**AGENCY OF HUMAN SERVICES DEPARTMENT OF DISABILITIES, AGING & INDEPENDENT LIVING**

Virtual Accessibility for Deaf and Hard-of-Hearing and DeafBlind Participants

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Contents

[INTRODUCTION 1](#_Toc92114353)

[ETIQUETTE OF USAGE WITH VIRTUAL PLATFORMS 1](#_Toc92114354)

[FEATURES TO CONSIDER WITH VIRTUAL PLATFORMS 1](#_Toc92114355)

[CLOSED CAPTIONING 2](#_Toc92114356)

[CONSIDERATIONS WHEN WORKING WITH AN ASL INTERPRETER/S 3](#_Toc92114357)

[USER’S GUIDE TO STREAMTEXT 3](#_Toc92114358)

[ADOBE CONNECT 4](#_Toc92114359)

[BLUE JEANS 4](#_Toc92114360)

[CISCO WEBEX 4](#_Toc92114361)

[GOOGLE MEETS 4](#_Toc92114362)

[GO TO MEETING 4](#_Toc92114363)

[LIFESIZE 4](#_Toc92114364)

[MICROSOFT TEAMS 4](#_Toc92114365)

[ZOOM 4](#_Toc92114366)

[RESOURCES 5](#_Toc92114367)

[VANCRO 5](#_Toc92114368)

[NATIONAL COURT REPORTERS ASSOCIATION 5](#_Toc92114369)

[WHITE COAT CAPTIONING 5](#_Toc92114370)

# **INTRODUCTION**

This document describes how to set up captioning, how to set up American Sign Language (ASL) interpreters and most importantly, how to provide equal accessibility to your D/deaf and Hard-of-Hearing and D/deafB/blind (D/HH/DB) participants. It will demonstrate a matrix of current accessibility features across various virtual platforms, and guidance on how to evaluate them.

Different applications have different features and approaches to accessibility. When it comes to choosing the appropriate video-conferencing platforms, you must consult with D/HH/DB users which is ideal. At times, security can be a deciding factor. You must contact your privacy and security officer to determine you can securely implement the approaches suggested by D/HH/DB users.

## 

## Etiquette of Usage with Virtual Platforms

Some suggestions listed here are for all D/HH/DB participants. Not all rely on ASL interpreters or captioning.

* Assign the host or co-host to monitor the meetings or presentations to complete the following tasks: pinpoint the name and title of the person speaking, ensure the speaker’s face including interpreters’ face is not obscured on the video feed screen.
* Assign someone to monitor the chat room while taking on the responsibility to repeat what is being said in the chatroom for those who are visually impaired or don’t have easy access to the chatroom and to be the timekeeper.
* Ensure all privacy settings of participants’ videos are off except the interpreter and whoever is speaking. It provides better visibility for your participants who relies on ASL interpreting or lipreading. If you choose to record the meetings, it’ll be easier for those to watch. Keep in mind the captioning needs to be added onto the recording later.
* Type your name and use the reaction feature at the same time. It provides better guidance on who to follow/listen. As a person with hearing loss, we cannot pick up on the auditory cues of when a person’s done speaking or whether the context is being understood or not. We rely on visual cues. It is common courtesy, so all participants (hearing or person with a hearing loss) are on the same page.
* Provide a copy of the agenda prior to commencing the meeting.
* Enunciate clearly at a comfortable volume and normal pace. Avoid whispering and mumbling.
* Allow transcription/captioning to be offered simultaneously along with the speakers.  A person can put in a request for a copy from the captioning company. A hearing person can take notes while listening to a presentation or webinar. It’s considered a form of reasonable accommodations to allow a person to decipher their own notes from the meeting later.
* Avoid physical distractions such as covering your mouth while speaking, leaning on elbow on a table with your palm partially obscuring your mouth, looking down or away from the camera while speaking thereby obscuring your mouth and face. Not all rely on captioning or ASL interpretations.
* Give D/HH/DB time to review/read the slides. D/HH/DB participants cannot listen and read at the same time as hearing participants can. Avoid repeating what is on the slides.

