

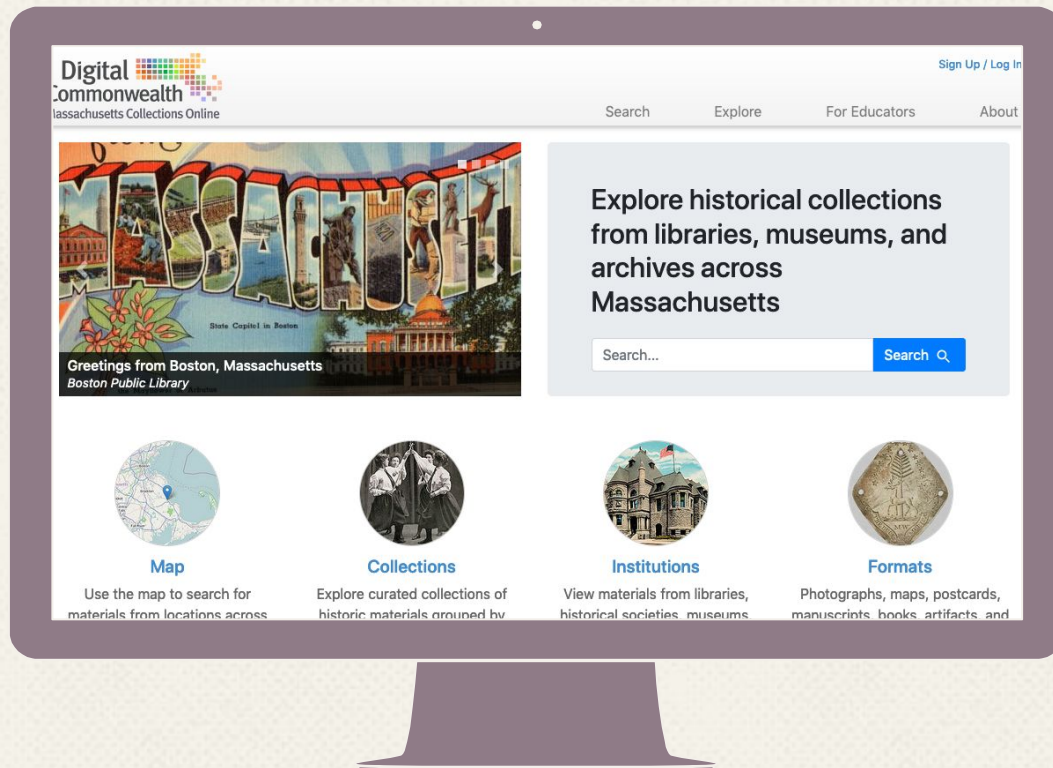


# DIGITAL COMMONWEALTH

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## Repository Systems Update: 2022

Eben English    Boston Public Library



## **digitalcommonwealth.org**

- Digital library of historical materials from Massachusetts institutions
- Over 950,000 items from libraries, archives, museums, historical societies
- Photographs, manuscripts, maps, artwork, video, artifacts, newspapers
- Hosted and harvested materials, links to other repositories
- Launched in 2006, funded by IMLS
- DPLA Service Hub

# WE HAVE LIFTOFF!

Covering April 2021 - March 2022

- New collections
- New systems
- Project updates
- Future work
- Usage trends
- Top 20 items



Detail from: *Gemini 6 ready for takeoff seen on television screen*  
Boston Public Library; Press Photography from the Brearley Collection  
<<https://ark.digitalcommonwealth.org/ark:/50959/rb68zq04f>>

