Disability Regulations / Legal Issues

Suzy Rosen Singleton
Chief, Disability Rights Office
Consumer & Governmental Affairs Bureau
202-510-9446
Suzanne.Singleton@fcc.gov

Section 501 Issues

Workplace accommodations for FCC staff who have disabilities

Kenneth Heredia
Workplace Accommodations Coordinator
Office of Workplace Diversity
202-418-7986
Kenneth.Heredia@fcc.gov

Section 508 Issues

Access to electronic data, resources, and equipment

Rebecca Lovley
Section 508 Program Manager
Office of Managing Director
202-418-1957
Rebecca.Lovley@fcc.gov

Security Issues

Frederick Bucher
Manager, Security Operations Center
202-418-7884
Frederick.Bucher@fcc.gov
(when sending e-mail, please cc:
Mary Harmon, Mary.Harmon@fcc.gov)

FCC University

Curtis Everett
Chief Learning Officer, Learning and Development Service Center

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INTRODUCTION - FCC POINTS OF CONTACT

Office of Managing Director
202-418-0294
Curtis.Everett@fcc.gov

Other Disability Issues

Gerard Williams
Section 504 Officer
Consumer & Governmental Affairs Bureau
202-418-1505 / 202-418-0432 TTY
Gerard.Williams@fcc.gov

Best Practices

Security

- Notify the Security Operations Center if you expect visitors with disabilities. Advance notice allows the Operations Center to assign sufficient security staff to screen visitors. Security Officers can also prepare for alternate communication modes and assistive devices that may require special attention when going through security screening.
- Remind the Security Operations Center that some assistive devices such as cochlear implants (used to improve hearing) or metal rods to strengthen bones, are surgically implanted and cannot be taken off or detached, and may set off metal detectors. Be prepared to use courtesy and good judgment in dealing with such situations.

FCC Meetings⁶

When planning meetings, the person or entity calling the meeting is responsible for acquiring appropriate accommodations for people with disabilities. The meeting organizer will remain the primary point of contact for meeting attendees, and the Section 504 team will provide consultation on how to ensure meeting accessibility. Individuals with disabilities who attend a meeting are responsible for requesting the accommodations they need. When accommodations are requested, inform the Section 504 Officer immediately.

- Provide as much advance notice as possible when scheduling a meeting and requesting accommodations. Accommodations for meetings may be acquired from outside vendors or may be available from staff. Keep in mind that last minute requests will be accepted but may be impossible to fill.

⁶ In this context, “meetings” are discussions or interactions not open to the public. Attendees are invited and are known in advance of the meeting.

FCC Events⁷

For FCC events, the Commission is responsible for acquiring accommodations for people with disabilities. Individuals with disabilities who attend an event are responsible for requesting the accommodations they need.

Before the event

- Include an Accessibility Statement (see [Accessibility Statements](#) on page 12) that accurately reflects the accommodations that will be provided in all event publicity, and/or a Statement that explains how to submit requests for accommodations.
- Accommodations for Commission events may be acquired from outside vendors or may be available from staff. In either case, as much advance notice as possible is appreciated. Keep in mind that last minute requests may be impossible to fill.
- Event registrants may send their accommodation requests to the FCC504@fcc.gov mailbox, the FCC504 voice mail at 202-418-0530, or staff assigned to collect responses. If accommodation requests are sent to staff assigned to collect responses, the requests should be forwarded immediately to the FCC's Section 504 Officer.
- Consider steps that make the event more accessible. For example, printing name tent cards for presenters and panelists will make identification of participants easier for all.

During the event

- Assign moderators to any discussion or panel presentations.
- Coordinate participant introductions. Ask participants to always identify themselves before beginning their comments. This is especially helpful during teleconferences.
- Recognize individuals who wish to speak and manage turn-taking. Avoid having several people speaking at once.
- Make sure there is ample time for everyone to comment or pose questions. Interpreters, captioning, CART, or other mediated services will be several seconds behind speakers since they must hear the information, transform it into the appropriate medium, and then transmit the information

⁷ In this context, "events" include public meetings, ceremonies, celebrations, or other occasions where general attendance is expected.

in the appropriate format. As a result, individuals relying on these services will experience a time delay.

- Designate staff to be available to assist attendees and accommodations providers as needed and as discussed with the Section 504 Officer.

Responding to Requests

- Do not deny accommodations requests.
- Do not inquire about the specific nature of a person's disability.
- Reply to the requester, confirming you have received their request, and that you will be in touch.
- Immediately forward the request to FCC504@fcc.gov or interpreters@fcc.gov. A member of the 504 team will be in touch with you to consult and coordinate accommodations as necessary.

Contracting and Acquisitions

All Commission programs and activities must be accessible to people with disabilities. This includes programs and activities offered by the Commission through contracts or other arrangements.⁸

- Carefully write all agreements for the provision of programs or activities between the Commission and other entities to ensure that access for people with disabilities to such programs or activities is explicitly required in the statement of work.

FCC Training

All FCC training must be accessible to people with disabilities. Training announcements should include an accessibility statement. See [Best Practices / Accessibility Statements](#) on page 12.

FCC contracted training

Entities contracting with the FCC to provide training must comply with the requirements of the Rehabilitation Act and the FCC's Section 504 Rules. It is expected that trainers will:

⁸ 47 C.F.R. § 1.1830(b)(3)-(6).

