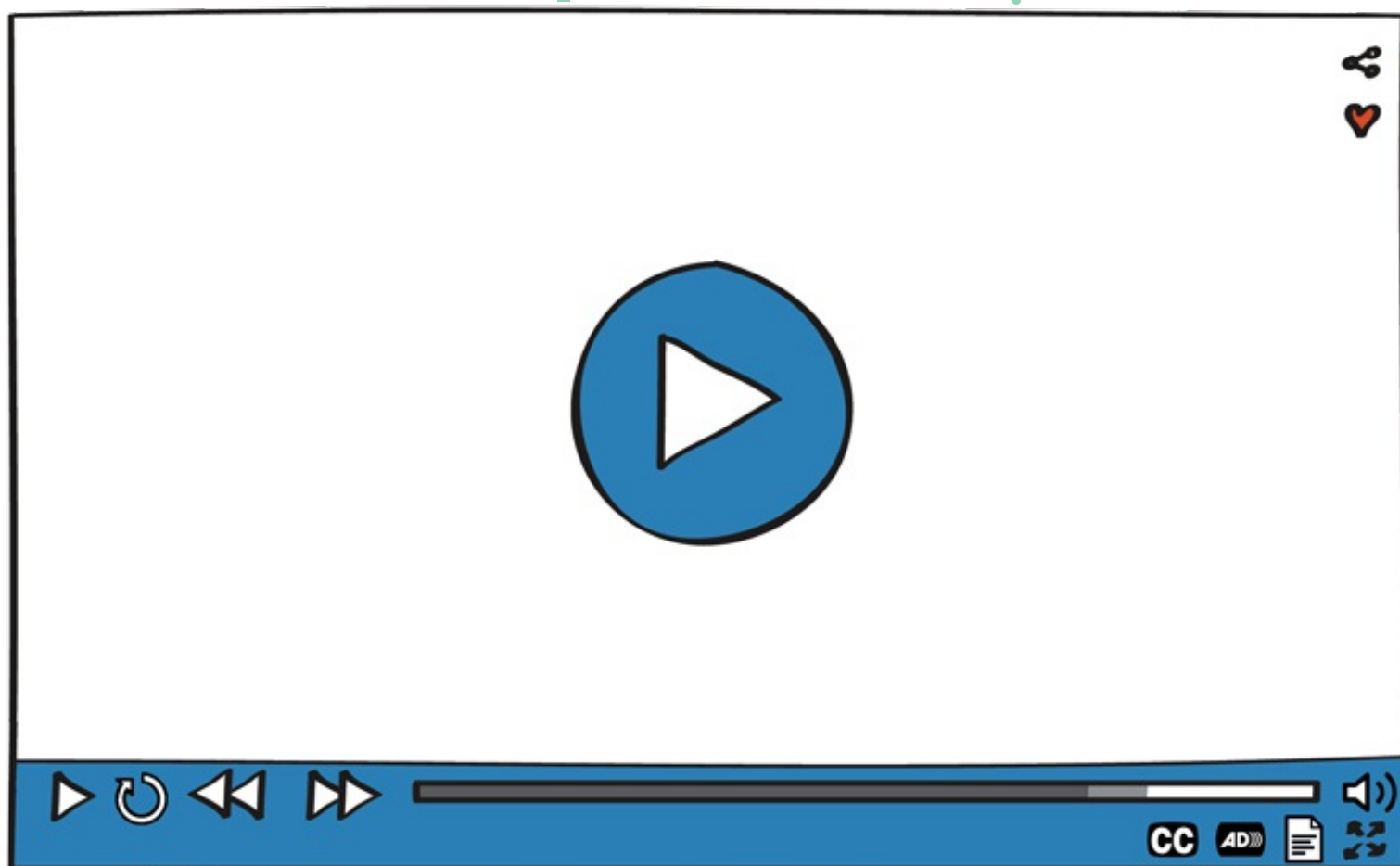




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What is accessible video?

"Videos should be produced and delivered in ways that ensure that all members of the audience can access their content.