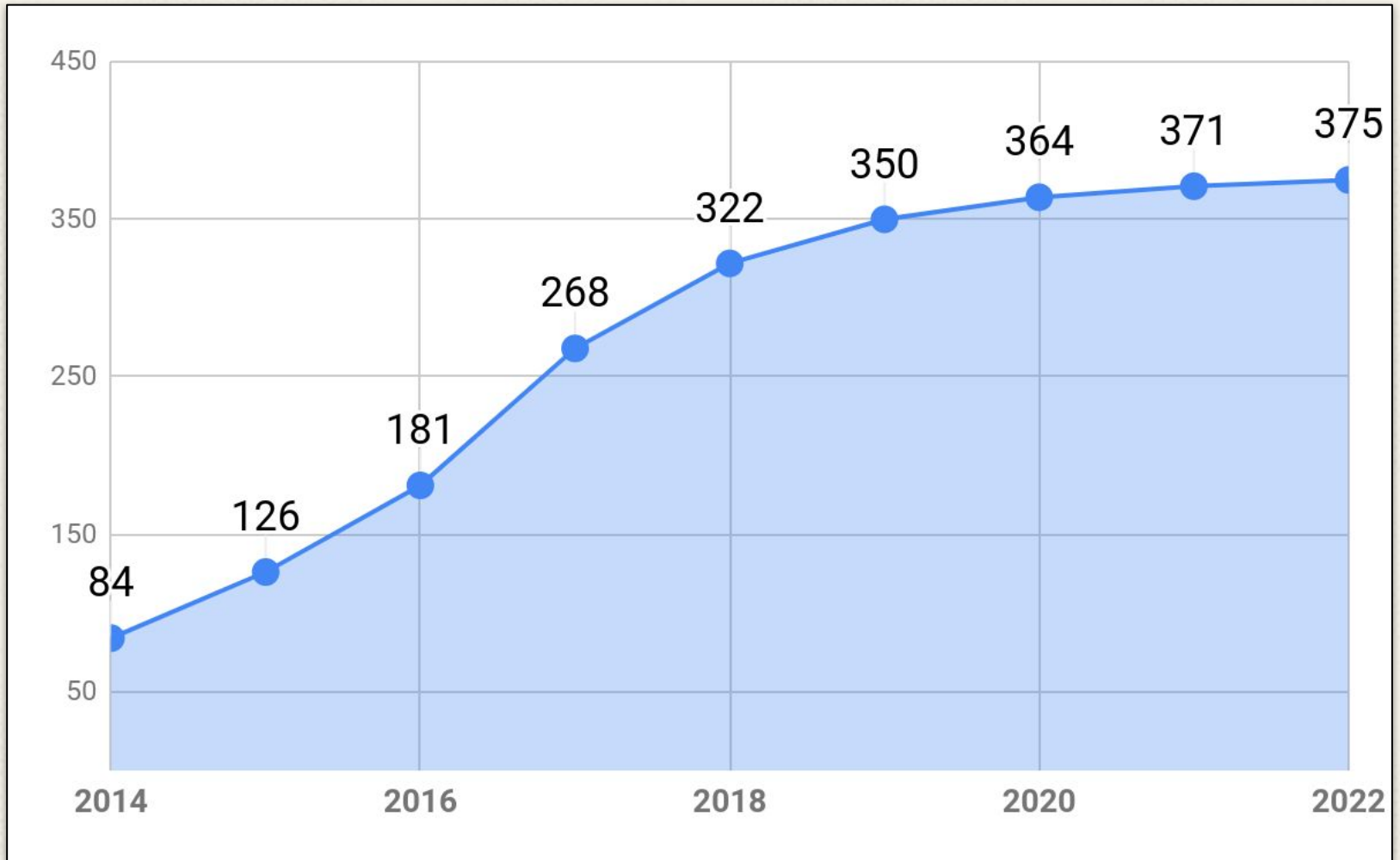
---

# NEW COLLECTIONS



*Astronaut Edwin E. Aldrin views a piece of moon rock*  
Boston Public Library; Press Photography from the Brearley Collection  
<<https://ark.digitalcommonwealth.org/ark:/50959/kh04nk24j>>

# NEW: INSTITUTIONS





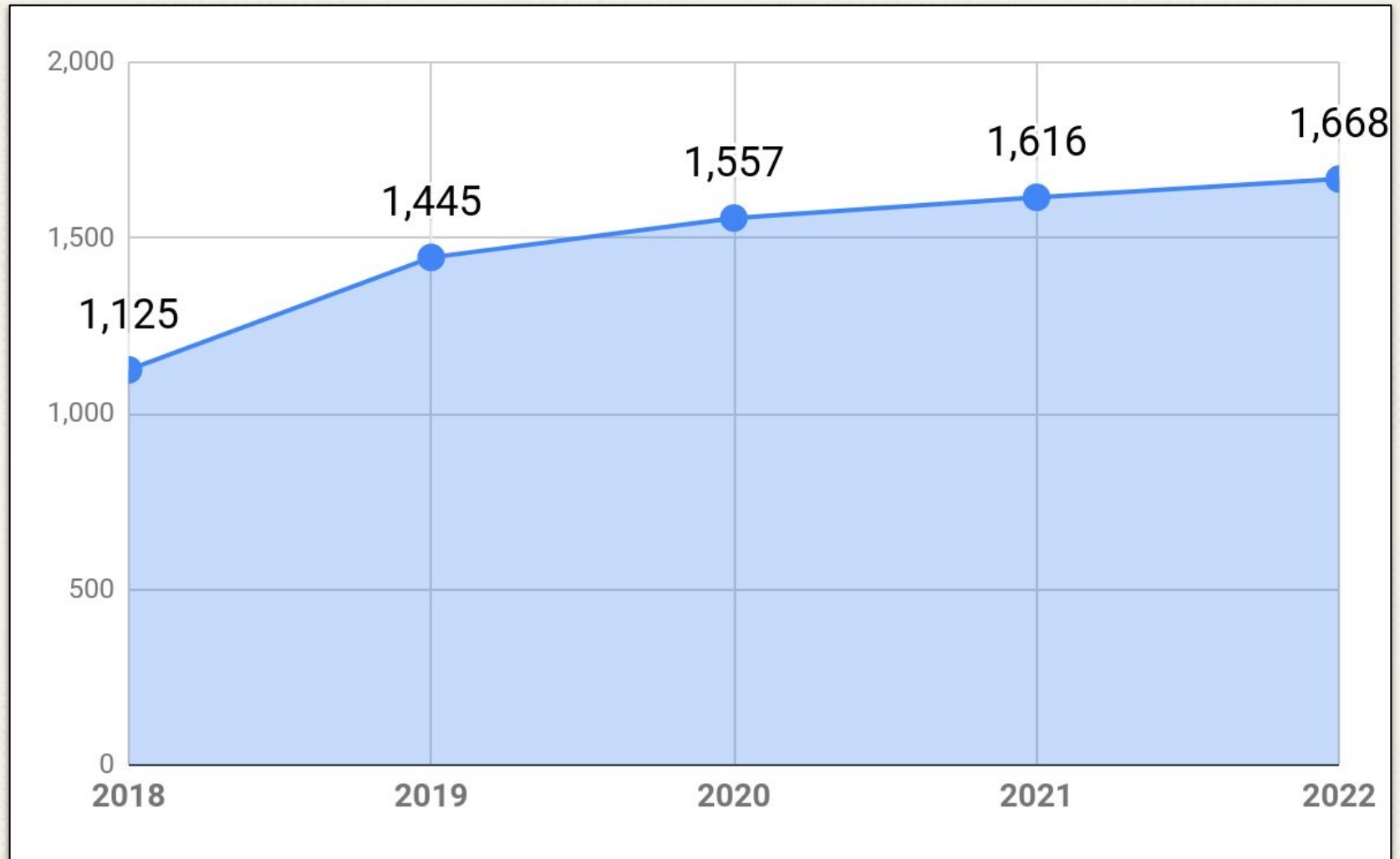
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## **NEW: INSTITUTIONS**