- Video and multimedia content included with training must be accessible. See Best Practices / Multimedia Access on page 14 for more information.
- Comply with reasonable accommodation requests from students including, but not limited to:
 - Providing print materials in Braille, large print, or accessible electronic format
 - Reading or describing visual objects, displays, or projections used in class
 - Arranging the classroom to allow appropriate lines of sight and/or physical access
 - Providing transcripts of any audio media used in connection with the class
 - Supplying a print alternative for oral quizzes or tests
 - Supplying an audio, accessible print, or accessible electronic version of print quizzes or tests

External training

Commission employees participating in external training must complete Standard Form 182 (available at www.fccuniversity.gov). The “Comments” field at the end of the form should be used to note reasonable accommodation needs. It is the employee’s responsibility to make the request for appropriate reasonable accommodations. Such accommodations may be provided either by the Commission or by the entity offering the training. For assistance confirming reasonable accommodations for external training, contact the Section 504 Officer (see FCC Points of Contact / General Access and Section 504 Issues on page 5).

FCC University

To request reasonable accommodations for FCC University courses, contact the Chief Learning Officer ([Contact Information/FCC University](#) on page 6).

Fire Drills, Evacuations, and Emergencies

- Be willing to communicate information in flexible ways, including writing notes, gesturing, etc. People who are deaf or hard of hearing may not be able to hear broadcasts over the public address system or verbal instructions from building monitors or security officers. Announcements or instructions passed by word of mouth are also likely to be missed by a person who is deaf or hard of hearing. Even people who have substantial residual hearing may have difficulty hearing instructions coming from behind them or orders given in areas with background noise such as fire alarms or the chatter from crowds of people. People who are blind or have low vision may not see gestures or other visual cues indicating where they should go or what they should do.
- Before helping individuals with disabilities during an emergency or drill, introduce yourself and ask if they would like help. If they accept your offer of assistance, ask them how they would like to proceed. Specifically, people who have low vision have varying levels of sight – some may be able to discern shapes, others may only be able to identify areas that are light or dark, still others may have tunnel vision, or may be able to see only in areas with bright lighting.
- Before attempting to help people who are blind, introduce yourself and ask them if they would like assistance. If they accept your offer of help, ask them how they would like to proceed.
- If evacuation assistance is needed for people who have significant mobility disabilities, contact one of the safety monitors stationed in the elevator lobbies for assistance. There are established procedures for evacuating people who may need physical assistance or to utilize evacuation chairs, for descending stairs, that are strategically located throughout the building. Consult the *Emergency Procedures* document on the FCC intranet (<http://intranet.fcc.gov/omd/ao/safety>) for more detailed instructions.
- When giving directions in emergency or high stress situations, do not assume that people who are non-responsive are being uncooperative.

Accessibility Statements

Model accessibility statements are provided below. They may be revised to match the specific circumstances of an event or document. Please contact the Commission's Section 504 Officer (see [Contact Information/Section 504 Issues](#) on page 5) for further

assistance in determining your accommodation statement needs. Make sure the statement you choose accurately reflects the services being provided.

For general meetings:

Reasonable accommodations for people with disabilities are available upon request. Include a description of the accommodation you will need and tell us how to contact you if we need more information. Make your request as early as possible. Last minute requests will be accepted, but may be impossible to fill. Send an e-mail to: FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

For meetings with captioning:

Open captioning will be provided for this event. Other reasonable accommodations for people with disabilities are available upon request. Include a description of the accommodation you will need and tell us how to contact you if we need more information. Make your request as early as possible. Last minute requests will be accepted but may be impossible to fill. Send an e-mail to: FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

For meetings with full accommodations:

The meeting site is fully accessible to people using wheelchairs or other mobility aids. Sign language interpreters, open captioning, and assistive listening devices will be provided on site. Other reasonable accommodations for people with disabilities are available upon request. Include a description of the accommodation you will need and tell us how to contact you if we need more information. Make your request as early as possible. Last minute requests will be accepted, but may be impossible to fill. Send an e-mail to: FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

For meetings that are webcast:

The meeting will be webcast with open captioning at [insert URL].⁹

For documents

To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to: FCC504@fcc.gov or

⁹ Typically, the URL is: www.fcc.gov/live

call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

Multimedia Access

Media purchased, owned or produced by the Commission, that is intended for use by either staff or the public, must be accessible to people with disabilities.

Video Content

- Videos with audible dialogue must be provided with **captioning**. Captioning may be either open (i.e. always visible) or closed (i.e. able to be toggled on and off by any given viewer via their media player).
- Videos with significant visual information, not otherwise included in audible dialogue, should be provided with **audio description** either as part of the primary audio track (i.e. main video track) or on a secondary audio track. Audio description is audio-narrated description of a program's key visual elements. These descriptions are inserted into natural pauses in the program's dialogue or other critical sound elements. Audio description makes video programming more accessible to individuals who are blind or visually impaired.¹⁰
- For assistance adding, editing, or reviewing the accessibility of video content, contact the Audio Visual Production staff (see [FCC Points of Contact/ Audio Visual Support](#) on page 5) and the FCC's Section 504 Officer (see [FCC Points of Contact/ Section 504 Issues](#) on page 5).
- For more information about captioning, see <https://www.nidcd.nih.gov/health/hearing/pages/caption.aspx> or contact the FCC's Section 504 Officer (see [FCC Points of Contact/ Section 504 Issues](#) on page 5).

