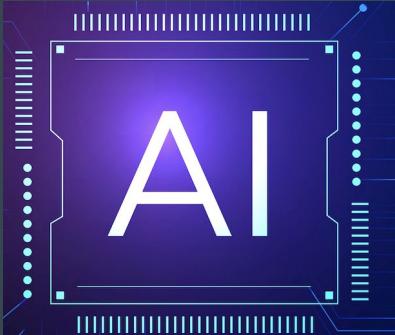


# AI and the CMC: A Transformative Tool

Accessibility, Government Meetings, and Broadcasting

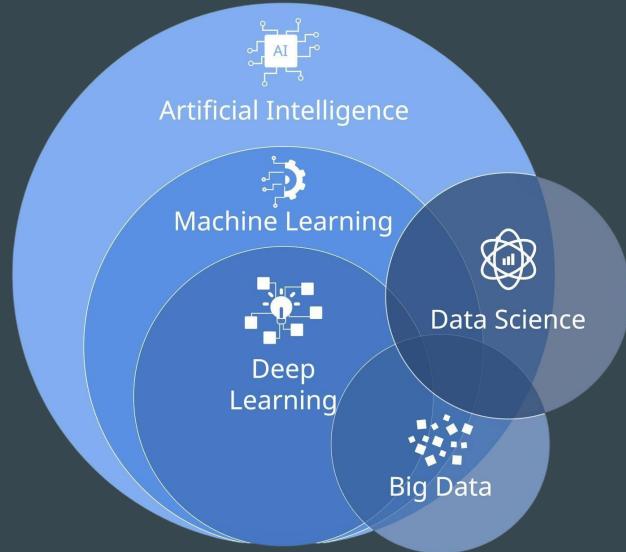
• • •



Jesse Lerman  
President & CEO, TelVue  
[jlerman@telvue.com](mailto:jlerman@telvue.com)

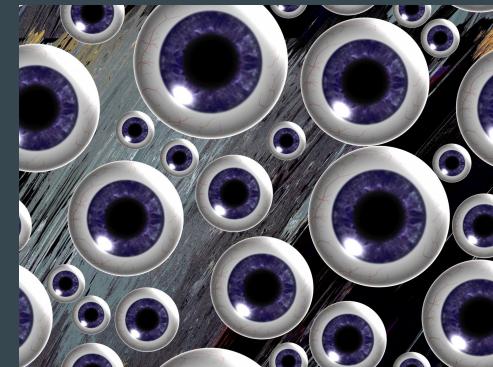
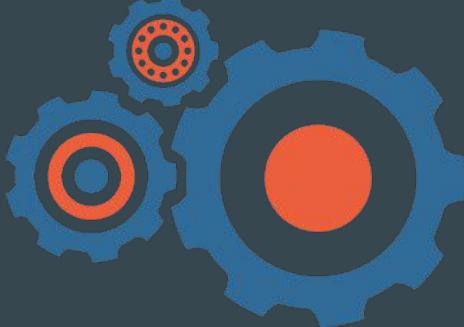
# What is AI?

- Machines emulating Human thinking
  - Discover, Infer, Reason
  - Machine Learning
    - Predictions and Decisions based on Data
    - Learns the more data provided
      - Deep Learning
        - “Neural Networks”
        - Modeled after how our minds work
          - Foundation Models: **GenAI, Language, Audio, Video**



# Why AI Matters in Community Media

- Save Time
- Enhance Automation & Workflow Efficiency
- Increase Accessibility & Compliance (ADA/WCAG)
- Enhance Discoverability
- Increase Audience Reach & Engagement





# Making Content Accessible for All

- Speech-to-Text for Captioning & Transcripts
- Diarization (Speaker Detection)
- Translation for Multi-language Captions
- Text-to-Speech
  - Auto Secondary Audio Programming (SAP)
  - Dubbing
- Video-to-Audio Description (AD)
- Text-to-Sign-Language (ASL)
- Web Content Accessibility Guidelines - AI Overlays, Website Processing



# Live Caption Translation



Dual Language Live Captioning (i.e. English & Spanish)  
On Cable & Streaming

# Video-on-Demand Translation - Over 100 Languages



los comentarios del público deben proporcionar garantizar la adecu

English  
Malayalam  
Vietnamese  
German  
French

|| 10 00:38 / 1:05:29

🔍 CC 🔍 ↗

# Open Captions



# In-Room Captions



LIVE EVENT CAPTIONS



LIVE EVENT CAPTIONS



that we'd hoped to have in the district.

That is specifically, we want to have the same amount by requirement that we have in the center business district.

Ah, I see. And that we would eventually have, and now have in the Main Street mixed use district, we were unable to support that.

The EI Oh E-O-H-L-C, I always get those initials wrong.