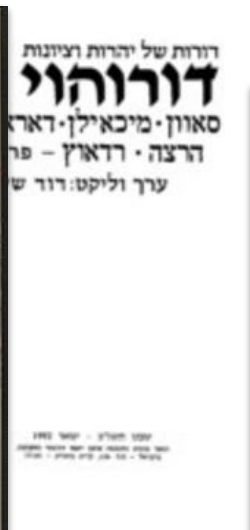
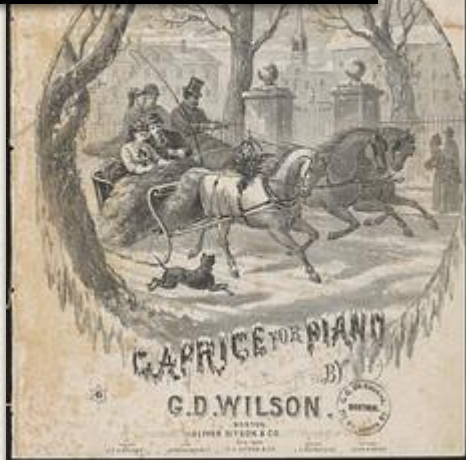
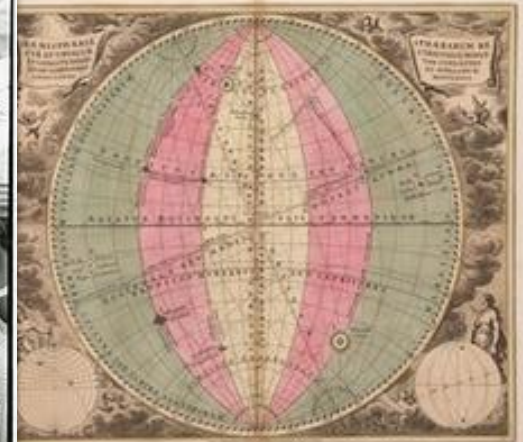
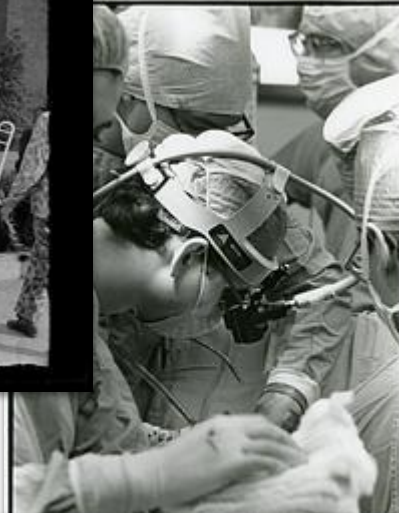
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- Boston Children's Hospital Archives
- City of Gloucester, Archives
- Harvard Musical Association
- Hopkinton Historical Society
- Yiddish Book Center