Audio Content

- Audio recordings owned by the Commission that are intended for use by either staff or the public must have written transcripts available upon request.

¹⁰ While the term, "audio description," is typically used to refer to the process of describing visual content on TV, movies, or to in-person events such as plays or museum tours. Video description is also sometimes used as a synonym for audio description. Descriptive narration or descriptive video are other terms that are occasionally used. When referring to the description of media within its regulatory authority, the FCC currently uses the term, "video description."

- Transcripts may be produced when requested and need not be prepared in advance. Once produced, however, the retention and maintenance of transcripts should parallel that of the audio recording.

Physical Access

In most cases, federal buildings adhere to the UFAS (Uniform Federal Accessibility Standards) guidelines established by the Architectural and Transportation Barriers Compliance Board (Access Board).¹¹ The UFAS “sets standards for facility accessibility by... [people with disabilities] for Federal and federally-funded facilities. These standards are to be applied during the design, construction, and alteration of buildings and facilities to the extent required by the Architectural Barriers Act of 1968, as amended.”¹²

- When choosing a facility outside Portals, make sure the building meets Federal Accessibility Guidelines as cited above.
- Keep aisles and doorways clear. Do not block pathways with boxes, furniture, or other obstacles.
- Establish aisles that are wide enough to accommodate wheelchairs and other mobility aids.
- Allow space for wheelchairs, scooters, etc. within the general seating area if possible.
- If participants are seated at tables, make sure the tables are tall enough to allow wheelchairs to fit.
- Where there is a stage or raised area, provide ramped access.
- When using podiums, consider the height of the podium in relation to each speaker’s height, including those who use wheelchairs or scooters.
- If audience members are expected to make comments or ask questions from microphones placed in the aisles, make sure there is an alternative for audience members who have difficulty standing or who cannot easily navigate to the microphones. Ensure that instructions to the audience include information on how those who opt to use an alternative method can indicate their desire to speak and be appropriately included in the queue.

¹¹ The Access Board, Accessibility Guidelines and Standards, *Uniform Federal Accessibility Standard (UFAS)*, <http://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/ufas> .

¹² *Id.*, Section 1 “Purpose.”

- If cards are used to collect questions or comments from the audience, moderators should inform the audience of the process for acquiring cards. Staff should be available to deliver cards to individuals and should be willing to assist individuals who have difficulty using or holding writing materials.
- If participants are expected to pick-up documents, food, etc. during an event, make sure staff are available to assist those who might have difficulty reaching or holding items. When placing items on tables, consider the reach of individuals using wheelchairs or who are of short stature.
- If individuals attending meetings on the TW level of the Portals II building are expected to use the meeting rooms on the Library level of the building, make sure that the lift is working and that the key to the lift is available on both the Commission Meeting Room side and the Library side of the lift.

Common Accommodations

Consistent with the Access Philosophy described in this manual, no Commission staff can presume to be an expert at determining necessary accommodations for an individual based on an assumed or identified disability. Only the individual with the disability can communicate their particular needs to ensure they have access. To that end, this section includes a number of the more common accommodations that are often provided for Commission activities. Each of these sections includes a general description of the accommodation, best practices, and the process by which Commission staff can engage such an accommodation if/when requested.

It is impossible to anticipate every conceivable need. Be flexible. Be ready to address individual requests for accommodation as they arise. Use common sense and courtesy. If you are unsure what to do, ask the individual requesting accommodations for guidance and reach out to the FCC's Section 504 Officer (see [FCC Points of Contact/ Section 504 Issues](#) on page 5).

The list below is not exhaustive, and accommodations are not mutually exclusive. It is very common to receive multiple accommodations requests for an event or individual.

Sign Language Interpreting

Description

For individuals who are deaf, hard of hearing, or have another disability that prevents them from accessing spoken English, and who have fluency in American Sign Language or another sign language, professional Sign Language Interpreters are a common accommodation. These trained professionals interpret either simultaneously (producing their interpretation while still attending to the source language) or consecutively (asking for pauses to render an interpretation) from spoken English to American Sign Language (or another sign language) and vice versa, and as a rule work in teams of two to prevent fatigue and provide monitoring for fidelity of the interpretation.

Best Practices

- Do not assume that interpreters will be provided for any given event at the Commission. **The only event for which interpreters are provided absent a request for accommodation are the Commission Open Meetings.**
- If sign language interpreters or other communication access services have been requested for a meeting, contact the FCC's Section 504 Officer (see [FCC Points of Contact/ Section 504 Issues](#) on page 5) to make arrangements.
- Request and confirm interpreting services and any other accommodations with as much advance notice as possible, but only when a meeting or event is confirmed (i.e., "placeholders" for meetings are not preferred).
- Provide as much advance information about a meeting or event as possible to the interpreting team (e.g. attendee list, agenda, PowerPoints or other presentations, documents to be reviewed, relevant background information). This helps ensure accuracy of interpretations during the event.
- Consult with the Section 504 team about the physical layout of the meeting space. Seating may need to be reserved for interpreters and assigned seating may be necessary to ensure clear sightlines to interpreters.
- Adhere to meeting start and end times. Interpreters and other access providers are scheduled as needed, and although some providers may have flexibility to stay late when meetings run over, there is no guarantee that overages can be covered.