## Features to Consider with Virtual Platforms

* Allow integration with captioning services. Captions embedded on the video can reduce split visual attention hence it is better to use remote Captioning Access RealTime Translation (CART) and StreamText. A person with visual limitations could benefit from viewing the captioning on a separate monitor because there one would be able to adjust the font’s size, the font’s color, and the background’s color.
* Enable user-customized appearance and font size of captions. Some video conferencing systems have hard-to-read caption defaults.
* Integrate Automated Speech Recognition (ASR) that feeds off the conference audio tends to provide better accuracy and usability than ASR that runs on a separate system.
* Allow participation via video relay services and IP (Internet Protocol) Captioned Telephone Services.
* Pin videos to support sign language interpreters when video follows the active speaker. If the video follows the speaker, the participant loses access to the interpreter; conversely, a signing participant may want to keep the video on themselves rather than on the interpreter providing the translation into spoken language.
* Allow participants to control the size of their video feed, to allow interpreters to work with the video and allow lip readers to focus on the speaker’s mouth.
* Allow participants to enlarge videos and share their screen at the same time. Some virtual platforms do not have that as an option therefore a thumbnail view of video when a screen or presentation is shared means it will be too small for a person to understand sign language or lip-read.
* Use text-chat functionality with prominent visual notifications to allow participants to alert hosts and other participants of accessibility problems and receive responses.
* Show multiple videos without privacy setting on can lower the resolution or frame rate too much for the quality of the speaker or signer’s video to remain intact.
* Avoid overflow of participants, it is recommended that they can see each other on one screen.
* Offer better support for co-host or moderator roles.

## Closed Captioning

In any virtual platforms you choose, you can add closed captions in RealTime to meetings and webinars for attendees who are D/HH/DB, as well as for those who have cognitive, learning, or other disabilities. To do so, you will need to hire a CART (Communication Access Realtime Translation) reporter from a third-party provider at least one week or more in advance. The [Association for Court Reporters and Captioners](https://www.ncra.org/?utm_medium=referral&utm_source=idealist) maintains a national directory. Many Vermonters are likely to use either [Alternative Communication Service](https://www.acscaptions.com) (ACS) or [White Coat Captioning](https://whitecoatcaptioning.com/) or [VITAC](https://vitac.com/). A host can put in a request for a copy of the transcript. It is their responsibility to notify the participants they can put in a request for a copy. Before distributing the transcript, review and make any necessary edits.

You will need to send the third-party provider the following information: Event title and description, date, time, virtual platform link, onsite contact’s name and number, and preparatory materials (e.g., agenda, speaker names, presentations). The provider will then schedule a captioner and send you a confirmation email with the captioner’s name and email address.

The CART reporter can either caption directly to a virtual platform or/and caption onto an additional browser on a separate device through [StreamText](https://streamtext.net/?utm_medium=referral&utm_source=idealist), or to both simultaneously. Attendees may request both. You must notify the provider of your choices. For the additional monitor on a separate device, ensure that the page is fully customize for each viewer to set their own font size, style, color, and background. For captions to be directly connected into the Zoom meeting, the meeting host must activate closed captioning in Zoom and assign our captioner. It is a good idea for the meeting host and captioner to log onto the meeting a few minutes early.

This document’s intent is to provide options. It is not intended to advocate for replacing the use of live captioners which is more accurate. It is best not to rely on the AI captioning feature because words can come out as inaudible or misspell certain terminology for instance dale instead of DAIL, death instead of deaf, or stuffing instead of Stephen. It would be considered more inclusive to provide captioning in RealTime to allow D/HH/DB participants to participate in meetings in the moment.

## Considerations When Working with an ASL Interpreter/s

Beyond the technical steps required for working with ASL interpreters on any virtual platform, there are other best practices for ensuring an effective meeting:

* The speaker’s video should be the only one unmuted. It allowed the interpreters to focus on the speaker’s voice.
* The host or moderator is responsible to repeat the questions being typed in the chatroom. A participant with limited vision may or may not be able to read it.
* Either the host can check in if anyone needs a break or the team of interpreters can take turns. In theory, interpreters should take turn every 20-30 minutes. It would prohibit both physical and mental fatigue on the interpreters’ part.
* It is recommended whoever is speaking at the moment, and the ASL interpreter(s) share their videos while everyone else keeps their video’s privacy setting on. For instance, on Zoom it is best practice to put your setting under Speaker’s View. This is to help with technical bandwidth concerns and to better facilitate the process below. Participants should participate in the live session by typing in the chat box.
* For videophone users, on a separate device (mobile device or computer), you would log in to the videophone app and connect to the interpreter/s with the virtual platform Audio/Dial-up number and inform the interpreter that you are joining a virtual platform (such as Zoom, Teams, GoTo, etc.) meeting and they will go ahead and connect that call.
  + Once connected, the interpreter will ask for the Meeting ID, following with a #(pound), then the participant number following with a #(pound). Once these two numbers are given the interpreter will be able to listen and interpret hearing participants’ voices. The interpreter can also voice for you as well if needed. D/HH/DB participants will now have two devices to view two different apps – virtual platform and video relay service vendor.

