



CAPTIONING AND TRANSCRIPTION PROJECT

Establishing a Successful Accessible Media Program in Higher Education: A Overview of Workflows, Costs, and Next Steps at George Mason University



TODAY'S AGENDA

- Who we are
- Mandates
- How we got started
- Overview of the captioning workflow
- Breaking down numbers
- Next steps
- Contact Info

The background is a solid dark green. On the left side, there is a large, stylized letter 'M' in a lighter shade of green. To the right of the 'M', there are several curved, pointed shapes that resemble palm fronds or stylized leaves, also in the same lighter green shade. The text 'ABOUT US' is positioned to the right of these elements.

ABOUT US

LOCATION AND ENROLLMENT

- Enrollment (Projected Fall 2018)
 - ~34k+ students from 130+ countries
 - Projected increases of \$1k per year over next 5-6 years (online)
- Over 1500+ Instructional and Research Faculty
- 10 colleges and schools
- Campus locations
 - 4 locations in Northern Virginia (Fairfax/**Main**, Arlington, Manassas, and Sterling)
 - **International:** Songdo (Korea)



ATI's MISSION & SERVICES

Mission

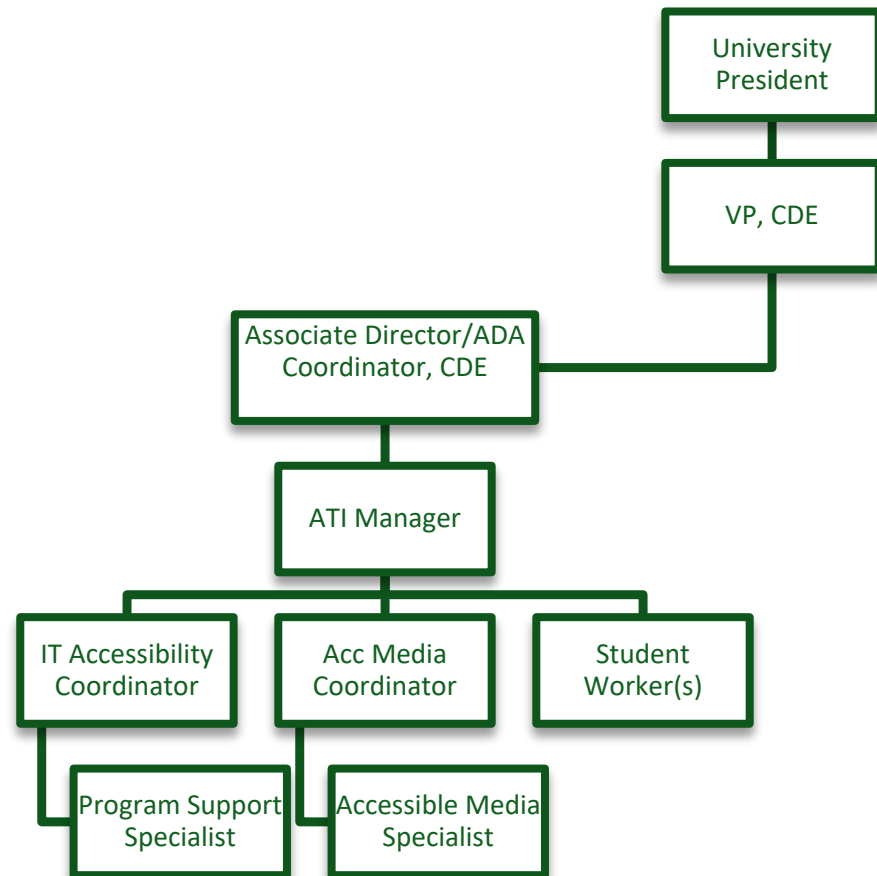
- Develop, coordinate, and implement a university-wide technology accessibility plan

Services

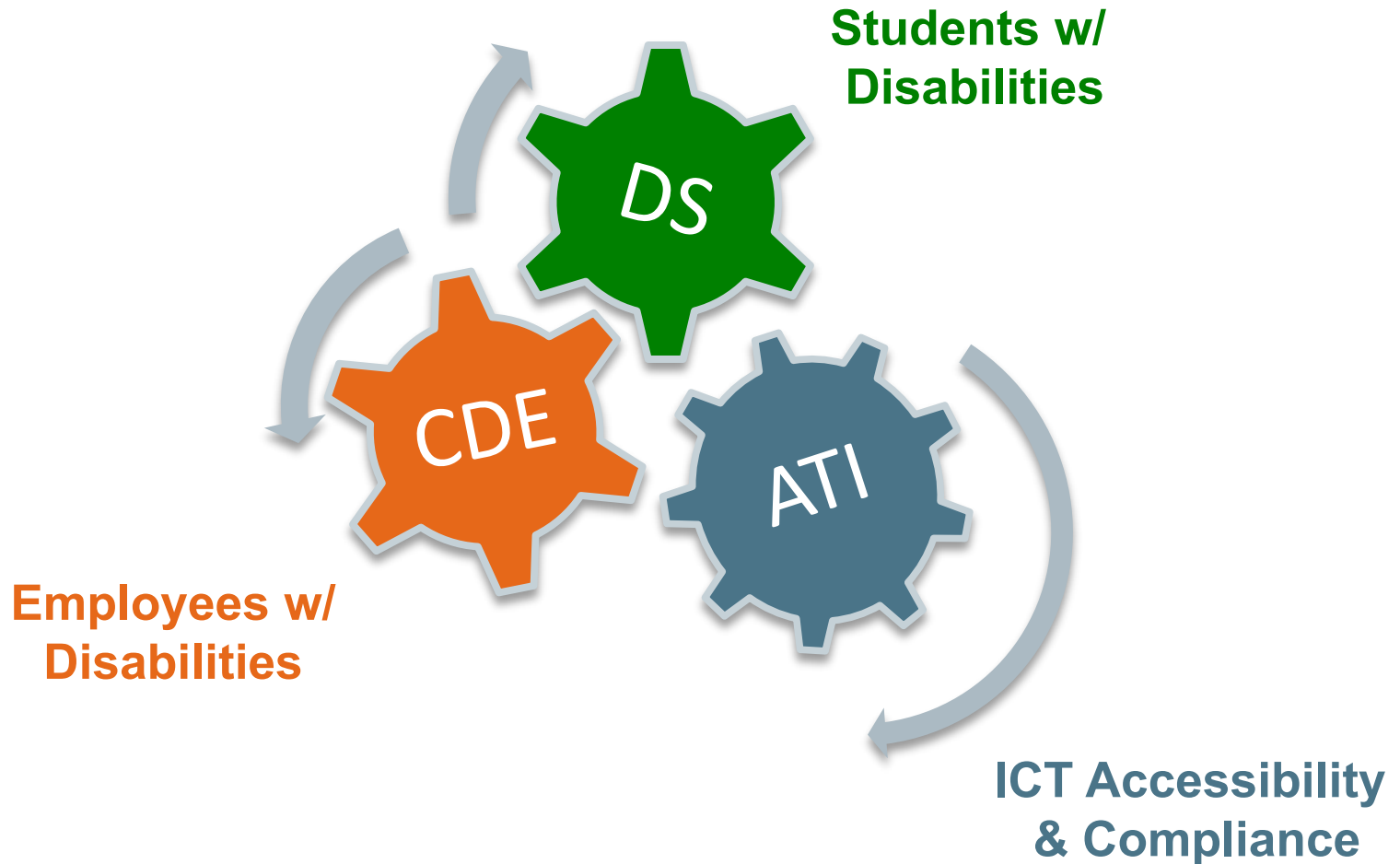
- Accessible Text (alternate formats)
- Accessible Media (captioning/transcription)
- Web Accessibility
- Assistive Technology Assessments, Support, and Training