I'm required to have a economic feasibility analysis

a la reunión del pueblo E-O-H-L-C nos informó que

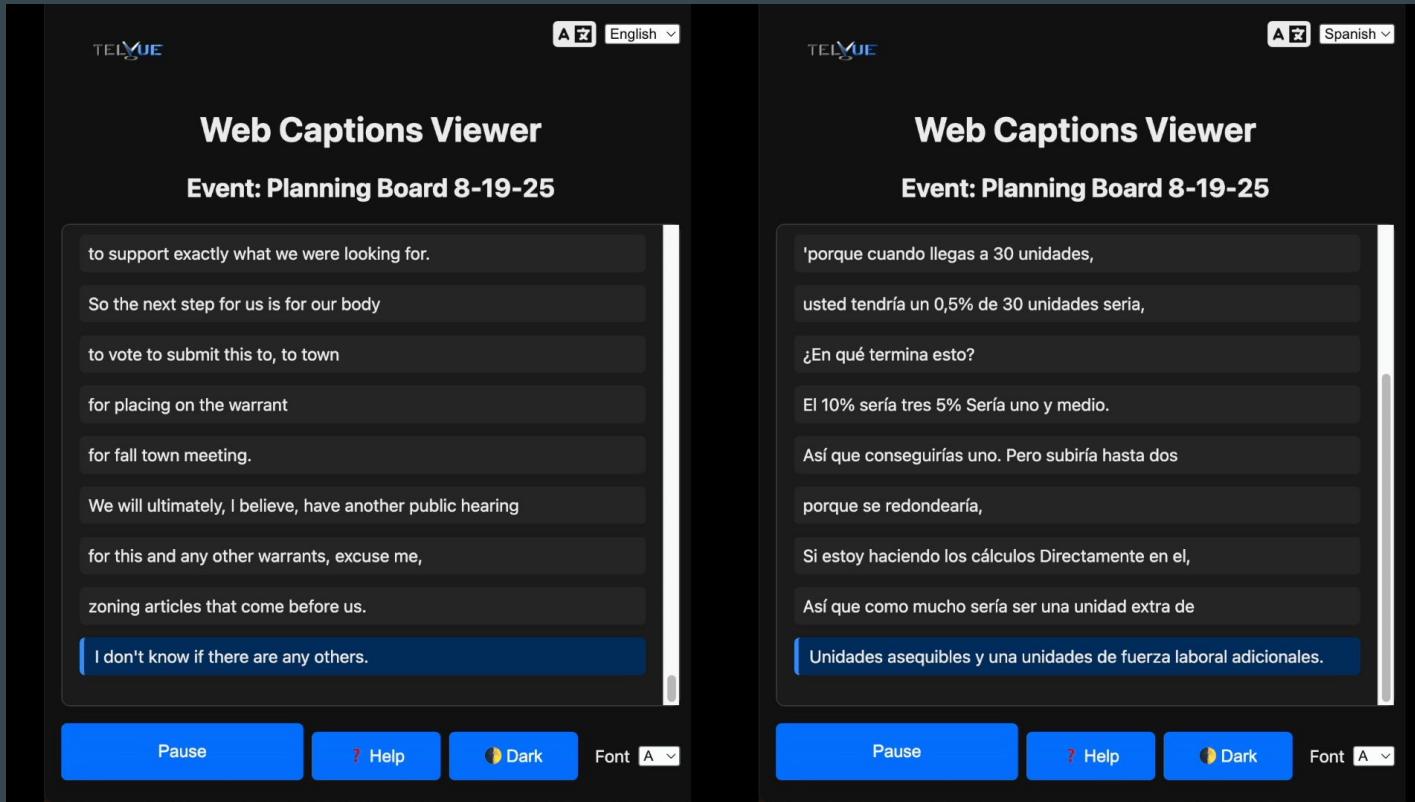
Oh, nos informó que esto sería aceptable y nosotros, y si, de ser aprobado por el municipio reunión, esto sería aceptable.

Y nos quedaríamos en cumplimiento continuo de nuestra aprobación de la E-O-H-L-C. Así que esto es un montón de cosas.

Esto ha estado sucediendo detrás de escena.

'Porque quería hacerte llegar esto, pero yo, Espero que todos supieran que esto estaba sucediendo. Esto es lo que he estado pidiendo por dinero.

# Web Captions



The image displays two side-by-side screenshots of the Web Captions Viewer interface. Both screenshots show the same event details and a list of captions, but the language is different: English on the left and Spanish on the right.

**Left Screenshot (English):**

- TELVue logo
- Language selection: English
- Web Captions Viewer**
- Event: Planning Board 8-19-25**
- Captions:
  - to support exactly what we were looking for.
  - So the next step for us is for our body
  - to vote to submit this to, to town
  - for placing on the warrant
  - for fall town meeting.
  - We will ultimately, I believe, have another public hearing
  - for this and any other warrants, excuse me,
  - zoning articles that come before us.
  - I don't know if there are any others.
- Control buttons: Pause, Help, Dark, Font A

**Right Screenshot (Spanish):**

- TELVue logo
- Language selection: Spanish
- Web Captions Viewer**
- Event: Planning Board 8-19-25**
- Captions:
  - 'porque cuando llegas a 30 unidades,
  - usted tendría un 0,5% de 30 unidades sería,
  - ¿En qué termina esto?
  - El 10% sería tres 5% Sería uno y medio.
  - Así que conseguirías uno. Pero subiría hasta dos
  - porque se redondearía,
  - Si estoy haciendo los cálculos Directamente en el,
  - Así que como mucho sería ser una unidad extra de
  - Unidades asequibles y una unidades de fuerza laboral adicionales.
- Control buttons: Pause, Help, Dark, Font A