An accessible video includes captions, a transcript, and audio description and is delivered in an accessible media player."

-University of Washington



Closed Caption Basics

Captions are time-synchronized text that can be read while watching a video.

They are usually noted with a CC icon.

Captions originated as an FCC mandate in the 1980s, but the use has expanded to online video and internet applications.

Captions assume the viewer can't hear, so they include relevant sound effects, speaker identifications, and other non-speech elements that make it easier for the viewer to understand who is speaking.

Vocabulary

Time-Synchronized: Captions align with words being spoken.

Relevant sound effects: Sounds pertinent to the scene must be noted.

Speaker IDs: Identification is necessary, particularly if there are multiple speakers.

Caption placement: Captions should not obstruct visual content and therefore should be moved accordingly.

Non-speech elements: Includes sound effects, speaker IDs, and other elements that are pertinent to the scene.

99% accuracy: This is the industry standard for caption accuracy. Allows for a 1% chance of error.

The Laws on Captioning

ADA Title II: Public entities must ensure "effective communication" with citizens.

ADA Title III: "Places of public accommodation" cannot discriminate against people with disabilities.

Section 504 of Rehabilitation Act: Requires equal access for individuals with disabilities.

Section 508 of Rehabilitation Act: Requires federal communications and information technology to be accessible.

CVAA: Increases the access of persons with disabilities to modern communications.



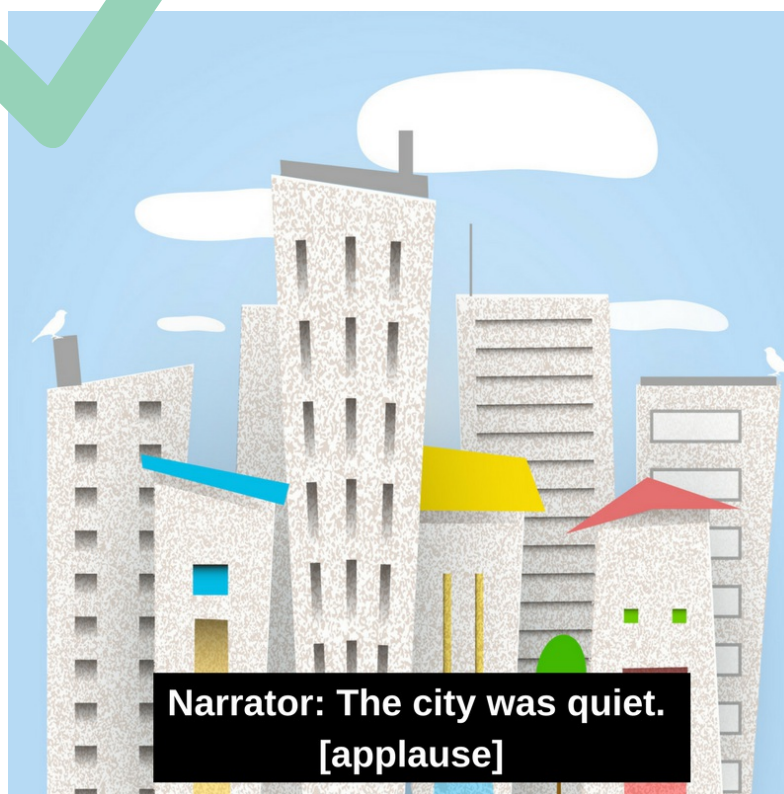
CC



Captions Quality Checklist*

- Accurate:** errorless, with good grammar and punctuation.
- Consistent:** uniformity in style and presentation.
- Clear:** includes speaker identifications and non-speech information.
- Readable:** there is enough time to read captions, captions don't obstruct visual content, and captions are synchronized with audio.
- Equal:** meaning and intention of video is preserved.

*From the DCMP Captioning Key



Are automatic captions good enough?

With automatic speech recognition (ASR) technology, accuracy rates are pretty bad. ASR often misses punctuation, doesn't remove hesitation words, and doesn't note speaker changes or speaker IDs. ASR also misses the important non-speech elements.