ATI STAFF & REPORTING STRUCTURE

- ATI operates under *Compliance, Diversity, and Ethics Office*
 - Reports up through ADA Coordinator to VP for CDE, who reports directly to University President
- More information about us available at <http://ati.gmu.edu>
- **Presentation:** <http://ati.gmu.edu/training/presentations/>



ACCESSIBILITY@MASON: A COLLABORATIVE PARTNERSHIP



A stylized graphic on a dark green background. On the left, a large, light green letter 'M' is partially visible. To its right, several light green, curved shapes resembling leaves or petals radiate upwards and to the right. On the right side of the image, the title text is displayed in white, uppercase letters.

THE LEGAL
LANDSCAPE AND
TECHNOLOGY
ACCESSIBILITY IN
HIGHER ED

DISABILITY LAWS: 504 AND ADA

Rehabilitation Act (1973): 504

- Equivalent access to all federal programs and services receiving federal financial assistance

ADA (1998): Titles II, III

- Extended 504 to public and commercial entities

Legal Challenges

- Centered on what is a “place of public accommodation”?
- DOJ/OCR rely on revised Section 508/WCAG 2.0 for guidance



ACCESSIBILITY LAWS & GUIDELINES: 508, WCAG, AND CVAA

Rehabilitation Act (1973): 508

- Covers federal agencies and states/Orgs that have adopted 508
- Revised 508 includes WCAG 2.0 Levels A and AA

WCAG 2.0

- Primarily focused on web-based content
- Integrated into revised 508 standards

21st Century Video and Communications Act, CVAA (2010): Title II

- Requires CC content on TV be CC when distributed online
- ***Who's responsible for compliance?***



Section 508

WORLD CONTENT ACCESSIBILITY GUIDELINES (WCAG): TIME-BASED MEDIA

- **Level A (minimum) – Captions, Prerecorded (1.2.2):** Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such
 - **Note:** You are not alone. Most institutions are not here yet!
- **Level AA (should) – Captions, Live (1.2.4):** Captions are provided for all live audio content in synchronized media
- **Level AAA (aspirational) – Sign Language, Prerecorded (1.2.6):** Sign language interpretation is provided for all prerecorded audio content in synchronized media

Intro to Factoring

The screenshot shows a video player with a title bar that reads "Intro to Factoring". The main content area displays text from a video titled "APPLICATIONS OF ALGEBRA" with a subtitle "The Greatest Common Factor". The text includes a definition of a factor, an example of factoring $6x^2y = (2)(3)(x)(x)(y)$, and a discussion of factoring the number 12. A sign language interpreter is visible in a small window on the right side of the video frame.

APPLICATIONS OF ALGEBRA The Greatest Common Factor

Recall: A **FACTOR** is part of an expressed product.

$6x^2y = (2)(3)(x)(x)(y)$ is an *expressed product with 5 factors*

To **FACTOR** a number or an algebraic expression, write it as an expressed product. (We can think of this as "**unmultiplying**".)

For example, 12 can be factored as $3 \cdot 4$:

$12 = (3)(4)$

But 12 is not factored *completely* because 4 can be factored

$4 = 2 \cdot 2$

$12 = (3)(2)(2) \Leftarrow$ *factored completely*

series were in a factor monomials and polynomials binomials and things like that we're

Image from <http://www.deaftec.org/resources/math/self-instruction/intro-factoring>

LEGAL SETTLEMENTS: NETFLIX, EDX, FEDEX

National Association of the Deaf (NAD), et al. v Netflix

- **Issue:** mail-order DVDs (captioned) vs. online streaming content (not captioned)
- **Settlement:** Netflix was required to caption all online streaming content by 2014
- Redefined “places of public accommodation” – not limited to just physical structures

NAD vs. Harvard/MIT (edX)

- **Issue:** lack of captioning or inaccurate captioning (YouTube) provided for online course materials
- **Settlement:** Web, platform, and mobile apps must conform to WCAG 2.0 AA; hire ICT accessibility staff; implement ICT accessibility policies; conduct ICT accessibility training

EEOC vs. FedEx

- **Issues:** Failure to provide ASL or closed captioning for training videos; failure to make modifications to sound sensitive equipment (moving equipment, scanners, etc.)
- Still in litigation

ACCESSIBILITY LAWSUITS: RESOLUTION AGREEMENTS (CAPTIONS)

- ✓ Univ. of Miami-Ohio (2016)*
 - ✓ Harvard/MIT – EdX (2015)*
 - ✓ Univ. of Montana (2014)*
 - ✓ Youngstown State (2014)*
 - ✓ SCTCS (2013)*
 - ✓ Univ. of Kentucky (2012)*
 - ✓ Ohio State Univ. (2010)*
- All cases reference a **lack of captions, *inaccurate captions*, and/or *video with no audio descriptions*** on websites and in online courses
 - Technically, any resolution requiring WCAG 2.0 compliance is indirectly requiring captioning.