# Web Content Accessibility Guidelines (WCAG)

- Audit/Fix
  - Consulting & Auto Scans
- Overlay
  - Quickest solution, sort of a bandaid
  - Javascript widget
  - Foreground - UI
  - Background - periodic scans, AI
    - Image ALT text
    - Navigation/menu roles
- Example Pricing
  - ~ \$500/yr sites under 1,000 pages, ~ \$1500/yr sites under 10,000 pages (Google site indexing)
- Website CMS tools & themes
- <https://overlayfactsheet.com/en/>



# Metadata and Content Tagging

- Scene & Object Recognition
  - Tag locations, people, brands in footage
- Semantic Search
  - Search footage using natural language queries like “person walking into a store at sunset.”
- Highlight Detection
  - AI identifies high-action or emotional moments for trailers, social clips, or recaps
- Examples: AWS, Imagen, Veritone
- Improve Discoverability



# Summaries, Chapters, Highlights

- Transcription, Summarization, Chapterization, Topics
- Meeting Auto Agendas, Key Moments
- Sports Summaries, Highlights
- Auto Clipping & Social Highlights
- Meetings: Zoom, Otter.ai, Playout/OVP Integrations



# Additional Reasons to Caption - Search, Agendas, Metadata



This is the public meeting of the Kalamazoo Public Schools.

**Captions**

Synchronize Video and Captions

Schools

Displaying 46 results for search term: "Schools" ×

00:02:41 This is the public meeting of the Kalamazoo Public Schools,

00:14:12 will be no further changes or movements between schools.

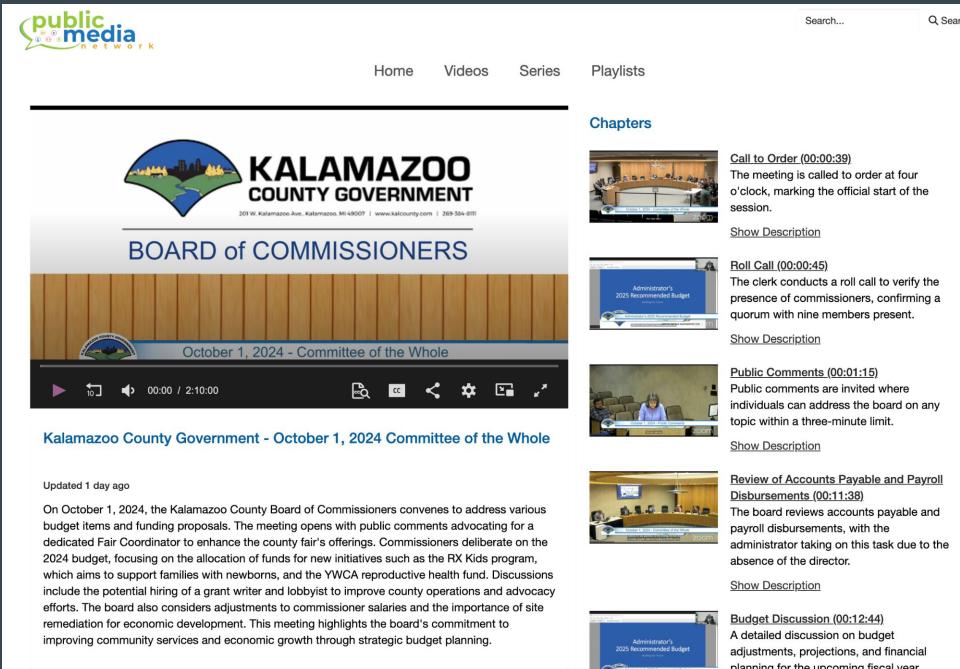
00:15:04 Last Wednesday, each of our elementary schools held a morning,

00:15:14 schools to hear from the principal.

00:15:32 Our award-winning Loy Norrix High schools deck up professional business

00:18:46 Kalamazoo Public Schools is a vibrant district.

Updated about 3 hours ago



public media network

Search...

Home Videos Series Playlists

**Chapters**

**KALAMAZOO COUNTY GOVERNMENT**  
209 W. Kalamazoo Ave., Kalamazoo, MI 49007 | [www.kalco.org](http://www.kalco.org) | 269.384.6211

**BOARD of COMMISSIONERS**

October 1, 2024 - Committee of the Whole

Call to Order (00:00:39)  
The meeting is called to order at four o'clock, marking the official start of the session.  
[Show Description](#)

Roll Call (00:00:45)  
The clerk conducts a roll call to verify the presence of commissioners, confirming a quorum with nine members present.  
[Show Description](#)

Public Comments (00:01:15)  
Public comments are invited where individuals can address the board on any topic within a three-minute limit.  
[Show Description](#)