- If you have interpreters present but no participants relying on interpretation, interpreters may remain in an on-call capacity or be redeployed to other ongoing requests.¹³ It is a common practice to make an announcement that interpreters are available if needed, and/or to share the location of interpreters on site in case participants arrive after the meeting has begun (such an announcement would be interpreted). Check in with the interpreting team on site, or the Section 504 Officer for more specific guidance.
- Be flexible and patient. Be ready to address individual requests for accommodation as they arise. Do not assume that all people with similar disabilities will want identical accommodations. Use common sense and courtesy. If you are unsure what to do, ask the individual requesting accommodations for guidance.
- Check in with interpreters and/or participants relying on interpreting services when possible throughout the meeting to ensure that things are running smoothly. A “communications check” of this type helps ensure that everyone has access to the meeting content.

Resources

- Registry of Interpreters for the Deaf (RID), Standard Practice Papers <https://rid.org/about-rid/about-interpreting/standard-practice-papers/>

Translation/Transcription

Description

There are occasions when information submitted to the Commission in an alternative format must be transcribed or translated into standard written English. Situations that warrant this process include complaints about discrimination based on disability,¹⁴ information related to FCC investigations, and other matters so designated by the Commission.

Best Practices

- Audio transcripts should accurately render information heard in audio recordings.

¹³ As stated, earlier, the FCC does provide “open interpretation” only at Commission Open Meetings, regardless of whether there are participants there relying on the services.

¹⁴ 47 C.F.R. § 1.1803.

- Braille transcripts should be produced by a certified Braille transcriber. Information on the certification process can be found at: <https://nfb.org/braille-transcribing>.¹⁵
- Translations should be produced by qualified transcribers, i.e., certified sign language interpreters or fluent bilingual users of ASL and English.¹⁶
- Whenever possible, transcripts should be reviewed for accuracy by someone other than the transcriber.

CART

Description

Communication Access Realtime Translation (CART) is often conflated with captioning, in that it converts spoken word into text. However, unlike captioning, CART is presented as a text stream and is not embedded within other visual media. CART is often used for meetings where the text output is displayed on a laptop, monitor, or projection screen. Captioning on the other hand refers to audible dialogue and relevant sounds embedded into a video or other media stream. Captioning can be either “open” in that the captions are always displayed, or “closed” to allow the user to toggle them on or off. All webcast events at the FCC must be captioned. For more information on captioning, see [Multimedia Access/ Video Content](#) on page 14.

Best Practices

- For any webcast, Contact the Audio Visual Production staff to request captioning services (see [FCC Points of Contact / Audio Visual Support](#) on page 5). Make sure the captions are also available to any attendees in the meeting room.

¹⁵ Braille transcribers were historically certified through the Library of Congress, National Library Service for the Blind and Physically Handicapped (NLS). In 2007, a contract was awarded to the National Federation of the Blind (NFB) to administer the National Braille Transcribing and Proofreading Certification Program.¹⁵ However, the Librarian of Congress and the NLS Director still authorize and issue the certifications awarded to Braille transcribers and proofreaders. See <https://nfb.org/programs-services/braille-certification>.

¹⁶ The Registry of Interpreters for the Deaf (RID)¹⁶ is the national certifying body for sign language interpreters. See www.rid.org .

- If CART is requested for a meeting or phone call, contact the FCC's Section 504 Officer to make arrangements.
- Consult with the Section 504 team about the physical layout of the meeting space. Seating may need to be adjusted to ensure clear sightlines to a display showing the CART stream.
- Send the CART URL (provided by the Section 504 team) to remote attendees.
- When using in-room amplification or conference phones, ensure all participants are using microphones or satellite microphones. Remote captioners can only hear what is broadcast through the sound system or phone bridge, so it is vital that all participants use a microphone when speaking.

Resources

- CART: https://www.ncra.org/docs/default-source/uploadedfiles/resources/cart-and-captioning-resources/cart-flyer.pdf?sfvrsn=2bc298a8_6

Assistive Listening

Description

Assistive Listening Devices (ALD's) or Assistive Listening Systems (ALS) use either in-room microphones or a dedicated microphone to broadcast an audio signal directly to receivers that can amplify the sound for people who need additional sound reinforcement (e.g. people who are deaf or hard of hearing). These systems can be either built in to the room (often called a "loop"), portable systems with multiple microphones and receivers, or personal systems with one microphone and one receiver. The technology varies, but the Commission has access to several such systems and also will accommodate individuals bringing their own personal transmitter/receiver if requested.

- Make sure that assistive listening devices with neckloops (for people with hearing aids) and ear buds are available. The Commission Meeting Room is equipped with a fixed FM listening system. There are also 2 portable FM systems that can be used throughout the building and at remote locations. Contact the Section 504 Officer or the Audio Visual Production staff to request captioning services (see [FCC Points of Contact / Audio Visual Support](#) on page 5).
- When microphones are provided, make sure that all participants use them. For meetings in the Commission Meeting Room, using the microphones

will ensure that amplification is provided for everyone in the room, the assistive listening system, and the captioners. Captioners and those relying on the assistive listening system can only hear what is broadcast through the sound system, so it is vital that all participants use a microphone when speaking.