HOW WE GOT STARTED WITH CAPTIONING

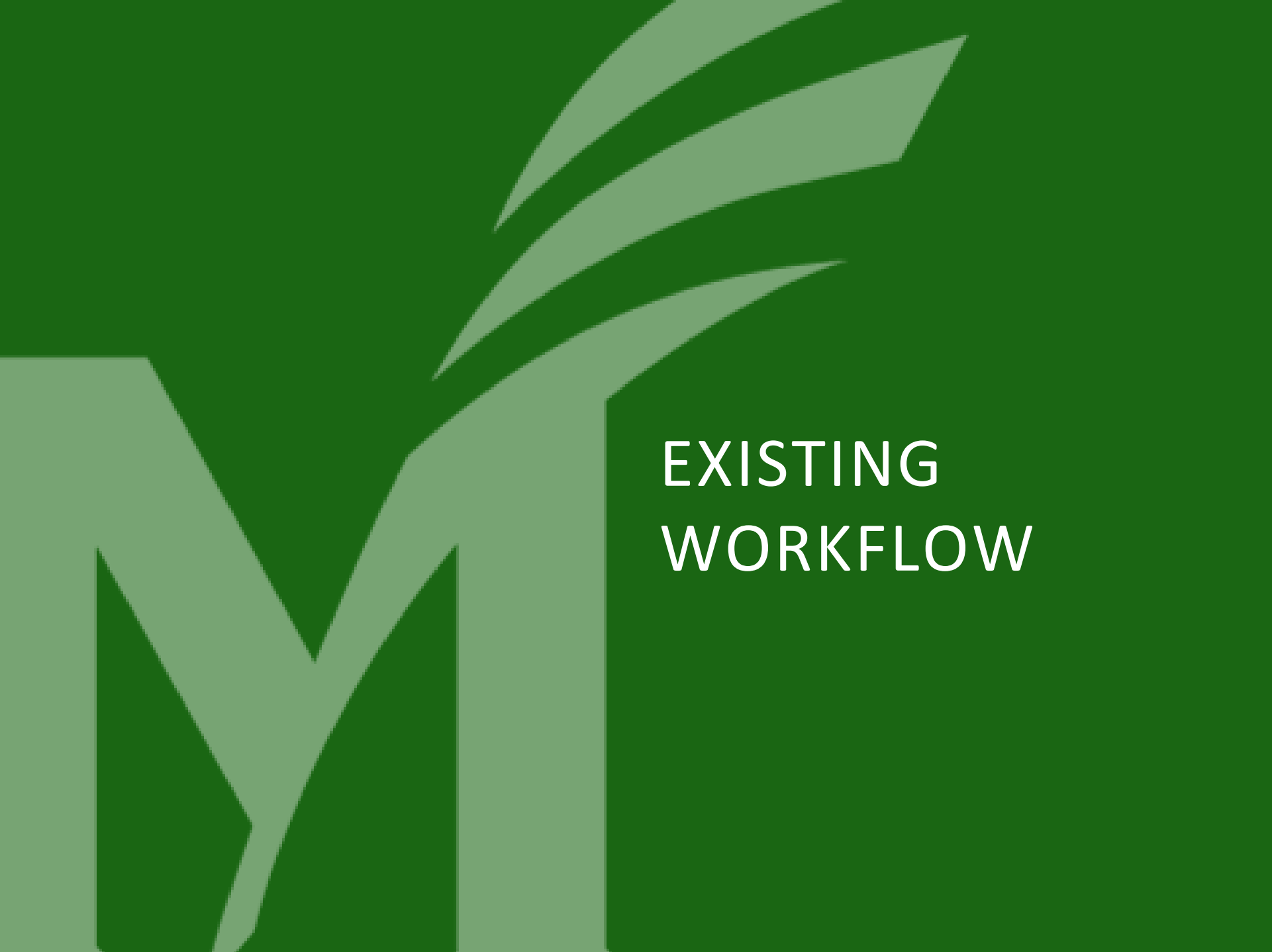
WHAT WAS HAPPENING AT MASON?

- National cases had Mason equivalents!
 - Deaf student enrolled in DL section of an IT course
- Who's paying for this?
 - No budget for captioning
- We were process-challenged
 - Did not have a strategy when these types of issues cropped up
- Poor results from automated solution
 - Faculty, for many reasons, would not clean up their own content

EARLY PITFALLS

- Improperly trained student workers
 - Lead to increased costs
- Faculty assumptions
 - Assumed buy-in would not be as challenging
- University's IT infrastructure was insufficient
 - Existing IT infrastructure did not support streaming media content effectively





EXISTING
WORKFLOW

REQUESTS SUBMITTED (INDIVIDUAL/BULK)



Assistive Technology Initiative

[REQUEST SERVICES](#)
[FAQS](#)
[CONTACT US](#)

[About Us](#) | [Accessible Text](#) | [Accessible Media](#) | [Web Accessibility](#) | [Resources](#) | [Policy](#) |

Request Services Form

This form is to request accessible text, accessible media (captioning), web access, ODS/CDE/Learning Services referrals, request technology training and to report ; please complete the [Contact Us Form](#).

ATI Services
Required Field*

Name *

Email *

Phone Number

Mason Affiliation *

Responsibilities for Provision of Accessible Media Online and/or in the Classroom

Faculty/Staff acknowledges the following:

- Video(s) will be used for at least one year on their website and/or in the classroom.
- Video(s) transcripts are the property of George Mason University and thus will only be used on GMU websites and/or in classrooms.

ATI will provide the following:

- Copy of video transcript (text file only) completed to at least 98% accuracy.
- ATI will not edit transcripts unless egregious errors are identified (i.e., accuracy or timing of captions)
- Confirmation emails will be sent upon receipt of your submission for processing, at the completion of your request, and as-needed throughout the process.

[Email & Attach Completed/Saved Form](#)

Date Needed	Material Title	Requester Name	Instructor/Staff Name	Reason for Request?	Course Name (i.e. HIST 100)	Length of

FACULTY/STAFF RESPONSIBILITIES

Faculty/Staff acknowledges the following:

- Video(s) will be used for at least one year
- Video(s) transcripts are the property of George Mason University and thus will only be used on GMU websites and/or in classrooms.

ATI will provide the following:

- Copy of video transcript (text file only, at least 98% accurate).
- ATI will not edit transcripts unless egregious errors are identified (i.e., accuracy or timing of captions)
- Confirmation emails sent upon receipt of your submission for processing, at the completion of your request, and as-needed throughout the process.