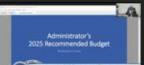
Review of Accounts Payable and Payroll Disbursements (00:11:38)  
The board reviews accounts payable and payroll disbursements, with the administrator taking on this task due to the absence of the director.  
[Show Description](#)

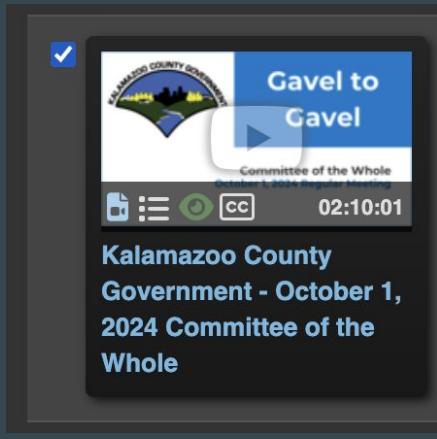
Budget Discussion (00:12:44)  
A detailed discussion on budget adjustments, projections, and financial planning for the upcoming fiscal year.

# Auto Agendas & Metadata

Media   Metadata   Activities   Attachments   VOD Links   **Chapters**   Assets

**Chapters**

Title	Summary	Start	End
	The meeting is called to order at four o'clock, marking the official start of the session.	00:00:39	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
	The clerk conducts a roll call to verify the presence of commissioners, confirming a quorum with nine members present.	00:00:45	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
	Public comments are invited where individuals can address the board on any topic within a three-minute limit.	00:01:15	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
	The board reviews accounts payable and payroll disbursements, with the administrator taking on this task due to the absence of the director.	00:11:38	<input type="button" value="Edit"/> <input type="button" value="Delete"/>



**Chapter Generation**

Chapter Generation

Content Type: **Meeting**

Hold Chapter Generation Jobs Awaiting Captions

**Summary Generation**

Summary Generation

Content Type: **Meeting**

Hold Summary Generation Jobs Awaiting Captions

**Caption Generation**

Caption Generation

Default Source Language: **English**

Profanity Filter?

Force Capitalization? (ALL CAPS)

Name	Type	Owner	Started	Completed	Status
<u>VOTE 2024 - Candidate Statement: Rafael Wolf (Spanish)</u>	Closed Captions Language Translation		10/14/24 12:49 pm	10/14/24 12:50 pm	<input type="button" value="complete"/>
<u>Road Commission of Kalamazoo County - September 24, 2024 Board of County Road Commissioners</u>	Agenda Items Generation		10/11/24 12:00 pm	10/11/24 12:01 pm	<input type="button" value="complete"/>

# Site-wide Caption & Chapter/Agenda Search



[Home](#)   [Videos](#)   [Series](#)   [Playlists](#)

Displaying 14 search results for "police" ✖



## Oshtemo Township - October 8, 2024 Oshtemo Township Regular Board

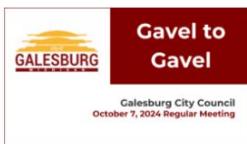
Added 5 days ago

[LIVE gavel to gavel coverage of the October 8, 2024 Oshtemo Township Regular Board meeting.](#)

34 Chapters

found 1 time(s) in video metadata

found 13 time(s) in chapters metadata



## Galesburg City Council - October 7, 2024 Galesburg City Council

Added 7 days ago

[LIVE gavel to gavel coverage of the October 7, 2024 Galesburg City Council meeting.](#)

24 Chapters

found 9 time(s) in caption lines

found 3 time(s) in chapters metadata

# Captions Search Highlights

 Search... Q Search

[Home](#) [Videos](#) [Series](#) [Playlists](#)

[return to search results](#)  
[clear highlighting](#)



**Galesburg City Council Meeting**

1:01:55 / 2:03:30

CC Share Settings Search

**Galesburg City Council - October 7, 2024 Galesburg City Council**

Updated about 11 hours ago

The Galesburg City Council meeting on October 7, 2023, covers key community issues, including

**Captions**

Synchronize Video and Captions

Q Search

Displaying 8 results for search phrase: "police" ×

**00:12:09**  
he turned it into the police department.

**00:15:06**  
The first one is our police report.

**01:01:55**  
and police funds come from a different portion

**01:10:25**  
What about police protection? Do you have to have 24 7?

**01:10:55**  
We don't have our own police department. We contract.

**01:10:59**  
to have your own police department.

**01:11:09**  
your own city to police department to either police it.

# Chapters Search Highlights



## Police Report (00:15:03)

The police report is presented with a discussion on bus camera enforcement.

The police report includes statistics on various calls and incidents in the area. The officers explain the process for handling bus stop violations with new camera technology on buses.

## Fire P

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# AI Sports Highlights & Summaries



## 2024 Medford at Malden Thanksgiving Football Game preview

Updated less than a minute ago

### 2024 Medford at Malden Thanksgiving Football Game preview

The Medford Mustangs vs. Malden Golden Tornadoes is an exciting high school football match. The Mustangs, led by Justin Marino, show a strong offensive front with Marino scoring a crucial touchdown. Prince Xavier, with his impressive carries, adds to the Mustangs' prowess. The Malden Golden Tornadoes, however, do not back down, with Kevin Exel and Samuel making significant contributions. The game is punctuated with several penalties and intense plays, keeping the audience on edge. The match ends with a victory for the Mustangs, showcasing the high school spirit and competitiveness.