- If people who are hard of hearing bring their own assistive listening devices (typically a small microphone and single receiver), comply with requests to use those devices. This will likely involve passing the microphone to the active speaker and avoiding crosstalk as much as possible.

Resources

- http://www.asha.org/public/hearing/treatment/assist_tech.htm

Tactile Sign Language Interpreting

Description

Individuals who are DeafBlind may rely on Tactile Sign Language interpreting to access spoken English at Commission meetings or events. This is a specialized form of sign language interpreting wherein the DeafBlind individual will physically touch the hands of the interpreter as they are signing. This is distinct from protactile interpreting, though they may appear to be similar to the casual observer. Tactile and protactile interpreting may both be provided by a Certified Deaf Interpreter (CDI) working in conjunction with a hearing interpreting team. CDIs have natural language fluency and a visual way of being that gives them a unique advantage in providing this type of service.

- Make sure that meeting publicity includes an Accessibility Statement (see [Accessibility Statements](#) on page 12 that accurately reflects the accommodations that will be provided, and/or a Statement that explains how to submit requests for accommodations.
- Contact the Section 504 Officer (see [Contact Information/Section 504 Issues](#) on page 5) for guidance on the provision and acquisition of accommodations for people who are DeafBlind. Such services are individualized to match the needs of the consumer in question.
- If you receive a request for tactile interpreting services, collect as much information about the requestor's accommodation needs as possible and pass that information on to the Section 504 team. Be sure to note the requestor's name, contact information, and the specific services they requested.

- Be prepared to rearrange chairs so that participants who are DeafBlind can maximize access to the services they need. Be aware that some close vision and tactile interpreters are themselves deaf. Deaf interpreters take in information visually from other interpreters or signing participants and interpret the information to individuals who are DeafBlind.
- Be patient. When individuals have disabilities affecting both vision and hearing, it means that both visual and auditory information must be conveyed to them. This takes time. Be prepared for communication to proceed more slowly than usual.

Alternate Format Documents

Description

The Commission can prepare documents in large print, braille, audio, text file, or other electronic formats to help improve accessibility of such documents for people with disabilities. The Commission employs an alternate formats specialist in the Web and Print Publishing Division to fulfill these requests. The Commission also accepts comments on proceedings in alternate formats. Comments that are submitted in an alternate format are filed in the format in which they are received. If the commenter includes a print transcript or summary of the information contained in the alternate format document, it will be filed with the submission. Comments must be identified with a label or other accompanying document that provides, in print, the commenter's name, address, and the docket number associated with the comment.

Best Practices

- Contact the Section 504 Officer (see [Contact Information/Section 504 Issues](#) on page 5) for guidance on the preparation and acquisition of alternate format documents.
- Make your request as early as possible. Documents are produced on demand, so sufficient time to complete format conversions must be provided.
- For meetings, make sure that meeting publicity includes an Accessibility Statement¹⁷ that accurately reflects the document formats that will be available, and/or a Statement that explains how to submit requests for accessible format documents.

¹⁷ [Accessibility Statements](#) can be found on page 12.

- Print documents distributed on-site should also be available, as appropriate, in accessible formats such as large print, audio, accessible electronic files, and/or Braille. When possible, ask individuals who are known to be blind or have low vision what format they prefer. Do not assume that all people who are blind use Braille.
- For electronic displays, sans serif fonts (fonts without the little “feet” attached to each letter) are considered easier to read, though with improved screen resolution, this may be less true now than it once was.¹⁸
- For large print materials, the size of type required will vary with the needs of the reader and with the font used.
- For generically produced large print items, use a sans serif font with a minimum font size of 16 to 18 points.¹⁹ Some sources consider 14-16 point font to be “enlarged print” and 18 point and larger to be “large print.”
- Avoid using all uppercase letters for large blocks of text. Mixed case letters are easier to read.²⁰
- Use high contrast colors when possible. It may be difficult for people with low vision to see information that is presented in colors that do not contrast strongly.²¹
- Make sure that documents released electronically are in an accessible format such as Microsoft Word, HTML, or ASCII text.

Telecommunications Relay Service

Description

Telecommunications Relay Service (TRS) allows persons with who are deaf, hard of hearing, DeafBlind or who have speech disabilities to place and receive telephone calls. A communications assistant (CA) relays the call back and forth between the person with a disability and the other party to the call. For example, in text-to-voice TRS, a person with hearing loss communicates in text what she wishes to communicate to the other party and the CA repeats in voice what the TRS user has typed. Furthermore, the CA types back to the TRS user what the voice telephone user responds. **Relay services**

¹⁸ For more information about Fonts, see: WebAIM: Web Accessibility in Mind, Articles, “Fonts”: <http://webaim.org/techniques/fonts> .

¹⁹ Lighthouse International, <http://li129-107.members.linode.com/accessibility/> .

²⁰ *Id.*

²¹ *Id.*

are available to the public without action from Commission staff. There is no need for the Commission to schedule or otherwise engage relay services.