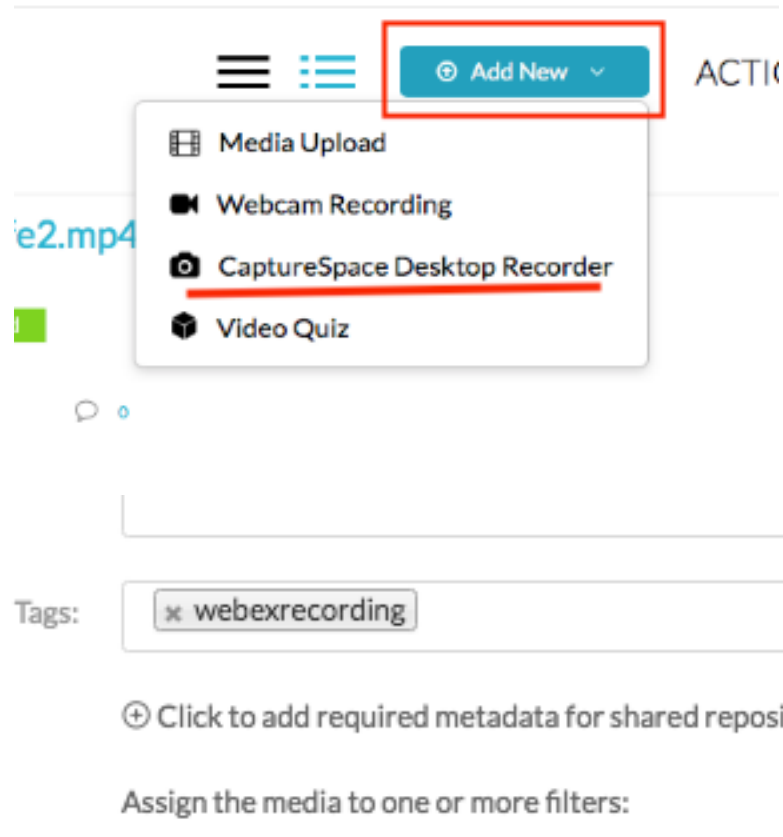
RECEIVING REQUESTS...

Kaltura (My Media)

- Integrates with Blackboard via ***My Media***
- Faculty can upload videos using *Media Upload*, *Webcam*, or *Desktop Recorder*
- Add '***captions***' tag

Additional submission methods

- YouTube
- Vimeo
- Library
- 3rd-party



MANAGING THE WORKFLOW...

Using Kaltura (KMC), AccMedia Coordinator...

- If necessary, pulls videos from other 3rd-party sources – uploads within Kaltura
- Provide technical assistance to faculty/staff who are unfamiliar with Kaltura
- Coordinator adds '***captions***' tag(s) to requested content (individual or bulk tagging)
- Determines TAT and tags with vendor appropriate time indication
- Assigns content to faculty member within KMC
- If material comes from Library - works with media services librarian to digitize and caption library content
- Edits any glaring errors before resending to faculty members with transcripts

The screenshot displays the Kaltura KMC (Kaltura Media Console) interface. The top navigation bar includes links for Dashboard, Content, Studio, Analytics, Settings, Administration, and Upload. Below this, a secondary bar shows Upload Control, Bulk Upload Log, and Drag Parsers. The main content area is titled 'Entries' and features a search bar and a 'Refresh' button. On the left, a 'Filter by Categories' sidebar shows a tree view with 'All Categories (No Filter)' selected. The central table lists video entries with columns for Thumbnail, ID, Name, Type, Plays, Created On, Duration, Status, and Actions. A context menu is open over the entry 'New Baby', showing options like 'Set Scheduling', 'Set Access Control', 'Add/Remove Tags', 'Add/Remove Categories', 'Add to New Category/Playlist', 'Change Owner', 'Download', and 'Delete'. The 'Add Tags' option is highlighted. The bottom of the interface shows pagination information: '1 Next 1-50 of 74' and a 'Show rows: 50' dropdown.

Thumbnail	ID	Name	Type	Plays	Created On	Duration	Status	Actions
	1_gj979h	Guiding to the Cape	Video	0	02/27/17 12:32	00:30	Ready	Select Action
	1_gj979h?	New Live Event Jan 2017	Video	0	01/24/17 12:55	N/A	Ready	Select Action
	1_gj979h?	new computer report	Video	13	01/17/17 13:18	00:29	Ready	Select Action
	1_gj979h?	new computer with captions	Video	3	01/17/17 13:17	00:29	Ready	Select Action
	1_gj979h?	New Baby	Video	0	01/12/17 13:08	00:13	Ready	Select Action
	1_gj979h?	Are at the Computer	Video	0	11/06/16 11:23	00:29	Ready	Select Action
	1_gj979h?	...	Video	0	08/19/16 16:43	00:21	Ready	Select Action
	1_gj979h?	...	Video	0	08/18/16 17:04	02:23	Ready	Select Action