## NEW: COLLECTIONS

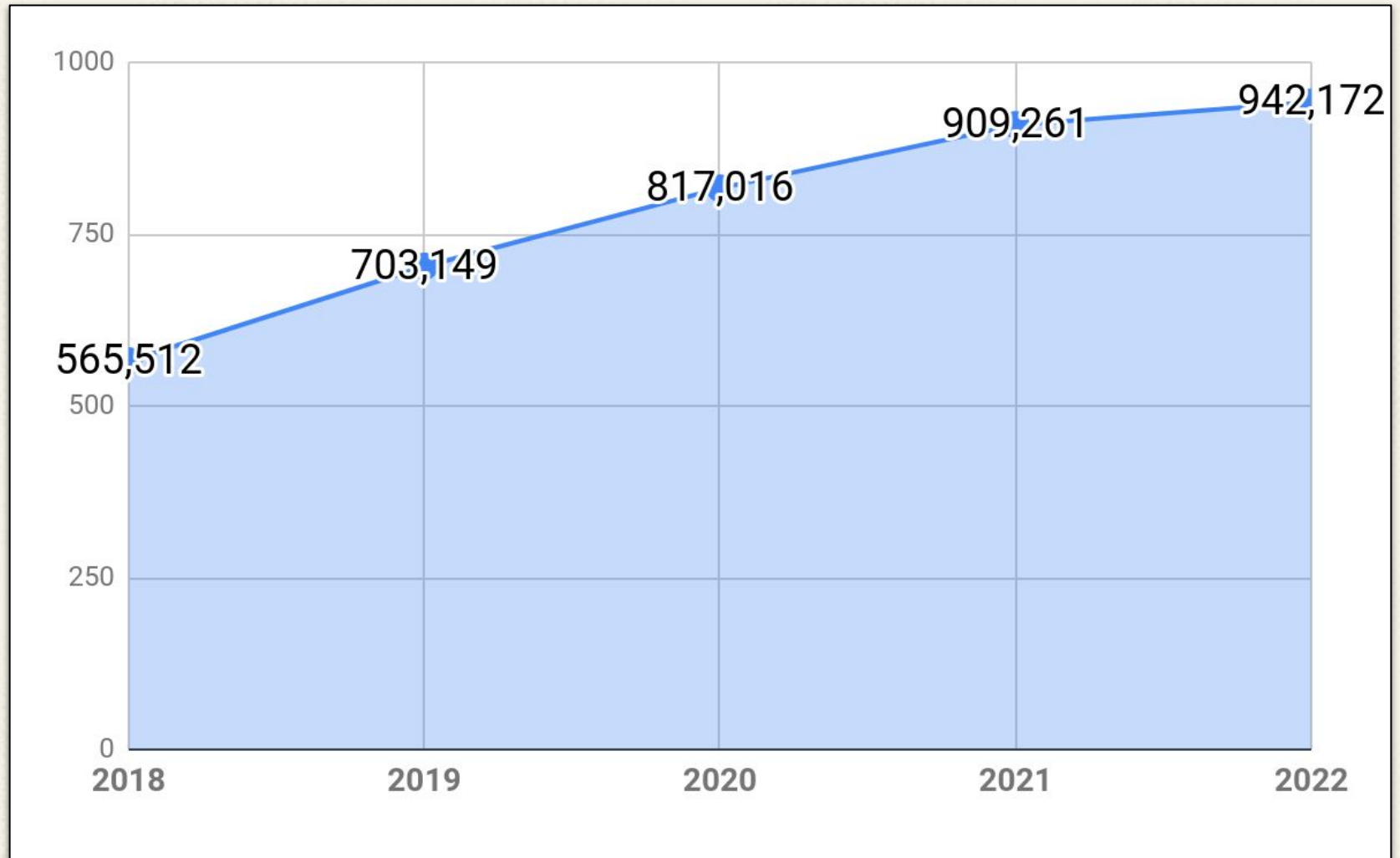


# NEW: COLLECTIONS

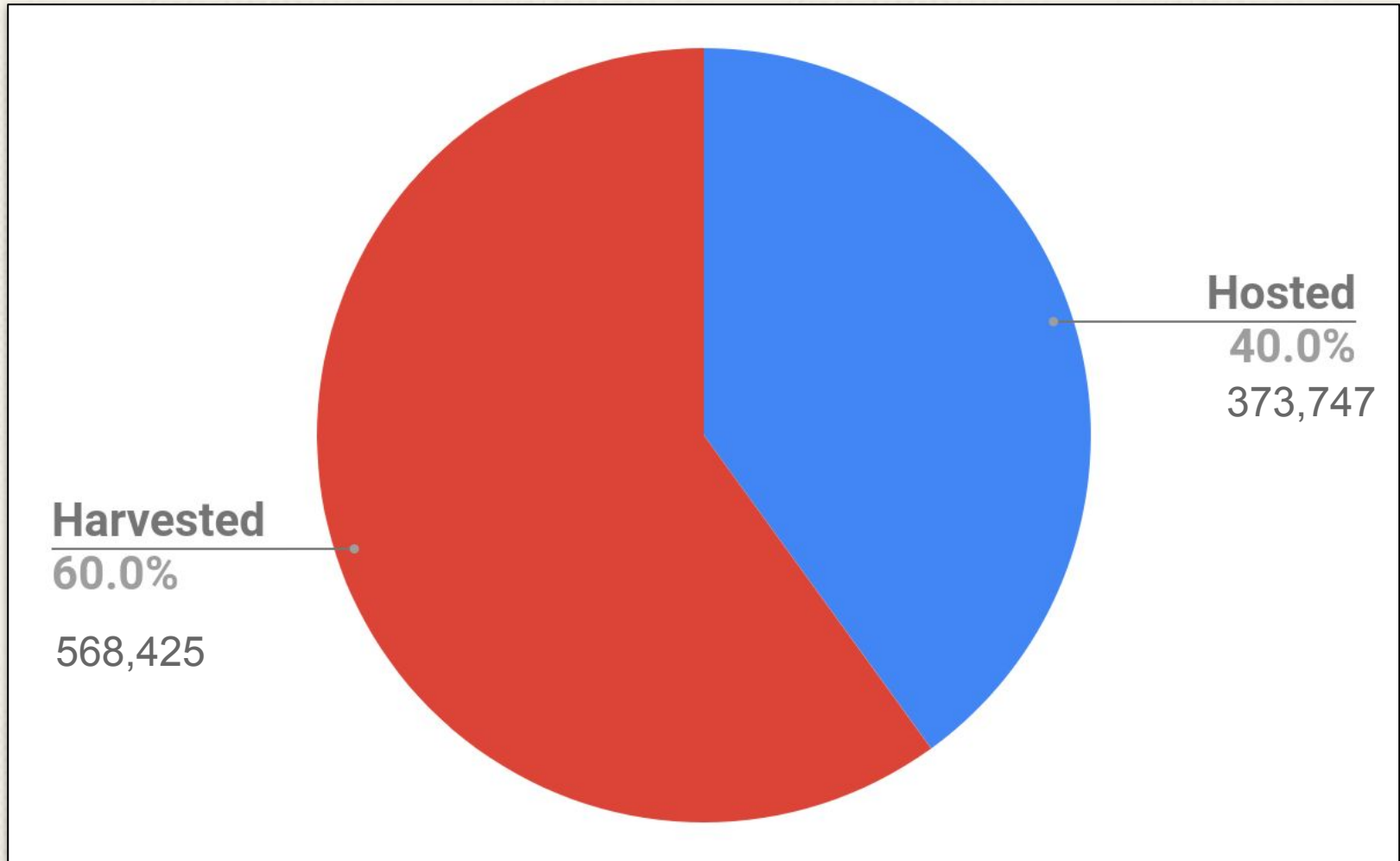




# NEW: ITEMS

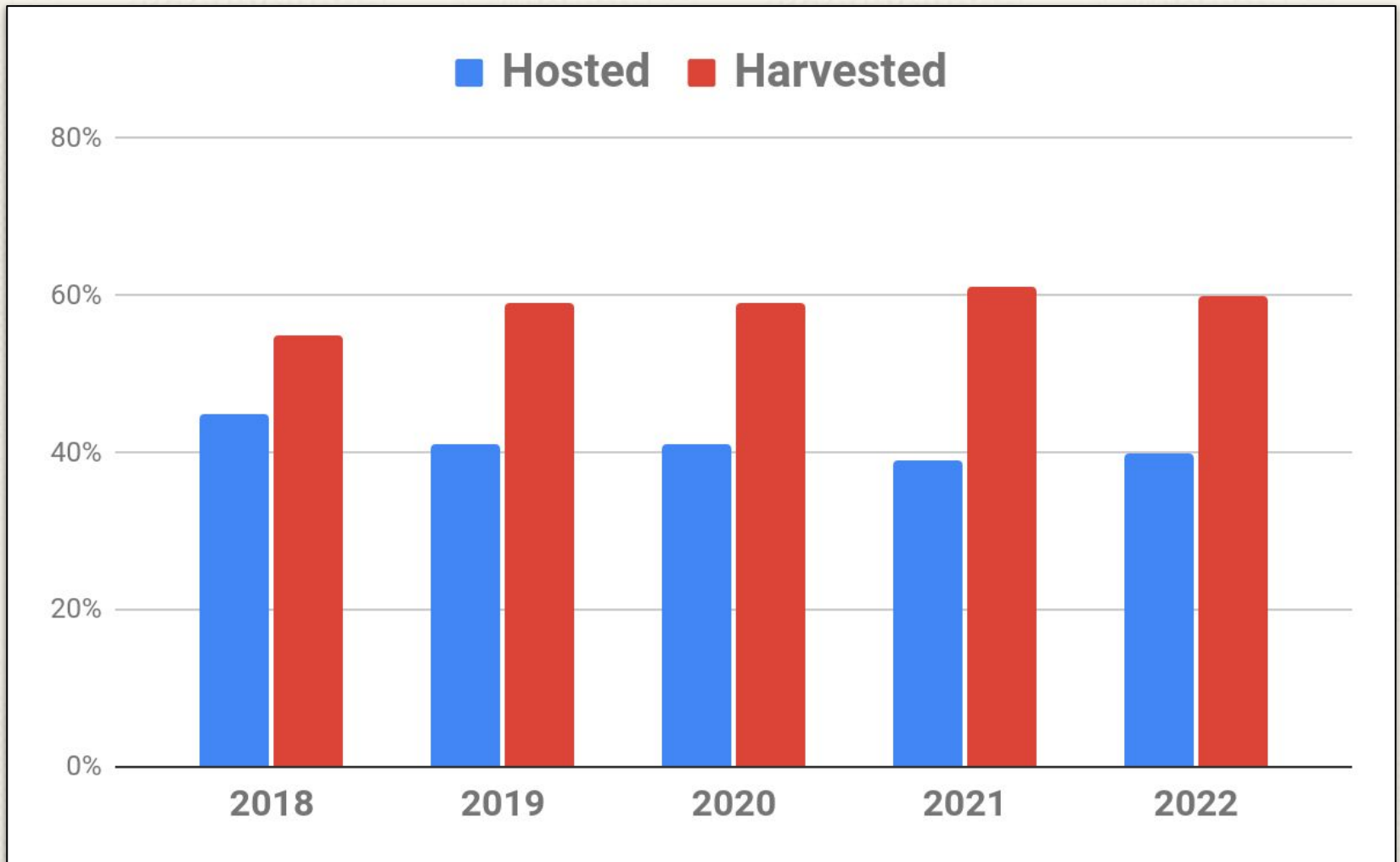


# HARVESTED v. HOSTED ITEMS



# HARVESTED v. HOSTED ITEMS

Last 5 Years



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# **NEW: HARVESTS**

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## **NEW HARVESTS**

- Yiddish Book Center

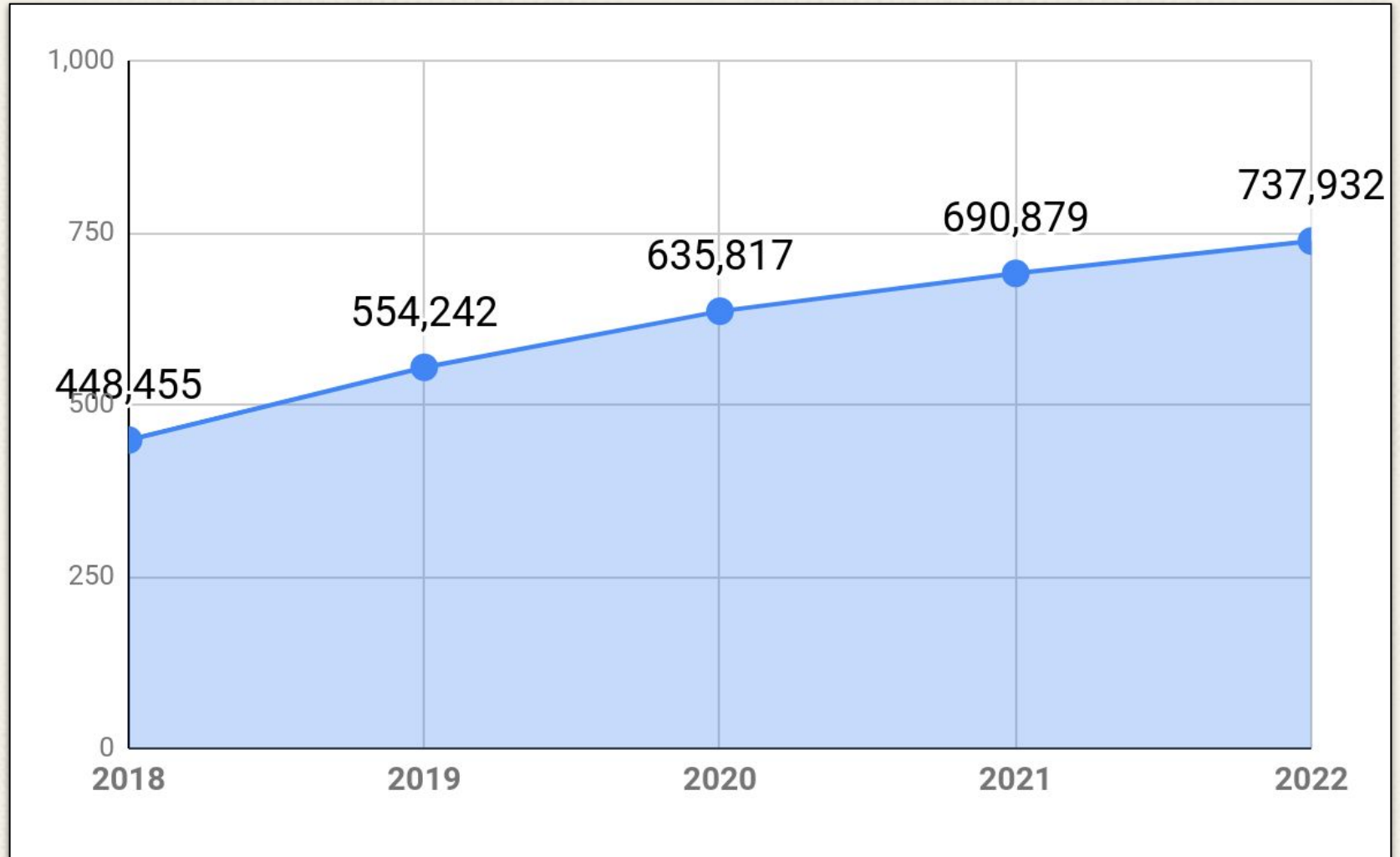
## **RE-HARVESTS**

- Northeastern University Library
- SAILS Library Network

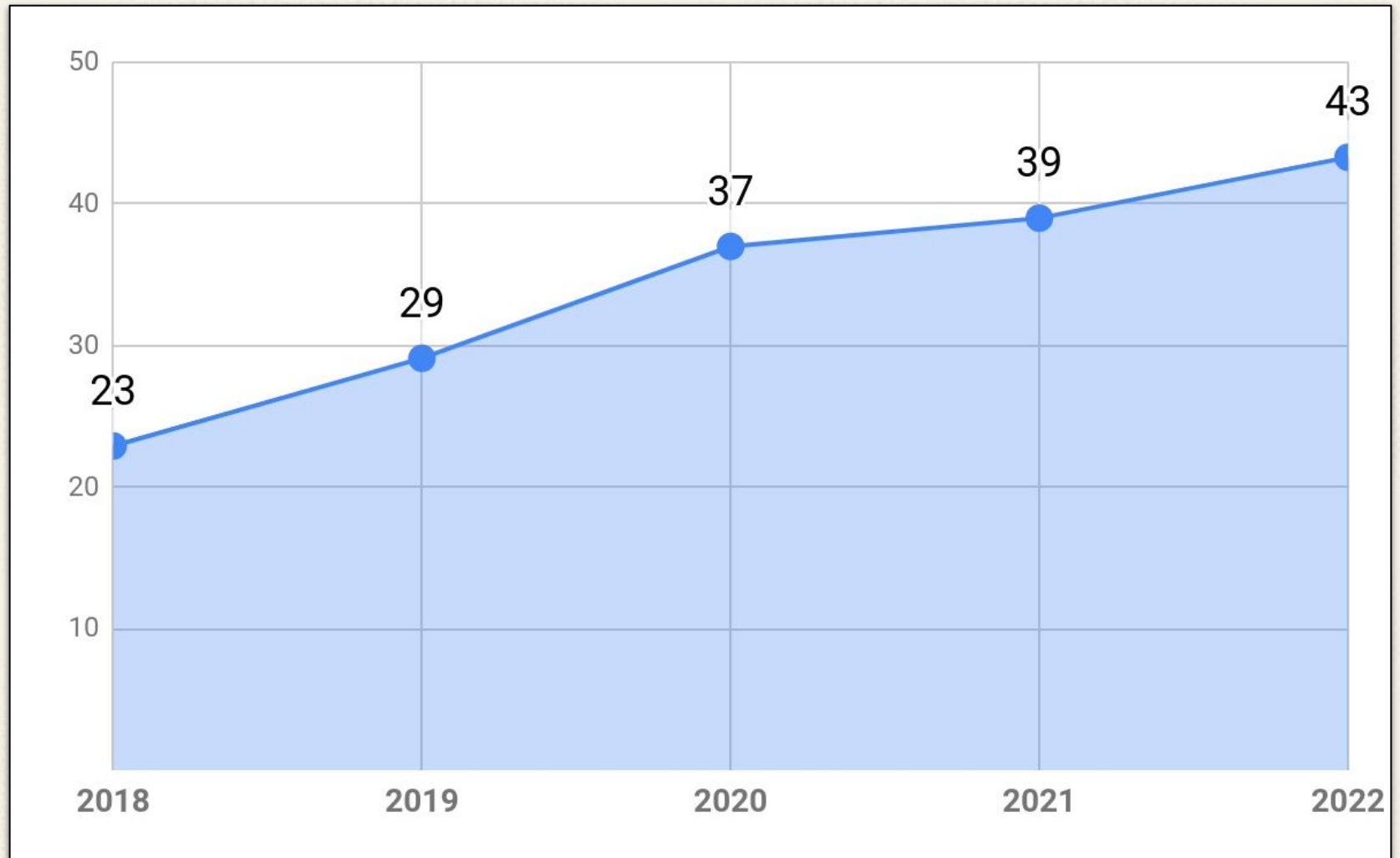


# NEW: FILES

## PRIMARY FILES ONLY



## NEW: STORAGE (TB)



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# NEW SYSTEMS



*Young boy looking up at Mariner II space probe at NASA exhibit at War Memorial Auditorium  