- **Internet Protocol Relay:** Internet Protocol Relay Service (IP Relay) allows persons with a hearing or speech disability to use Telecommunications Relay Service through a computer or web-enabled device to communicate through the telephone system with hearing persons. Unlike traditional TRS - where a user contacts a TRS center via telephone lines and a CA calls the receiving party via voice telephone - the first leg of an IP Relay call goes from the caller's computer or other web-enabled device to the IP Relay Center via the Internet, usually through a webpage interface. The second leg of the call, as with traditional TRS, is from the CA to the receiving party via voice telephone through the public switched telephone network.
- **Video Relay Service:** Video Relay Service is a form of Telecommunications Relay Service that enables persons with hearing disabilities who use American Sign Language to communicate with voice telephone users through video equipment, rather than through typed text. Video equipment links the VRS user with a CA so that the VRS user and the CA can see and communicate with each other in signed conversation. Because the conversation between the VRS user and the CA flows much more quickly than with a text-based TRS call, VRS has become an enormously popular form of TRS.
- **Internet Protocol Captioned Telephone Service:** IP CTS is essentially a combination of two other forms of TRS: CTS and IP Relay. CTS allows a person with hearing loss but who can use his or her own voice and has some residual hearing, to speak directly to the called party and then listen, to the extent possible, to the other party and simultaneously read captions of what the other party is saying. In the most common set-up of this service, when an IP CTS user places a call over a CTS telephone (which is equipped with special software and a screen for displaying captions), the call is automatically connected both to the receiving party (over the PSTN) and via the Internet to a captioned telephone CA. Once connected, the CA hears and repeats or re-voices everything the other party says, and voice recognition technology automatically transcribes those words from the CA's voice into text, which is then transmitted directly to the IP CTS user. The use of voice recognition technology allows the captions to appear on the IP CTS user's telephone, nearly simultaneously with the other party's spoken words. There are also versions of IP CTS that for use with a smartphone or personal computer.

- **Speech to Speech Relay:** Speech-to-Speech (STS) is one form of Telecommunications Relay Service (TRS). TRS is a service that allows persons with hearing and speech disabilities to access the telephone system to place and receive telephone calls. STS enables persons with a speech disability to make telephone calls using their own voice (or an assistive voice device). Like all forms of TRS, STS uses a CA to relay the conversation back and forth between the person with the speech disability and the other party to the call. STS CAs are operators who are specifically trained in understanding a variety of speech disorders, which enables them to repeat what the caller says in a manner that makes the caller's words clear and understandable to the called party.

Best Practices

- Do not disconnect calls if or when you hear a relay operator introduction. This can sometimes resemble a telemarketer introduction
- Be patient when participating in a relay call. Allow for sufficient pauses for the CA to be able to catch up to the flow of conversation.
- Ask for clarification and repetition as necessary to ensure full understanding by both parties to the call.
- For teleconference or multi party calls, introduce yourself by name before you begin to speak.

Direct Video Calling

Description

Direct Video Calling (DVC) is an alternative to relay services for entities receiving incoming calls from members of the public who use American Sign Language. Rather than relying on a Video Relay Service interpreter to serve as an intermediary between a deaf caller and a hearing employee at the agency or company, the entity receiving the call employs a deaf person fluent in ASL to take such calls directly, without the need for an interpreter. This direct service model significantly improves the efficiency of calls and customer satisfaction as compared to calls made through VRS. **This is a systemic accommodation and is not something requested on an ad hoc basis.** The Commission offers DVC services as an alternative to calling our direct voice line:

ASL Consumer Support Line
844-4-FCC-ASL (844-432-2275)

Best Practices



- Include the ASL Consumer Support Line contact number in all materials where the general FCC contact information block is provided.
- Offer the ASL Consumer Support Line option to consumers interacting with the Commission via VRS.
- Suggest DVC implementation to other companies, entities or agencies inquiring about ways to better reach deaf or hard of hearing consumers, or who otherwise operate call centers that are often contacted by ASL users via VRS. For more information such entities can contact DVC@fcc.gov.

Resources

- <http://www.fcc.gov/encyclopedia/telecommunications-relay-services-trs>

Protactile Interpreting

Description

Protactile is a language that grew organically from the DeafBlind community interacting directly without sighted intervention. It is distinct from both visual ASL and tactile ASL, requiring a unique mix of cultural awareness and language proficiency to provide effective interpreting services. The language is inextricably linked with a philosophy of respect for the autonomy of DeafBlind individuals and respect for touch-centric communication and experience. There is currently a small pool of protactile qualified interpreters in the US.

Best Practices

- If protactile interpreting services have been requested for a meeting, contact the FCC's Section 504 Officer (see [Contact Information/Section 504 Issues](#) on page 5) to make arrangements. Be sure to emphasize that the request is for protactile interpreters rather than sign language interpreters so that appropriately trained providers can be assigned.
- Make requests for protactile interpreting as early as possible.
- Be comfortable staying in physical contact with the protactile interpreter and the DeafBlind consumer during any interaction. Physical contact (referred to as reciprocity) is a principal tenet of protactile, even when your communication is being mediated by an interpreter.
- Proactively look for opportunities to allow protactile consumer to interact with the physical space and any materials through touch.

Sighted Guide/SSP

Description

In addition to offering an arm or elbow to guide people who are blind or visually impaired through the environment, sighted guides and support service providers (SSPs) provide information about the layout of meeting spaces, people in the room, and food or other items meeting attendees need to interact with. People who are DeafBlind are more likely to request to work with SSPs as opposed to sighted guides, and the language proficiency requirements for such an SSP will change accordingly (e.g. protactile, tactile ASL, revoicing for an assistive listening device).