**Chapters**

 [First Touchdown by Medford Mustangs \(00:13:30\)](#)  
Medford Mustangs score their first touchdown of the game with a pass from Marino.

In an impressive play, Marino passes to a Medford Mustang player who successfully scores a touchdown. This play marks the first major scoring moment for the Medford Mustangs, setting a competitive tone for the game.

[Hide Description](#)

 [End of First Quarter \(00:22:27\)](#)  
The first quarter concludes with the Medford Mustangs leading 6-0 against their opponents.

As the first quarter comes to a close, the Medford Mustangs hold a lead with a score of 6-0, having successfully scored a touchdown earlier in the game. The teams prepare to continue their battle in the second quarter.

[Hide Description](#)

 [Malden High School Scores \(00:39:22\)](#)  
Malden High School scores with a successful two-point conversion, taking the lead 8-6.

 [Edit](#)

 [Download](#)

 [Add to Playlist](#)

 [YouTube Export](#)

 [Syndicate](#)

 [Transcode](#)

 [Generate Captions](#)

 [Translate Captions](#)

 [Generate Agenda Items](#)

 [Generate Sports Highlights](#)

 [Edit Captions](#)

 [Clear Storage Space](#)

 [Delete](#)

# Example Overlay Widget (MassAccess.org)

ENGLISH ▾

**Accessibility Adjustments**

Reset Settings Statement Hide Interface

Unclear content? Search in dictionary...

Choose the right accessibility profile for you

**Seizure Safe Profile**  
Clear flashes & reduces color

**Vision Impaired Profile**  
Enhances website's visuals

**ADHD Friendly Profile**  
More focus & fewer distractions

**Cognitive Disability Profile**  
Assists with reading & focusing

**Keyboard Navigation (Motor)**  
Use website with the keyboard

**Blind Users (Screen Reader)**  
Optimize website for screen-readers

Content Adjustments

Content Scaling (Default)

Readable Font

Highlight Titles

Highlight Links

Text Magnifier

Adjust Font Sizing (Default)

Align Center

Adjust Line Height (Default)

Align Left

Adjust Letter Spacing (Default)

Align Right

Color Adjustments

Dark Contrast

Light Contrast

High Contrast

High Saturation

Adjust Text Colors (Cancel)

Monochrome

Adjust Title Colors (Cancel)

Low Saturation

Adjust Background Colors (Cancel)