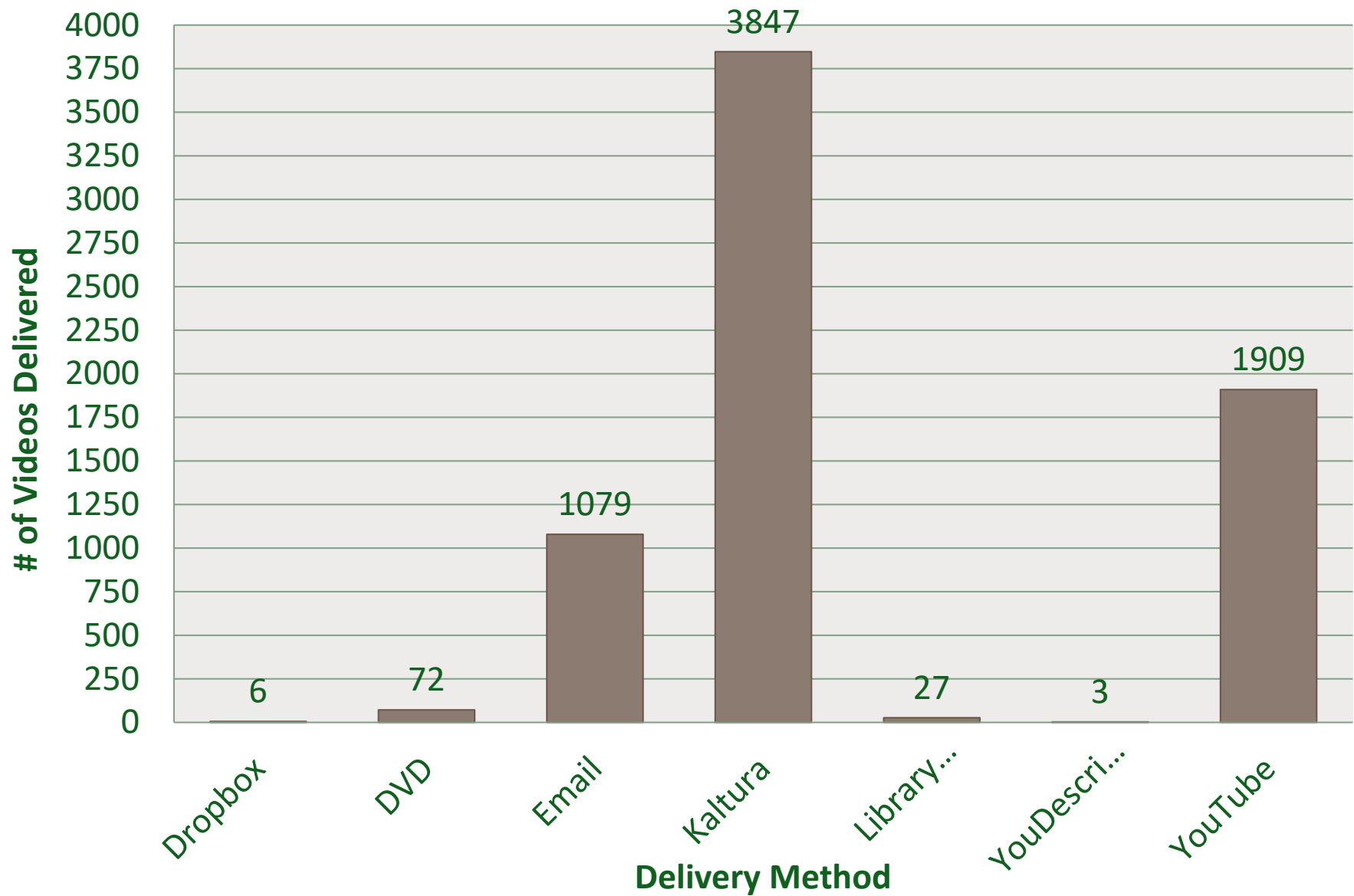
KALTURA, CAPTIONING, & APIs

Kaltura (Video Management Platform)

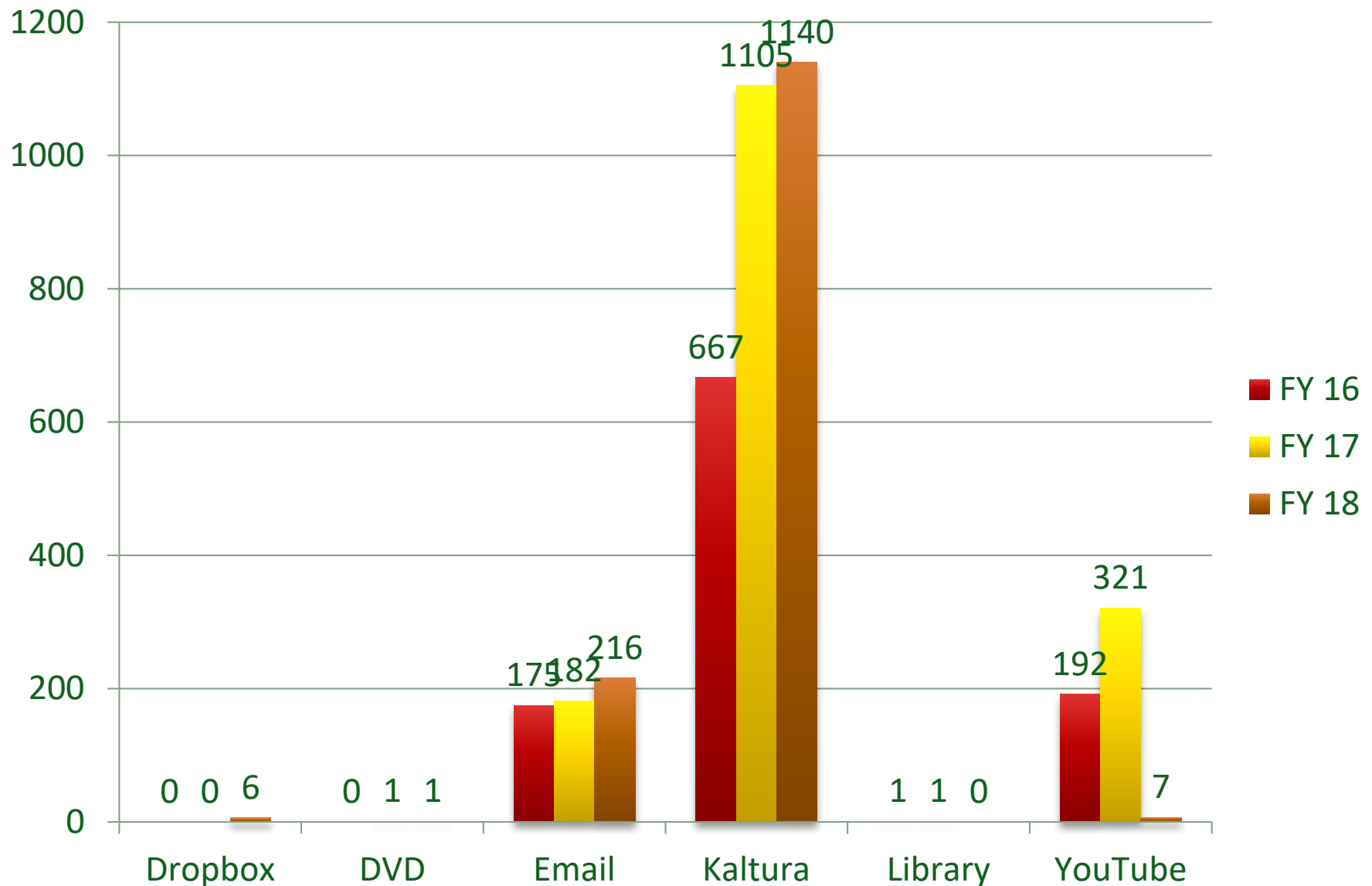
- Integrates with Blackboard
- APIs with captioning vendors (Cielo24, 3Play Media)
 - Content can be pushed from platform directly to vendor (via tags)
 - Tagging to support different TATs (turnaround times)
 - Vendor uploads completed captions back to video
 - Use vendor supported editing tools for ease of any needed corrections