Boston Public Library; Press Photography from the Brearley Collection  
<<https://ark.digitalcommonwealth.org/ark:/50959/5138k9968>>*

## DC3: LIFTOFF?





## DC3: WHEELS UP

### New repository system:

- Open-source
- Database-backed metadata
- Cloud storage for file assets
- API-driven
- Microservices framework



*Gemini 12 capsule being removed from the USS Wasp*  
Boston Public Library; Press Photography from the Brearley Collection  
<<https://ark.digitalcommonwealth.org/ark:/50959/rb68z7640>>

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## DC3: ADVANTAGES

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- Increased storage capacity
- “Pay as you go” storage costs
- Less infrastructure
- More widely-adopted technologies
- Bigger community, more support
- Atomic updates
- Greater authority control
- Increased fault tolerance
- Flexibility

## DC3: MICROSERVICES

- Curator (metadata, file inventory)
- Authority API
- ARK Manager
- IIF Image Server
- Search index
- AVI Processor
- Public front-end

All code available on GitHub: <https://github.com/boston-library>

## DC3: MIGRATION

- Suspended ingests & harvests in May 2021
- Migration ran from September - December 2021
  - 926,812 items
  - 7,289,632 files
  - 39.55 TB
- All files verified w/checksums
- Resumed ingests in January 2022



## DC3: NEXT STEPS

- OAI-PMH:  
harvesting & provider
- Newspaper ingest workflow
- Internet Archive  
ingest workflow
- Administrative interface
- Scalable cloud deployment



*Amateur Rocketeer Club, July 16, 1969*  
Jones Library, Amherst; Amherst Record Photograph Collection  
<<https://digitalamherst.org/items/show/1986>>