Orientation Adjustments

Mute Sounds

Hide Images

Read Mode

Reading Guide

Select an option

Stop Animations

Reading Mask

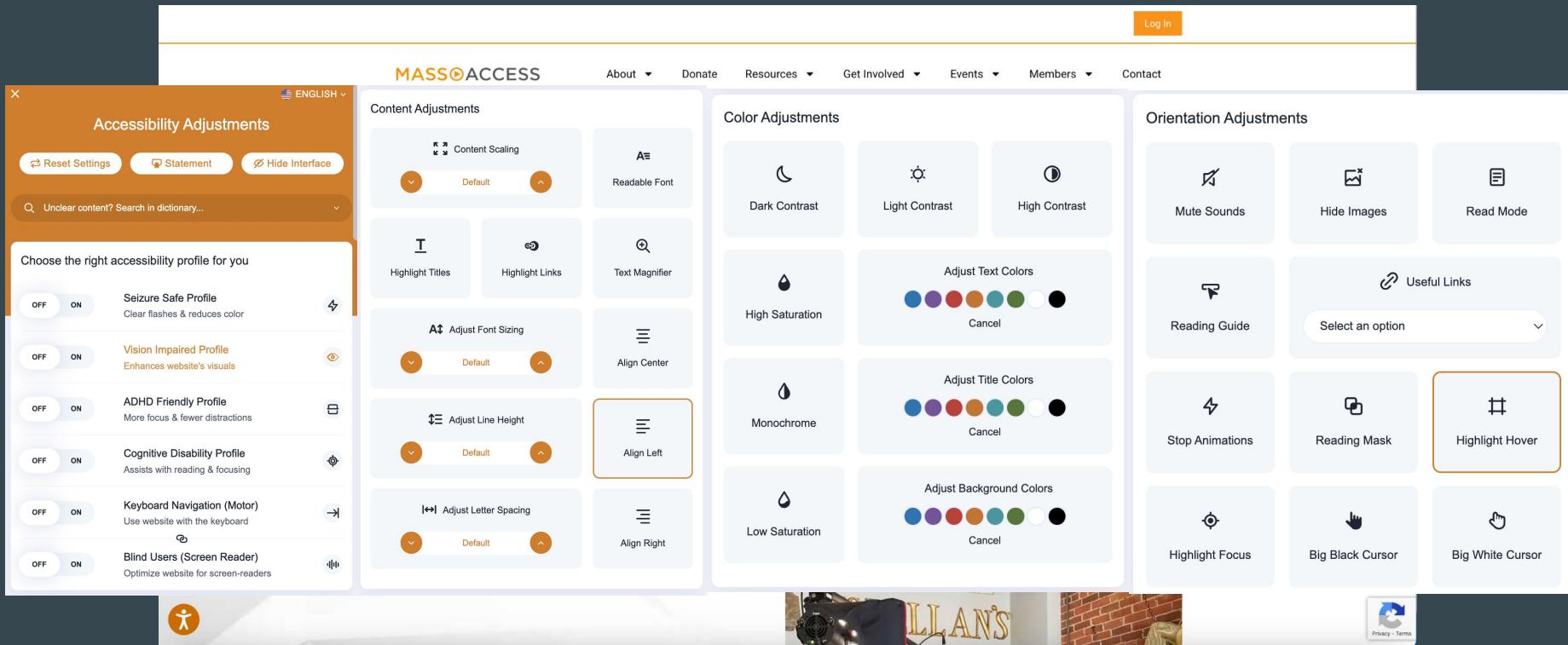
Highlight Hover

Highlight Focus

Big Black Cursor

Big White Cursor

Log In



# Example Overlay Widget (PublicMediaNetwork.org)



WATCH LEARN CREATE ABOUT

NEW EPISODE: "I always knew my course" Cassandra Stewart sits down with Marvinetta on All Stories Matter!

NEW EPISODE: "I always knew my course" Cassandra Stewart sits down with Marvinetta on All Stories Matter!

In this episode of 'All Stories Matter,' Marvinetta Woodley Penn sits down with Cassandra Stewart from Milestone Senior Services. They discuss Cassandra's fascinating journey from her engineering roots in Flint, Michigan, to her impactful work in Kalamazoo, where she now helps seniors through Milestone's various...

STORIES MATTER



Gavel to Gavel: Upcoming Local Government Meetings and Key Agenda Items – December 1 – 5

Monday (12/01): City of Kalamazoo Committee of the Whole (5:00 PM, PMN4): The Committee of the Whole will meet Monday to hear a presentation on Utility Rates. Kalamazoo City Commission (7:00 PM, PMN4): In Monday's Business Meeting, the City Commission will review and vote on...

**GET INVOLVED**

PARTNER CREATE WATCH LEARN

Accessibility

Text

Bigger text Line height

Text align Readable font

Visual

Contrast Grayscale

Hide images Pause animations

Orientation

Highlight links Reading mask

Outline focus Sitemap

Page structure

Ally by

# Audio Description

- DOJ requirement (Pre-recorded )
- Descriptive Transcript - text alternative
  - Read, text-to-speech, converted to braille
- Human AD Expensive, \$15-\$30+/minute
  - hardship exemption?
- AI Video Analysis
  - Amazon Rekognition, Nova
  - Google Gemini
- AI Audio Description Tools
  - Wide range of pricing
- AD Player integration
  - Multiple videos vs. additional audio tracks
- Upload audio description as separate tracks
  - YouTube Studio “Languages”



verbit 3PLAYMEDIA  
audible sight™



Additional Audio Track

No file chosen

Accepted audio formats: mp3, aac, m4a, wav, aif, wma, opus, ogg, flac, wma

Audio Title (eg: Alt Language, Director's Commentary)