FCC Caption Quality Requirements*

- Caption Synchronicity:** “In order to be synchronous, captions must coincide with their corresponding spoken words and sounds to the greatest extent possible.”
- Program Completeness:** “In order for a program’s captions to be complete, captions must run from the beginning to the end of the program, to the fullest extent possible.”
- Caption Placement:** “Captions should not block other important visual content on the screen including, but not limited to, character faces, featured text (e.g., weather or other news updates, graphics and credits), and other information that is essential to understanding a program’s content when the closed captioning feature is activated.”
- Caption Accuracy:** Must be almost perfect. For real-time captioning you can have an accuracy of 98.6%.

*From the FCC

The FCC on Closed Captioning

The Federal Communications Commission (FCC) regulates interstate and international communication via television, radio, and the internet.

The FCC applies to television broadcasters in the US, television content producers, television content distributors, film producers and distributors in the US.

Some web video broadcasters are also affected by the FCC.

Transcripts

Transcripts are a text version of the audio.

Transcripts can contain additional descriptions, explanations, and comments that are beneficial.

Transcripts are braille and screen reader accessible, allowing deaf/blind individuals to access the content.

Transcripts make the content in the video searchable. Using an interactive transcript is a great tool to engage viewers.

Fully accessible video should include both synchronized captions and a descriptive transcript.

If you have captions, creating transcripts is easy. Simply copy and paste the text into a new document.

Are transcripts enough?

Both captions and transcripts are required for accessible video.

Without captions, d/Deaf viewers would have to switch back and forth between the video and the transcript, which is very distracting and not an equivalent alternative.

For audio only content, transcripts are enough.

Transcript Checklist*

- Brief** summary of subject matter
- Identifies** the speakers
- Includes** relevant non-speech information
- Includes** on-screen text
- Includes** description of important on-screen actions or events
- If there is** an audio description track, the descriptions are integrated into the transcript

*From the W3C

Publishing Transcripts

One of the following is sufficient:

- Linked** on a separate document or Web page
- Integrated** in the same Web page
- Interactive** transcript

Merged Descriptive Transcript

Contains both transcript and descriptions
accommodating deaf and blind viewers.

(SPEECH)
LET ME SHOW YOU A QUICK DEMO.
(DESCRIPTION)
DRAWS DIAGRAM.
(SPEECH)



Audio Description Basics

Audio description, also referred to as video description, described video, or description, is a service for blind and low-vision viewers.

Audio description is a separate audio track that is played along with the video, narrating the images and action on the screen.

The descriptions happen within the natural pauses of the video's audio track.

Audio description is noted by the icons AD or D))).

What to Describe?

Start by asking, '**what does the viewer need to know?**'

Describe only what is seen, avoid describing motivations or intentions.

Describe where **unidentified sounds** are coming from.

Include credits, subtitles, and captions.

Have a **clear distinction** between the description and video's audio.

Good description **does not interfere** with important elements in the original audio track, including soundtrack, dialogue, and non-speech elements.

Good description **enhances** the video.

It's important to **prioritize** important content based on the time available.

The Laws on Audio Description

Audio description is required under the **Americans with Disabilities Act (ADA)**, **21st Century Video Accessibility Act (CVAA)**, and **Section 504 and Section 508 of the Rehabilitation Act**.

Under **WCAG 2.0 Level AA** compliance, audio description is also required.

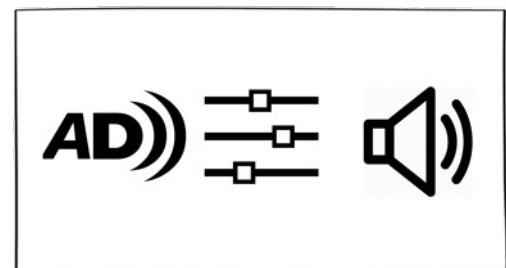


Where Can I Publish Audio Description?