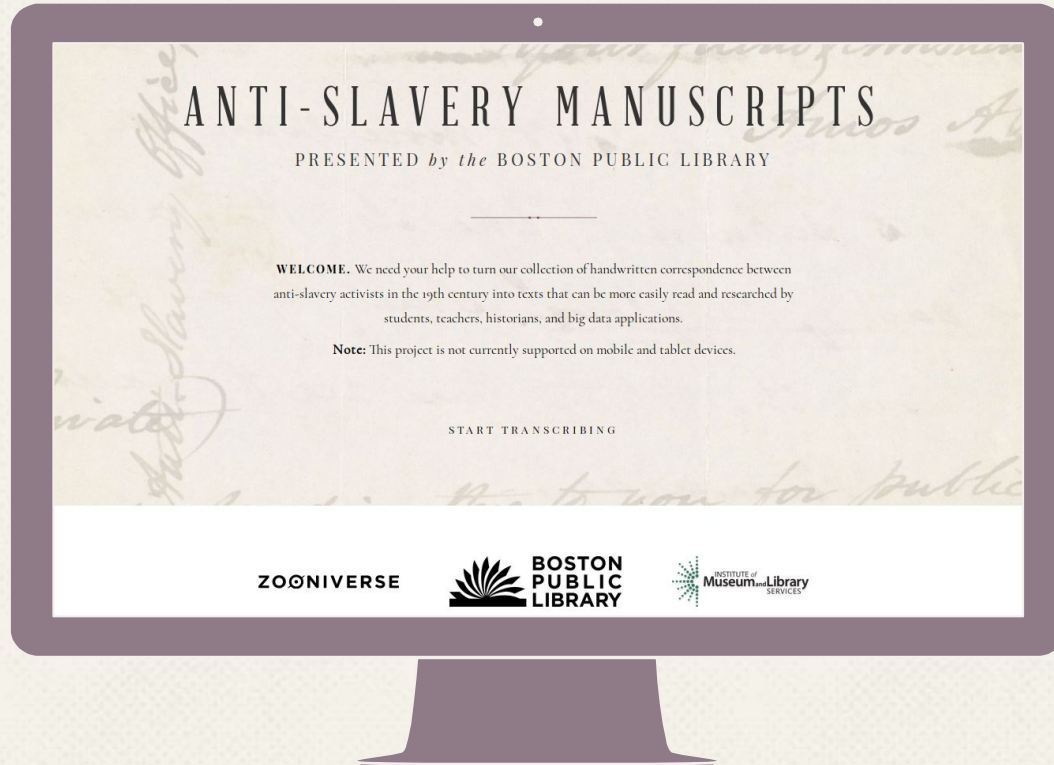
---

# PROJECT UPDATES



Detail from: *Crewmembers During Training Session in Flight Deck Simulation*  
Framingham State University, Henry Whittemore Library; Challenger STS-51L  
<[https://digitalcommons.framingham.edu/uncategorized/IO\\_ff98800a-c800-4138-b248-707935525eb1/](https://digitalcommons.framingham.edu/uncategorized/IO_ff98800a-c800-4138-b248-707935525eb1/)>

# UPDATES: ZOONIVERSE



## Transcriptions now available!

- Crowd-sourced transcription of letters from BPL Anti-Slavery Collection
- Over 12K letters transcribed
- Downloadable PDF transcription
- Full-text search w/highlighting



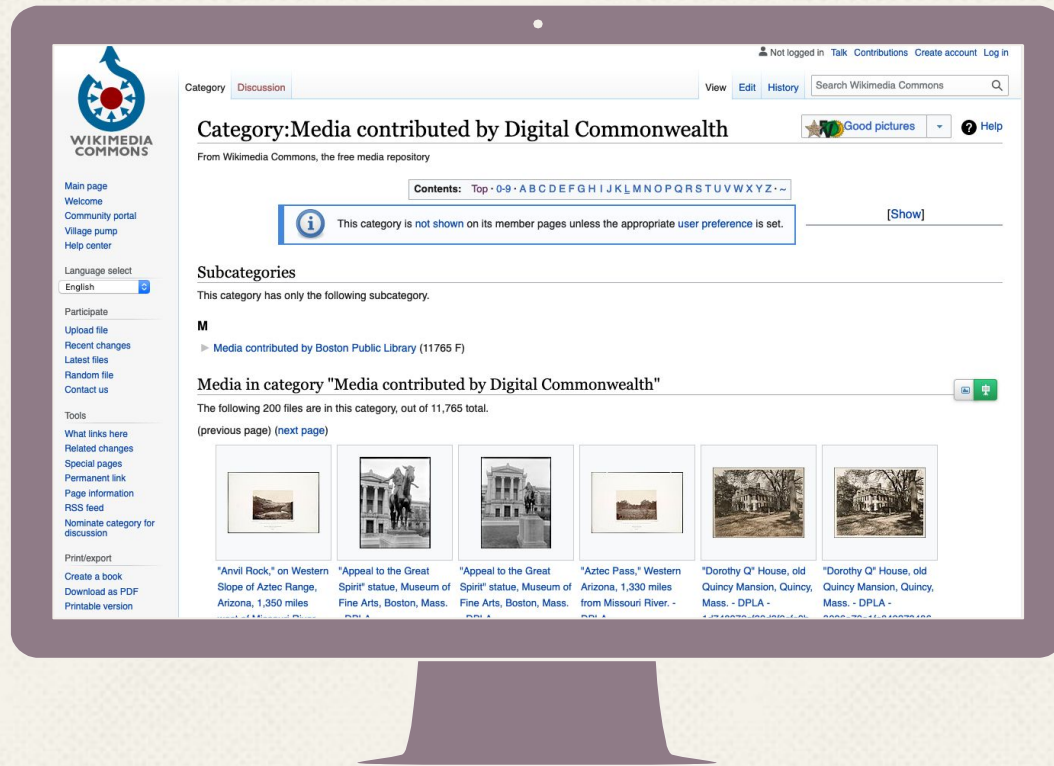
# UPDATES: ZOONIVERSE



Viewing: *In Memoriam by William Lloyd Garrison, Boston, [Mass.], June 20, 1878*  
Boston Public Library; Anti-Slavery (Collection of Distinction)  
<<https://ark.digitalcommonwealth.org/ark:/50959/cv43qb980>>