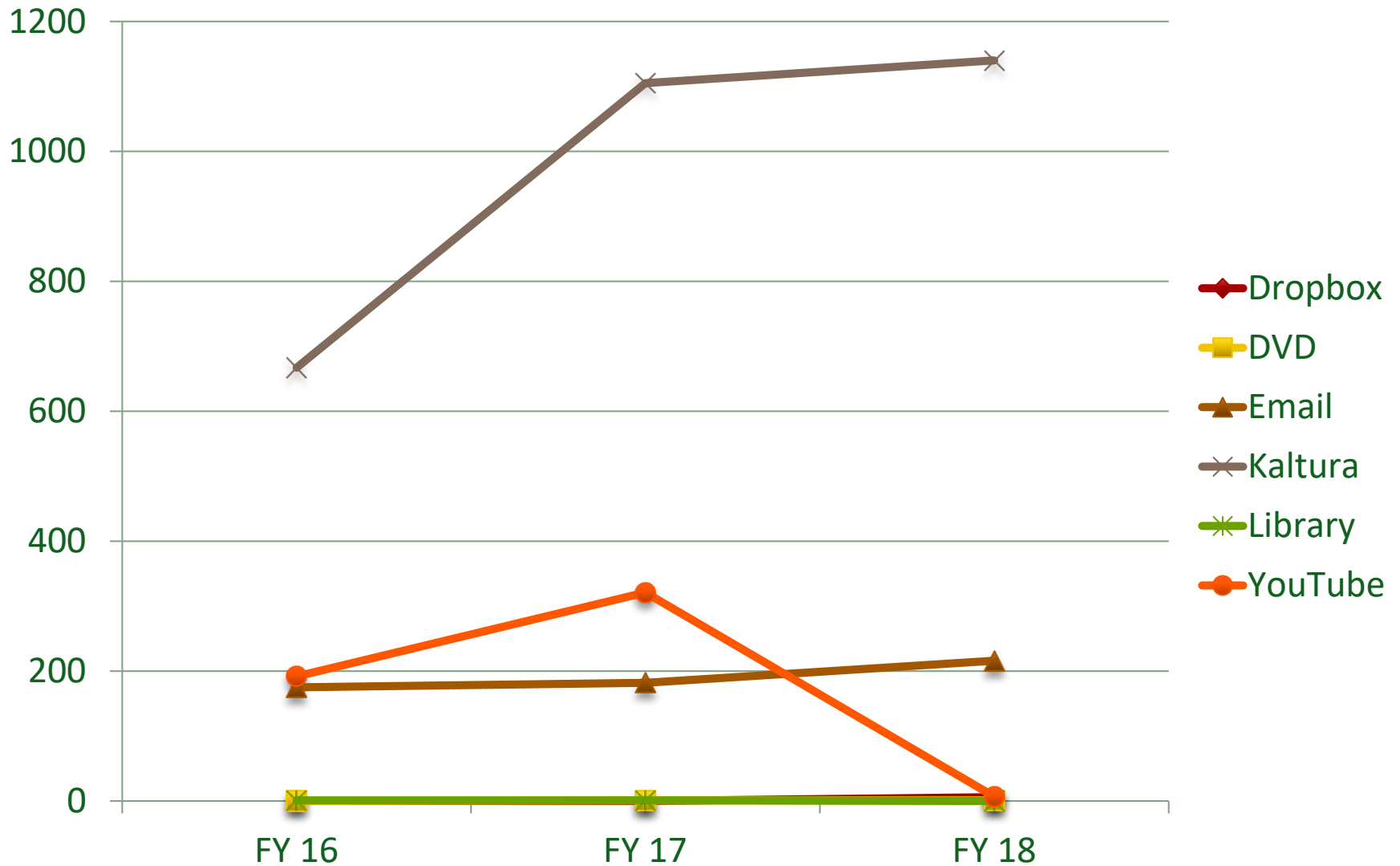
HOW FILES ARE DELIVERED



HOW FILES ARE DELIVERED (BY FY)



HOW FILES ARE DELIVERED (FY TRENDLINES)



STRATEGIC PARTNERSHIPS (ACC MEDIA)



Disability Services

- Pre-semester faculty workshops

Office of Digital Learning (Provost's Office)

- OCDI Workshops
- SOUPR

Information Technology Services

- Online Learning Services (Bb, Kaltura)