Unfortunately, most video players do not support audio descriptions. But this shouldn't keep you from publishing them! There are several ways you can add audio descriptions.

Audio Description Plugin

With the audio description plugin, you can add descriptions to videos on video players that don't support audio description. You can also add descriptions to videos that you don't own.



MP4 Video with Audio Description

Most players don't support a secondary audio track or video source associated with the original video. Another workaround is to publish a second video with audio descriptions.

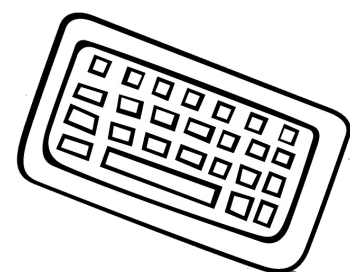


Adding a secondary, user-selectable soundtrack

If your media player allows it, you can add a second, user-selectable soundtrack. Like turning on captions, this would turn on the audio description soundtrack in a video.

As a WebVTT description track

HTML 5 video supports WebVTT descriptions. In the code, you would include a `<track>` element with the `<type>` "description."





Audio Description Quality Checklist*

- Accurate:** no errors in word choice, pronunciation, diction, or enunciation.
- Consistent:** content and voicing should match style, tone, and pace of program.
- Prioritized:** content essential to the comprehension and enjoyment is of the utmost importance.
- Appropriate:** think of the intended audience, be objective, simple, and succinct.
- Equal:** meaning and intention of video is preserved and conveyed.

*From the DCMP Description Key

What if there isn't enough space?

If there isn't room for all the descriptions to fit, consider using extended audio description.

With extended audio description, the video is paused, allowing time for descriptions.

Video Player Basics

An accessible video player supports audio descriptions, captions, and transcripts.

It should be fully keyboard accessible with no keyboard traps.

It shouldn't start automatically, but if it does, there should be a mechanism for users to pause or stop the video.

Keep in mind, few video players are fully accessible, so make sure you provide equivalent alternatives.

What are keyboard traps?

"A keyboard trap occurs when a user can get into a component or element on a web page by using the keyboard but cannot get out of that component or element through the use of the keyboard."

-Siteimprove

Always test your video player to ensure it is keyboard accessible.

Keyboard traps inhibit blind and visually impaired users, as well as users with limited or no use of their hands from navigating a web page.



Video Player Checklist*

- Video player can be operated with a keyboard
- Video player starts at the user's request
- Video player has mechanism to pause or stop video
- Volume can be modified with a mouse and a keyboard
- Proper labels for text alternatives are present
- Video or video alternative is available if Flash is disabled
- Video is functional when style sheets are disabled
- Video remains in correct page sequence when style sheets are disabled
- If JavaScript is disabled, JavaScript links do not become hidden
- Links to video file are descriptive
- Video can be selected without causing a change to current focus

- There is no content that flashes more than three times per second
- Video player is fully functional across browsers
- Video volume can be adjusted

*From AccessibilityOz

Captions

- Video includes captions with icon
- Captions include all dialogue and non-speech elements
- Captions are time-synchronized
- Captions do not block important visual elements.
- Viewers are given enough time to read the captions
- There is sufficient color contrast between the video & the captions
- Correct LANG attribute is used



Captions (cont'd)

- Users can customize the display of captions (optional)
- Users can toggle captions on or off
- Audio descriptions are included in the transcript
- Color alone is not used to indicate current position of transcript

Transcripts

- The video contains transcripts
- Transcript link is clearly labeled
- Transcript provides all relevant information
- Transcript is accessible
- Transcript includes on-screen text
- If transcript is on another page, users can return back to video
- Interactive transcripts are synchronized to video
- Interactive transcripts are available when style sheet is disabled

Audio Description

- The video has audio description
- Descriptions are of relevant content
- Descriptions include relevant on-screen text
- Descriptions do not distort original audio track
- Extended audio description is used when necessary
- Descriptions are provided as a separate audio track, through a plugin, or as a separate described video
- When applicable, video includes audio description icon