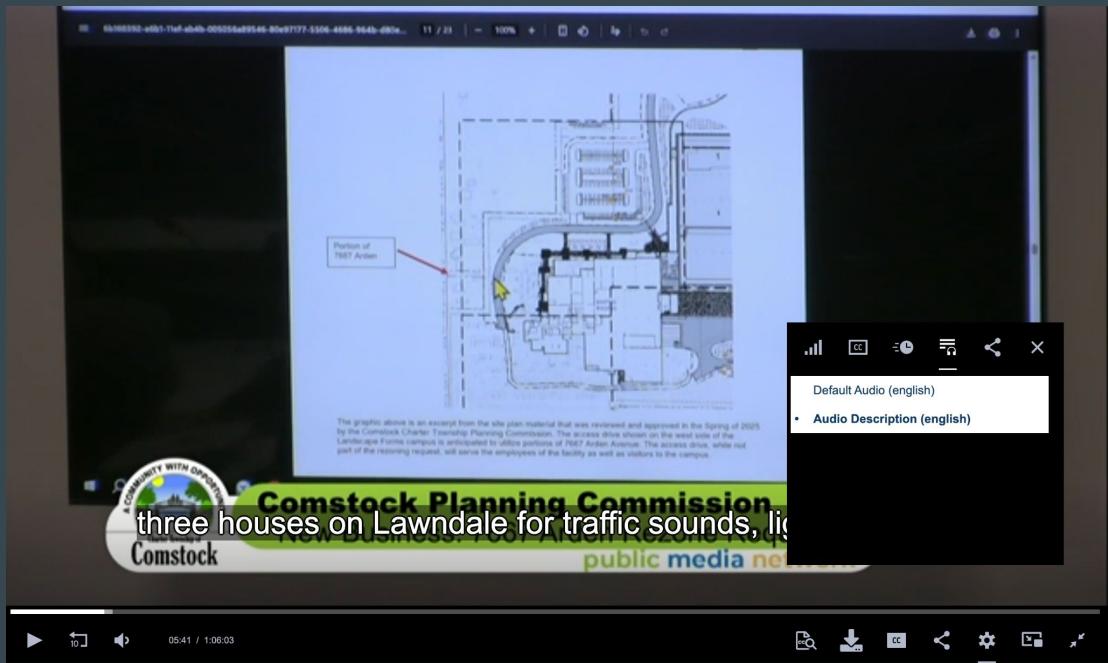
Audio language code

▾

# Audio Description - Government Meetings



- Fairly static visually
- Diarization announce speaker
- Speaker/Presenter Cues
- Slides & Presentation Material
- Full descriptive audio



# AI Cameras - Meeting Rooms & Sports

- Automatic Framing & People Framing
- Auto Preset & Region Recall
- Auto Tracking
  - Visual & Voice
  - Players
  - Ball/Action



# American Sign Language (ASL)

- AI - <https://www.signapse.ai/>
  - Speech to AI-generated ASL Picture-in-Picture
  - ~\$150/mo base plus \$25/minute
- Not required under WCAG 2.1 AA



SignStudio



# Practical Tips - Captioning

- Captioning
  - Confirm that captions flow through cable & web streaming playing a test file
  - Get started now with low cost approach to gain experience & develop a strategy
  - Leverage First-run Reports to estimate required Caption usage
  - Consider including top world language translation important to your community
  - Get the benefit of tag-along features like Caption Transcript Search
  - Consider saving time with AI Agendas & Metadata



# Practical Tips - WCAG, beyond

- WCAG Website
  - Look into what tools your website CMS offers now
  - Try an auto scan to see how far off you are
  - Register your website with Google Search Console tools to get your pages count
  - Consider overlay/widget approach now especially if the price is manageable
- Audio Description start planning now
- Consider Website Accessibility Statement (check with legal 1st)
- Plan in advance (budget & rollout), regulation deadlines are here!
- Get ahead of the curve, increase value to community & stakeholders
- Expand your audience, increase accessibility
- Unlock new ways to connect with your community



# FCC Captioning Compliance



- Most CMCs exempt
- Exemptions
  - < \$3MM annual gross revenue
  - Captioning costs > 2% annual gross revenue
  - Late night programming 2-6am
  - Primarily “text-based” programming (Community Bulletin Boards)
  - 1st 4 years for new operation
  - Primarily non-vocal music
  - Locally produced by distributor, non-news programming, no repeat value
    - Local parades, high school sports, community theater
    - When “electronic news room” captioning not available

# ADA Title II - State and Local Government



- Web Content Accessibility Guidelines 2.1 AA
  - Deadline: 4/24/26 > 50,000, otherwise 4/26/27
- Websites & Apps Generally
  - Web Pages, User Interfaces, Documents, PDFs, Images, Videos etc...
- Captioning - Both Live & Pre-recorded
- Audio Description - Pre-recorded only
- Transcripts for Podcasts (Internet Radio may not have requirement)
- Plus “Effective Communications”...

# ADA Title II - Exemptions



- “Undue financial or administration burden”
  - Requires high-level official to sign written statement
  - Proof that all alternatives exhausted
- Archived programming (pre-dating deadlines)
  - Dedicated, clearly identified archive area
  - Presented outside of archive
- Social media content pre-dating deadlines

# ADA Title III - Public Accommodations



- Includes Nonprofits with public services, websites
- “Effective Communications”
  - Not specifically Web Content Accessibility Guidelines 2.1 AA
  - But WCAG is becoming the “standard” anyway
  - Captioning on cable could be implied
  - Audio Description even on able, bulletin board could be implied



## ADA Title II vs. Title III

- Title II - **State and Local Government**
  - Operated directly by government body or under government control
    - All programming
  - Performing or contracted for core government functions
    - i.e. Government Meetings
  - Hosted directly by municipal/government site
    - All programming
    - Not including iframes or links to other non-government sites
- Title III - **Public-facing Nonprofits**
- **Not where but who**
  - Website, Social Media, YouTube, Archive.org, Cable

# Predictive Scheduling

- Content placement based on audience patterns
- Automated schedule generation
- Predictive Analytics
- Training
  - historical viewership data
  - content affinity
  - audience trends.
- Fully automated vs. recommendations



# Video Production & Editing

- Scripting & Storyboarding
  - Storyboard Hero, Jasper AI
- Synthetic Avatars and Voiceovers
- Pictory – Turns long-form content into bite-sized videos.
- Wisecut – Automatically cuts and edits videos based on speech.
- Auto-Editing
  - Assemble rough cuts from raw footage
  - Based on scene detection, speaker changes, or emotional tone
- Shot Selection
  - Analyze footage to pick the best takes, crop shots, and apply transitions
- Color Correction
  - Match color grades between shots
  - Automatically enhance contrast, brightness, or mood