## User’s Guide to StreamText

StreamText is designed to integrate with web-based applications. StreamText works with many online meeting software platforms. Text streams are readable by JAWS and other screen reader packages. It is compatible with Chrome, Internet Explorer, Firefox, Safari, Android, iOS, and many others.

1. Click on the assigned URL by the captionist.
2. After opening the RealTime page, you will see a green checkmark in the lower right corner to indicate you are connected. If you see a yellow circle with an exclamation point, you are not connected.
3. Tabs at the top of the screen that will allow you to change the appearance of your RealTime screen. Click on Theme, Font Size, Font Family, Background, and Text Color to personalize the appearance of the RealTime page.
4. If you uncheck the box under Scroll, RealTime text will stop scrolling.
5. Click View Transcript to go back and review the text. While you are viewing the transcript, RealTime captions continue to run in the background. To return to RealTime, simply close the transcript.

Below each subcategory for various virtual platforms, you will see direct links on how to enable closed captioning or how to ensure better visibility on speakers and/or interpreters.

# **ADOBE CONNECT**

ACCESSIBILITY FEATURES

[CLOSED](https://helpx.adobe.com/adobe-connect/using/closed-captioning-html-client.html) CAPTIONING

[MANAGE MEETING ATTENDEES](https://helpx.adobe.com/adobe-connect/using/user-guide.html/adobe-connect/using/attendees.ug.html)

[VIEW AND MODIFY A PARTICIPANT LIST](https://help.adobe.com/en_US/connect/8.0/using/WS11d1def534ea1be08a52b610b38bfaa95-7f93.html#WS11d1def534ea1be08a52b610b38bfaa95-7f91)

# **BLUE JEANS**

[ACCESSIBILITY FEATURES](https://support.bluejeans.com/s/article/Accessibility-Features)

[CLOSED CAPTIONING USER GUIDE FOR MEETINGS](https://support.bluejeans.com/s/article/Closed-Captioning-for-Meetings-User-Guide)

[EVENTS: CLOSED CAPTIONING SUPPORT (BLUEJEANS.COM)](https://support.bluejeans.com/s/article/Closed-Captioning-for-Events)

[EVENTS: ACCESSIBILITY FEATURES](https://support.bluejeans.com/s/article/BlueJeans-Events-Accessibility-Features)

[DESKTOP APP: PARTICIPANT PINNING](https://support.bluejeans.com/s/article/Fixing-a-participant-to-always-appear-as-main-speaker)

[DESKTOP APP: PARTICIPANT SPOTLIGHT](https://support.bluejeans.com/s/article/Spotlight)

Note: Participants can now pin up to 25 participants at a time, depending on layout.

# **CISCO WEBEX**

[ACCESSIBILITY FEATURES](https://www.webex.com/accessibility.html)

[HOW DO I ENABLE CLOSED CAPTIONS?](https://help.webex.com/en-us/WBX18865/How-Do-I-Schedule-Closed-Caption-Meetings)

[HOW TO PARTICIPATE AND JOIN A WEBEX MEETING](https://cfsa.dc.gov/sites/default/files/dc/sites/cfsa/publication/attachments/How%20to%20Participate%20in%20WebEx%20Meetings%20%28How%20to%20Pin%20a%20Presenter_Interpreter%29.pdf)

[PLAY OR DOWNLOAD A WEBEX RECORDING](https://help.webex.com/en-us/aplwwj/Play-or-Download-a-Webex-Recording#:~:text=Select%20Recordings%20on%20the%20left,that%20you%20hosted%20and%20recorded.&text=To%20play%20a%20recording%2C%20click%20the%20name%20of%20the%20recording.&text=If%20you%27re%20using%20WBS33.)