To request sighted guides or SSPs, contact the FCC's Section 504 Officer (see [Contact Information/Section 504 Issues](#) on page 5).

Oral Interpreters/Transliterators

Oral interpreters are sometimes also called oral transliterators because they receive information in English and produce output in English as well (unlike interpreters who generally receive information in one language and translate the information into a different language).²² Oral interpreters/transliterators are skilled in the techniques of mouthing words clearly and effectively so that people who are skilled in lipreading or speechreading can understand what is being said by watching the interpreter's face, body language, and lips.

To request oral interpreters/transliterators, contact the FCC's Section 504 Officer (see [Contact Information/Section 504 Issues](#) on page 5).

²² While many people use the word "lipreading," experts consider the term to be inaccurate. "Speechreading" is the more appropriate term for the process of understanding speech through visual perception of spoken language. For more information about speechreading, see the Gallaudet University Laurent Clerc National Deaf Education Center website: <https://www3.gallaudet.edu/documents/clerc/SI-speech.pdf>

Appendix

Tips for Working with Sign Language Interpreters

- Speak clearly in a normal tone of voice and at a natural pace; do not exaggerate lip movements (if the person who is deaf or hard of hearing has speechreading/lipreading skills, exaggerated mouth movements will distort rather than enhance understanding).
- Make sure there is adequate lighting. Avoid lighting that places shadows on the interpreter or that makes it difficult to see the interpreter's hands and face – for example, do not use a window or other bright/glaring light as a backdrop for the interpreter. Instead, try to direct the light onto the interpreter's face and hands so that they can be clearly seen.
- If possible, position the interpreter so that the person who is deaf or hard of hearing can see both the interpreter and the speaker.
- If speakers are likely to use acronyms, jargon, or vocabulary peculiar to your field, it is helpful to provide the interpreter with a list of such terms and their definitions prior to the start of the meeting.
- Speak directly to the person who is deaf or hard of hearing. Avoid asking the interpreter to “tell him” or “ask her.”
- Maintain eye contact with the person who is deaf or hard of hearing, not with the interpreter. It may help to remind yourself that your conversation is with the person who is deaf or hard of hearing, not with the interpreter. This may seem difficult at first because you will hear the interpreter's voice and will see the person who is deaf or hard of hearing shifting her gaze between you and the interpreter. Keep in mind that the person who is deaf or hard of hearing must look at the interpreter in order to understand what you are saying.
- Realize that the interpreter is speaking for the person who is deaf or hard of hearing. When the interpreter says, “I” or “me,” she is speaking as the person who is deaf or hard of hearing, not as herself.
- Do not attempt to have private conversations with a working interpreter. It is the job of the interpreter to convey everything that is said or heard, including your efforts at engaging the interpreter's attention.
- In large gatherings where microphones are used, make sure that the interpreters have microphones as well as clear lines of sight to the speaker(s) who are deaf or hard of hearing. Allow time before the start of

the presentation for the interpreters and the speaker(s) to meet and discuss details of the interpretation process.

- Events lasting one hour or more will usually require two interpreters. A team of two interpreters increases accuracy and lessens the mental and physical strain associated with interpreting. When interpreters work as a team, they will generally switch roles every twenty to thirty minutes.
- If you are in doubt as to the best arrangements for your situation, ask the interpreters and the people who are deaf or hard of hearing. They are the experts on what will work best for them.
- Use the term “interpreter,” not “signer,” as interpreting is a complex process that involves much more than the ability to “sign.”

Tips on Language Use

People First Language

When writing or talking about disabilities, use “**people first**” terminology whenever possible. For example:

- People with disabilities, **not** disabled people.
- Individual with autism, **not** the autistic person.
- Student with an intellectual disability, **not** mentally retarded.²³
- People who are blind, **not** the blind person.

Identity

Many people with disabilities consider their disability to be an integral part of their identity. They do not consider themselves to be “victims” of their disabilities or to “suffer” from their disabilities. Be sure to use people first language as described above. For example:

- Person with cerebral palsy, **not** suffers from cerebral palsy
- Person who had a stroke, **not** is a stroke victim
- Person with AIDS, **not** suffering from AIDS.

²³ Rosa’s Law was signed on October 5, 2010 and requires that Federal legislation use the term “an intellectual disability” rather than “mental retardation” and the term “individuals with intellectual disabilities” rather “than individuals who are mentally retarded.” The text of Rosa’s Law can be found at: <http://www.gpo.gov/fdsys/pkg/BILLS-111s2781enr/pdf/BILLS-111s2781enr.pdf> .

- Person who uses a wheelchair **not** wheelchair bound.
- Wheelchair user, **not** confined to a wheelchair.

Hearing Impaired vs. Deaf / Hard of Hearing

The term, “hearing impaired,” is often used in official documents to refer to people who are deaf or hard of hearing. However, many in the deaf and hard of hearing community strongly prefer the terms deaf, hard of hearing, or person with hearing loss. To them, the term “hearing impaired” implies that individuals with hearing loss are somehow “broken” and in need of repair. For example:

- People with hearing loss, **not** the hearing impaired.
- Deaf / hard of hearing, **not** deaf-mute / deaf and dumb.