# AI Video Generation Tools

- Unscript – Converts text into fully polished videos, easy and fast.
- Lumen5 – Turns articles or scripts into shareable videos.
- Synthesia – Create videos with AI avatars delivering your content.
- InVideo – Script-to-video transformation with templates.
- Animoto – AI-generated marketing videos from photos and clips.
- Adobe Firefly – AI-generated videos, image, audio for creative
  - Adobe Generative Extend
- Runway ML – AI-generated videos, Smart video edits



# AI Image Generation Tools

- DALL-E
- Adobe Firefly
- ChatGPT
- Gemini



A stylized portrait-oriented depiction where a tiger serves as the dividing line between two contrasting worlds. To the left, fiery reds and oranges dominate as flames consume trees. To the right, a rejuvenated forest flourishes with fresh green foliage. The tiger, depicted with exaggerated and artistic features, stands tall and undeterred, symbolizing nature's enduring spirit amidst chaos and rebirth.

# AI Music Generation Tools

- [Suno](#)
- [Udio](#)
- Riffusion
- Adobe Firefly



# Audio Enhancement



- Automatic Captions & Subtitles:
  - Tools like Whisper, Trint, Rev, Speechmatics, generate accurate transcripts and captions in real time.
- Voice Isolation & Cleanup
  - AI separates speech from background noise or music and can even enhance muffled dialogue.
- Voice Synthesis & Dubbing
  - Synthetic voices now make it possible to dub in multiple languages or incorporate automatic Secondary Audio Program (SAP)
    - Amazon Polly, ElevenLabs

# Building Deeper Connections

- Personalized Recommendations
  - Relevant content, customized interfaces
- Interactive Chatbots and Polls
  - Live Q&A, assistance, multi-lingual
- Sentiment Analysis
  - AI tracks reactions & expressions, helping producers adjust content
- Predictive Engagement
  - Best time to notify new content
- Churn Prediction and Retention Nudges
  - Custom offers and trailers before lose attention
- Examples: StreamHatchet,



# Publishing & Distribution

- Auto-Reformatting
  - Resize and reframe content
    - vertical (TikTok, Instagram)
    - square
    - landscape formats.
- Thumbnail & Title Suggestions
  - recommend thumbnails
  - engaging titles for better CTR.
- Content Moderation
  - Detect sensitive or inappropriate material before publishing



# Live Production

- Camera Automation
  - Pan/tilt/zoom based on speaker tracking
- Virtual Backgrounds & Compositing
  - Cleanly isolate subjects and place in virtual environments.
- Live Highlight Reels
  - Clip and share highlight moments
  - Real time during events or sports broadcasts.



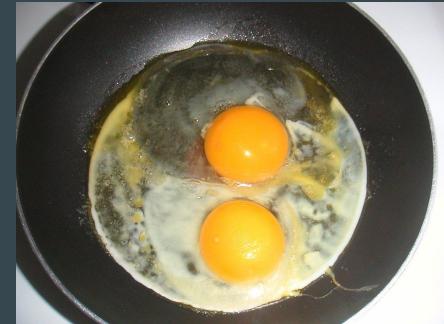
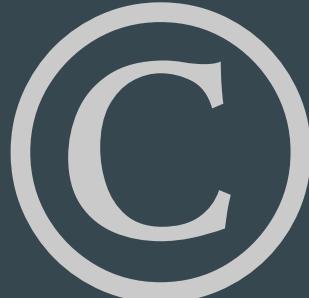
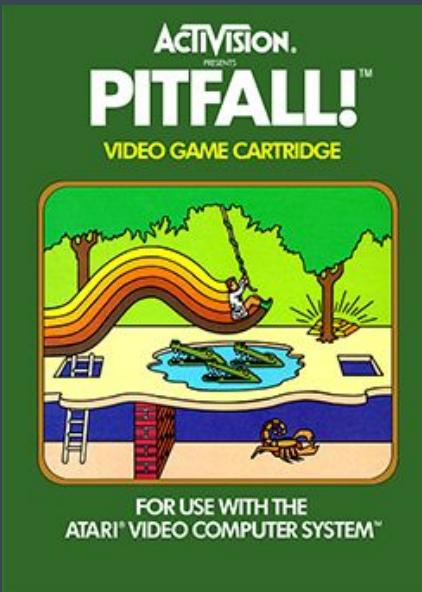
# Websites & Coding

- Website
  - Wix, Squarespace, Wordpress templates
  - AI Search Engine Optimization tools
- Coding
  - Great for Test Suites, Rapid Prototyping, APIs, and more
    - Github Copilot
    - Gemini
    - ChatGPT
    - Claude
    - Amazon Q



# Pitfalls

- Beware of hallucinations
- Intellectual Property concerns



This is your AI on drugs...

# Embracing AI

- Start small, experiment
- Focus on saving time, workflow productivity
- Enhancing & Augmenting
- Ethical AI use, intellectual property, guidelines
- Stay community focused



Thank you for your time!



WE SHARE YOUR VISION™

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[jlerman@telvue.com](mailto:jlerman@telvue.com)