# **GOOGLE MEETS**

[GOOGLE MEET ACCESSIBILITY](https://support.google.com/meet/answer/7313544?hl=en)

[USE CAPTIONS IN A VIDEO CALL](https://support.google.com/meet/answer/9300310?co=GENIE.Platform%3DDesktop&hl=en)

[USE CAPTIONS IN A MEETING](https://support.google.com/meethardware/answer/9495962)

[CHANGE THE LAYOUT OF MEETING PARTICIPANTS](C:\\Users\\megan.tierney-ward\\AppData\\Local\\Microsoft\\Windows\\INetCache\\Content.Outlook\\F41DNDXG\\Change the layout of meeting participants)

# **GO TO MEETING**

[ACCESSIBILITY FEATURES](https://support.goto.com/meeting/help/what-accessibility-features-are-available-in-gotomeeting-classic)

[HOW DO I MANAGE MY ATTENDEES?](https://support.goto.com/meeting/help/view-and-manage-attendees-desktop-app-g2m040013)

[HOW DO I USE MEETING TRANSCRIPTIONS?](https://support.goto.com/meeting/help/transcriptions-smart-meeting-assistant-g2m040030)

# **LIFESIZE**

[ADDING CAPTIONS TO VIDEOS](http://vc.iu17.org/docs/wp_out-en/adding-captions-to-videos.html#:~:text=Adding%20Captions%20to%20Live%20Streams,Click%20Start%20caption.)

# **MICROSOFT TEAMS**

[USE LIVE CAPTIONS IN A TEAMS MEETING](https://support.microsoft.com/en-us/office/use-live-captions-in-a-teams-meeting-4be2d304-f675-4b57-8347-cbd000a21260)

[USING SPOTLIGHT VS. PIN FOR TEAMS MEETINGS](https://www.marquette.edu/microsoft-teams/spotlight-vs-pin-teams-meeting.php#:~:text=Pin%20a%20participant%20in%20a%20Teams%20Meeting%20%28your,only%20your%20view%29%20regardless%20of%20the%20speaker.%20)

# **ZOOM**

[INTEGRATING A THIRD-PARTY CLOSED CAPTIONING SERVICE](https://support.zoom.us/hc/en-us/articles/115002212983-Integrating-a-third-party-closed-captioning-service)

[LANGUAGE INTERPRETATION IN MEETINGS AND WEBINARS](https://support.zoom.us/hc/en-us/articles/360034919791-Language-interpretation-in-meetings-and-webinars)

[VIEWING CLOSED CAPTIONING IN ZOOM ROOMS](https://support.zoom.us/hc/en-us/articles/115002522006-Viewing-closed-captioning-in-Zoom-Rooms)

[CLOSED CAPTIONING AND LIVE TRANSCRIPTION](https://support.zoom.us/hc/en-us/articles/207279736-closed-captioning)

[PINNING PARTICIPANTS' VIDEOS](https://support.zoom.us/hc/en-us/articles/201362743-Pinning-participants-videos)

[SPOTLIGHTING PARTICIPANTS’ VIDEOS](https://support.zoom.us/hc/en-us/articles/201362653)

[MANAGING PARTICIPANTS IN A MEETING](https://support.zoom.us/hc/en-us/articles/115005759423-Managing-participants-in-a-meeting)

[ENABLING AND ADDING A CO-HOST](https://support.zoom.us/hc/en-us/articles/206330935-Enabling-and-adding-a-co-host)

# **RESOURCES**

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## Vancro

Website: [Vancro](file:///C:\Users\megan.tierney-ward\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\F41DNDXG\Vancroiis.com)

Email: [Interpretingservices@vancro.com](mailto:Interpretingservices@vancro.com)

Videophone: [802-275-0104](tel:8022750104)

Voice: [802-271-0103](tel:8022710103)

## 

## National Court Reporters Association

## Website: [NCRA Sourcebook](https://portal.ncra.org/Sourcebook)

## White Coat Captioning

Website: [White Coat Captioning](https://whitecoatcaptioning.com)

**Email:** [info@whitecoatcaptioning.com](mailto:info@whitecoatcaptioning.com)

Note: Jitsu is not listed in this document due to insufficient cited notation on captioning or participants such as interpreters.