University Libraries

- Library requests, purchasing & procurement

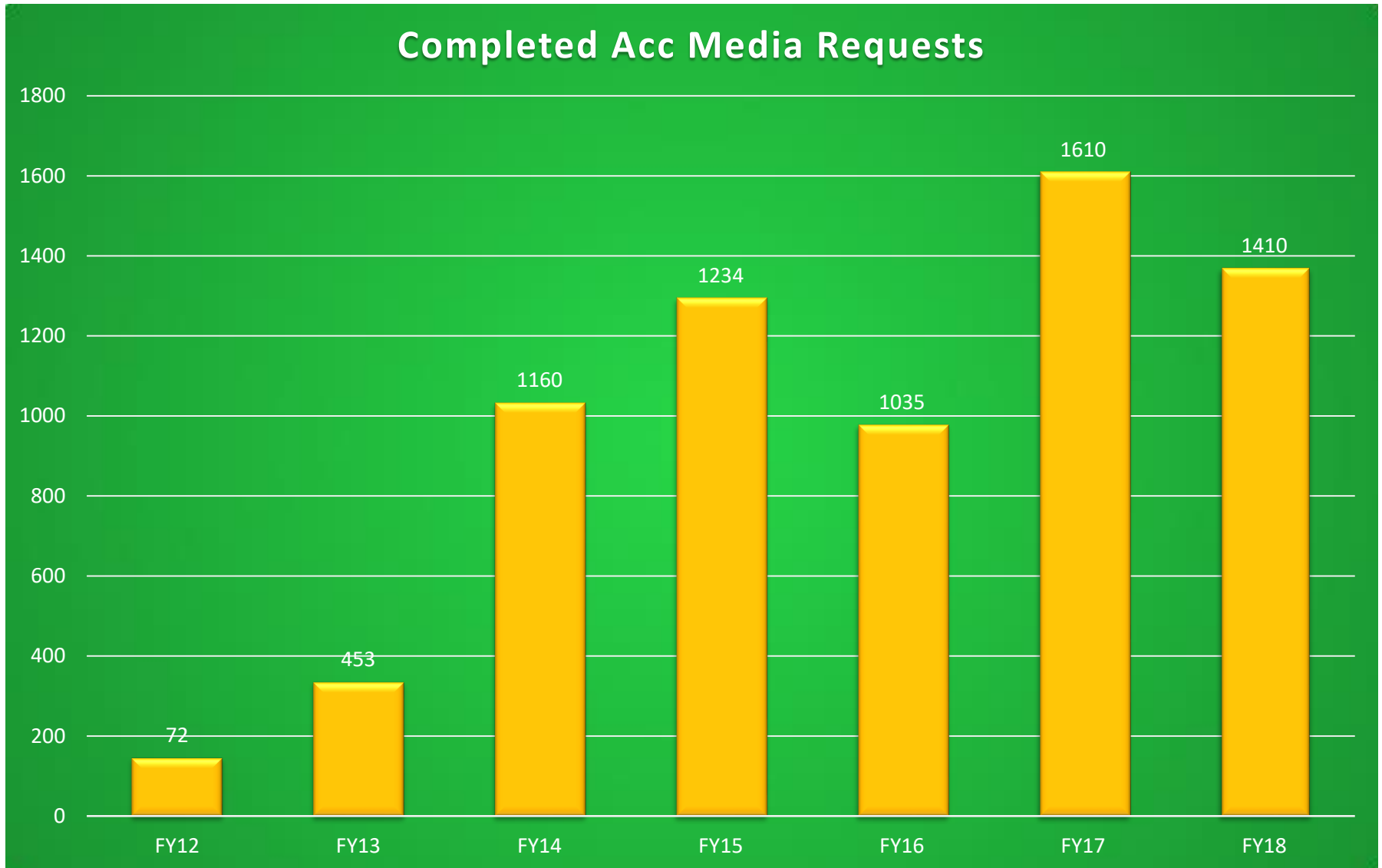
Communications & Marketing

- Front-facing multimedia content

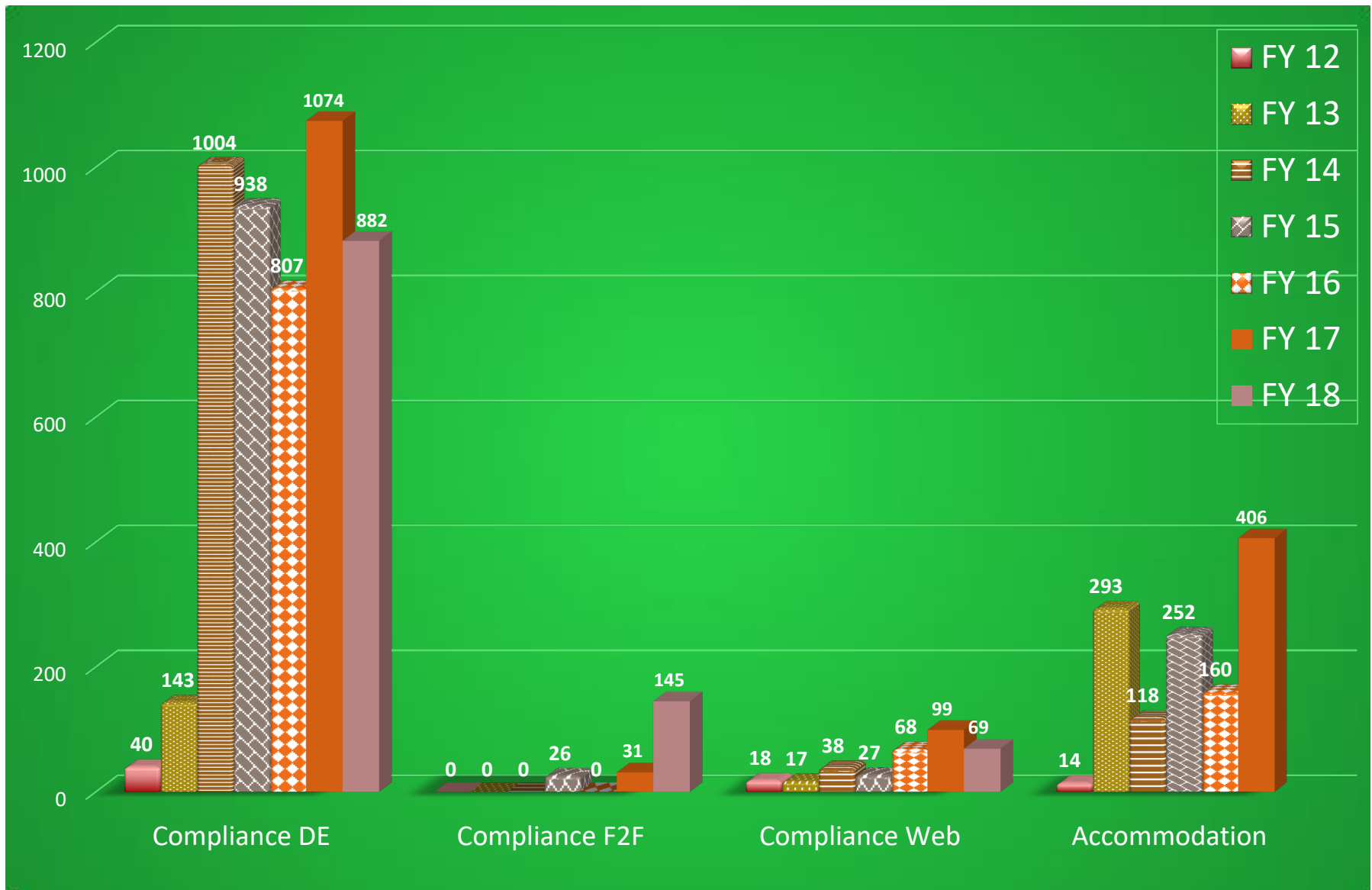
WHAT THE NUMBERS SHOW



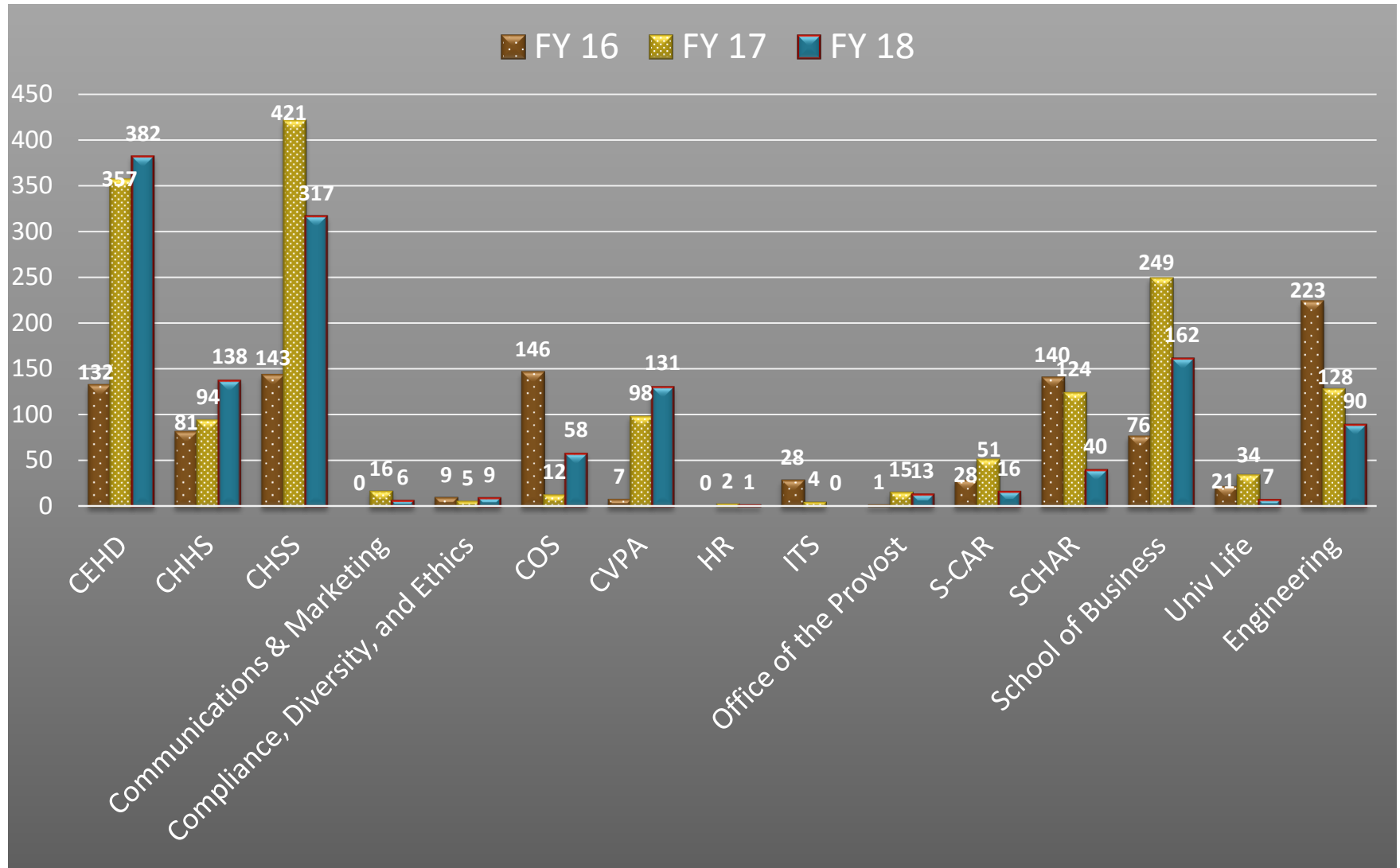
COMPLETED ACCESSIBLE MEDIA REQUESTS, FY12-PRESENT



COMPLIANCE BREAKDOWN VS. ACCOMMODATION



VIDEO BREAKDOWN PER ACADEMIC UNIT





COSTS (FY12-PRESENT)

COST COMPARISONS BY FY

	FY12*	FY13	FY14	FY15	FY 16	FY17	FY18
Total Minutes	3,453	7,309	16,419	19,261	17,318	27,738	20,549
Total Hours	57.55	121.82	278.4	321	289	462.3	342.5
Total Jobs	195	371	1034	1296	979	1,610	1,410
Hours (Outsourced)	18.63	68.97	222.55	275.95	277	431.5	315.3
Jobs (Outsourced)	24	177	901	1136	909	1,508	1,239
Avg. Cost/Min (Outsourced)	\$2.94	\$2.73	\$2.35	\$2.19	\$1.45	\$1.45	\$1.35
Hours (In-house)*	38.92	52.85	51.1	45.05	11	30.8	22.85
Jobs (In-house)*	171	194	133	160	70	102	169
Total Costs (In-house)*	\$13,707.62	\$0	\$0	\$0	\$0	\$0	\$0
Avg. Cost/Min (In-house)*	\$5.87	\$0	\$0	\$0	\$0	\$0	\$0

USING DATA TO ENHANCE DECISION-MAKING



WHO'S USING THE SERVICE?

- Over 378 faculty/staff members have made requests
- Top 5 Schools/Colleges/Units making requests
 - Volgenau School of Engineering
 - College of Humanities and Social Sciences
 - College of Education & Human Development
 - School of Business