Handicap vs. Disability

When referring to individuals with disabilities, use “disability” rather than “handicap.” Today, “handicap” generally has a pejorative connotation.

- People with disabilities, **not** the handicapped.

Deaf-blind, Deaf blind, Deafblind, or DeafBlind

There is no consensus on the proper spelling of the term, deaf-blind. It can be seen in print with or without a hyphen or rendered as one compound word with varying capitalization.

The American Association of the Deaf-Blind (AADB)²⁴ includes a hyphen between the words “Deaf” and “Blind,” as does the Helen Keller National Center for Deaf-Blind Youths & Adults (HKNC).²⁵

However, Deafblind International (DbI),²⁶ Deafblind UK,²⁷ and DeafBlind Citizens in Action (DBCA)²⁸ use the single compound term, deafblind.

²⁴ <http://www.aadb.org> .

²⁵ <http://www.hknc.org> .

²⁶ <http://www.deafblindinternational.org> .

²⁷ <http://www.deafblind.org.uk> .

²⁸ <https://dbcitizens.org/>

Disability Statistics

Overall Disability Statistics

- U.S. Census Bureau, People and Households, Disability
 - <https://www.census.gov/topics/health/disability.html>

Deaf and Hard of Hearing Statistics

Statistics about deaf and hard of hearing populations can be particularly difficult to find. Gallaudet University has gathered a collection of statistical resources on its website including the following:

- Gallaudet University, Library, LibGuides, Deaf Statistics
 - <http://libguides.gallaudet.edu/content.php?pid=119476&sid=102911>
[1](#)
- Gallaudet University, Library, LibGuides, Deaf Population of the U.S.
 - <http://libguides.gallaudet.edu/content.php?pid=119476&sid=102919>
[0](#)
- Gallaudet University, Gallaudet Research Institute, Can You Tell Me How Many Deaf People There are in the United States?
 - <http://research.gallaudet.edu/Demographics/deaf-US.php>
- Gallaudet University, Library, LibGuides, Deaf Statistics, American Deaf-Blind Population
 - <http://libguides.gallaudet.edu/content.php?pid=119476&sid=102920>
[3](#)

Disability Rights Laws

Americans with Disabilities Act of 1990

- PL 101-336, July 26, 1990
- 104 Stat. 327
- 42 U.S.C. §§ 12101 et seq.

Implementing Regulations:

- 29 CFR Parts 1630, 1602 (Title I, EEOC)
- 28 CFR Part 35 (Title II, Department of Justice)
- 49 CFR Parts 27, 37, 38 (Title II, III, Department of Transportation)

- 28 CFR Part 36 (Title III, Department of Justice)
- 47 CFR §§ 64.601 et seq. (Title IV, FCC)

Architectural Barriers Act of 1968

- PL 90-480, August 12, 1968
- 82 Stat. 718
- 42 U.S.C. §§ 4151 et seq.

Implementing Regulation:

- 41 CFR Subpart 101-19.6

Individuals with Disabilities Education Act

- 20 U.S.C. §§ 1400 et seq.

Implementing Regulation:

- 34 CFR Part 300

Rehabilitation Act of 1973

- PL 93-112, September 26, 1973
- 87 Stat. 355

Rehabilitation Act of 1973, as amended

As amended via the Workforce Investment act of 1998

- PL 105-220, August 7, 1998
- 112 Stat. 936
- 29 U.S.C. § 701-797

Section 501

- 29 U.S.C. § 791

Implementing Regulation:

- 29 CFR § 1614.203

Section 503

- 29 U.S.C. § 793

Implementing Regulation:

- 41 CFR Part 60-741

Section 504

- 29 U.S.C. § 794

Section 508

- 29 U.S.C. § 794d

Rosa's Law

- PL 111-256, October 5, 2010
- 124 Stat 2643

Telecommunications Act of 1996

- PL 104-104, January 3, 1996
- 110 Stat. 56
- 47 U.S.C. §§ 255, 251(a)(2)

Twenty-First Century Communications and Video Accessibility Act of 2010

- PL 111-260, October 8, 2010
- 124 Stat 2751
- PL 111-265 (technical amendments)
- 124 Stat 2795
- 47 U.S.C. § 618(b)

A Guide to Disability Rights Laws

- U.S. Department of Justice, Civil Rights Division, Disability Rights Section
 - <http://www.ada.gov/cguide.htm>

Disability Access Symbols²⁹

- Access for Low Vision



- Physical Access



- Large Print



- Assistive Listening System

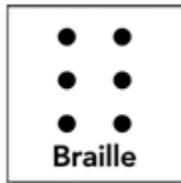


- Audio Description / Video Description



²⁹ Symbols may be downloaded from <https://graphicartistsguild.org/downloadable-disability-access-symbols/>

- Braille



- Closed Captioning



- Sign Language Interpretation



- TTY



- Volume Control Telephone



Other resources

- More information on Braille:
 - <https://www.afb.org/blindness-and-low-vision/braille/what-braille>
- More information on cued speech:



FCC SECTION 504 HANDBOOK
APPENDIX - OTHER RESOURCES

- <http://www.cuedspeech.org>
- More information about oral interpreting/transliterating
 - <https://rid.org/about-rid/about-interpreting/standard-practice-papers/>