 - College of Science
- Reasons for Request
 - Compliance for DE Course – 70%
 - Compliance for F2F Course – 3%
 - Compliance for Websites – 5%
 - Disability Accommodation – 22%

NEXT STEPS

- Assess Workflow
 - Continue working with stakeholders (DS, ODL, Library)
 - Continue tracking media, finding new areas for tracking
- Continue to improve campus buy-in
 - Targeted marketing (Semi-annual mailings)
 - Semester Faculty/Staff Surveys
 - Semester Student Surveys (D/HOH)
 - Social Media Outreach – via @AccessibleMason Twitter
 - Faculty/Staff Trainings (each semester)
 - Online Course Reviews c/o ODL
 - MAAPS Initiative – *Mason Academic Accessibility Plans*
- Improve costs/timelines
 - Statewide Captioning & Transcription RFP to reduce per minute costs

THINGS TO CONSIDER FOR YOUR INSTITUTION...

- Budget/Prioritization
- Build infrastructure first
- Involve stakeholders early
 - Front-facing websites
 - Online learning
 - Faculty teaching students with sensory impairments
- In-house (i.e., students, staff/faculty) vs. Outsourcing
- Develop policies and procedures
- Training, Training, Training!!



CONTACTING Us

Assistive Technology Initiative (ATI)

4400 University Drive, MSN 6A11
Aquia Building, Rm. 238
Fairfax, VA 22030

Phone: 703-993-4329

Fax: 703-993-4743

E-mail: ati@gmu.edu

Web: <http://ati.gmu.edu>,

Twitter: @AccessibleMason