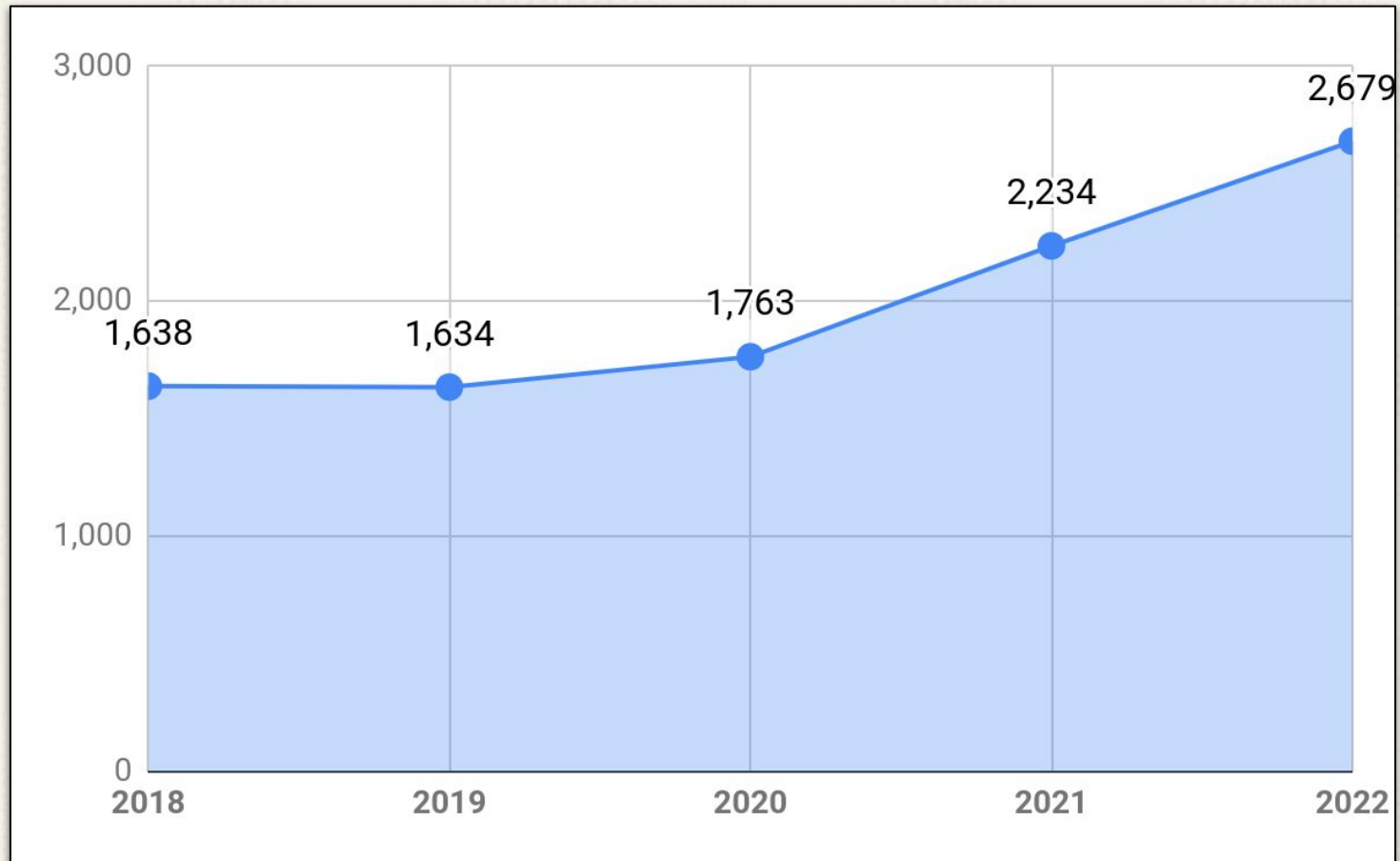
# UPDATES: WIKIMEDIA COMMONS



- 20K image files uploaded to Wikimedia Commons by DPLA
- Public-domain and select Creative Commons-licensed items
- BPL; Mass. Archives, Dept. of Conservation & Recreation; Phillips Academy Andover; National Archives Boston

# WIKIMEDIA: TRAFFIC

Sessions with referral from Wikipedia or Wikimedia sites:



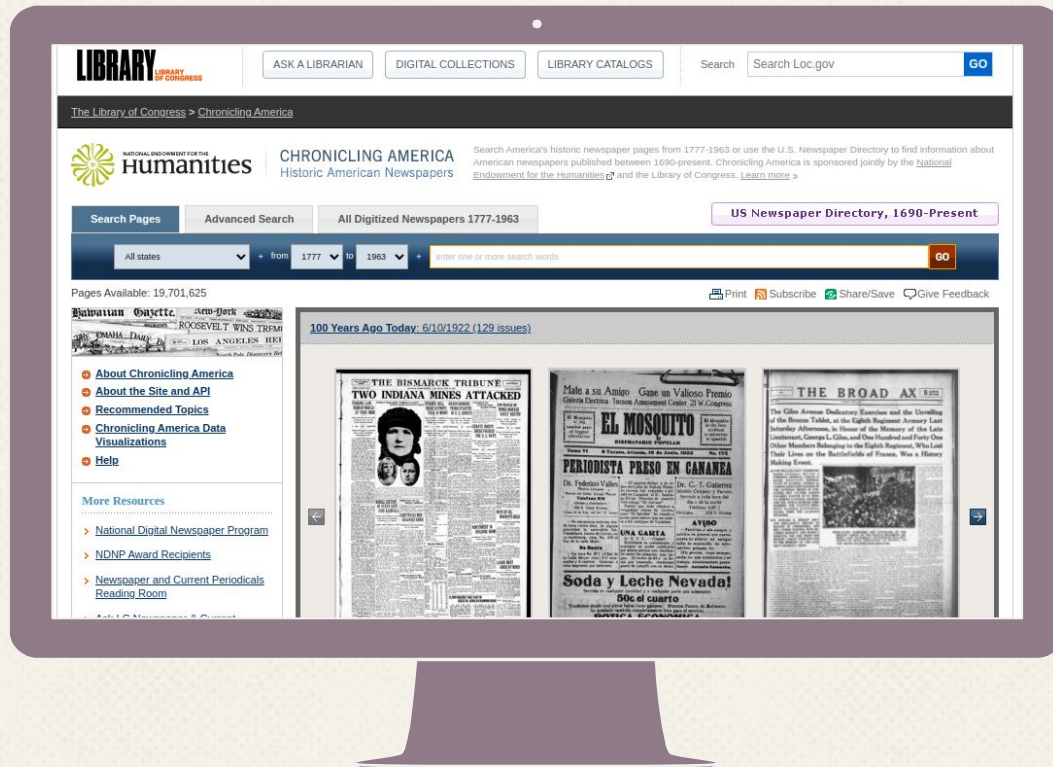
# UPDATES: NEWSPAPERS



## Microfilm scanning at BPL

- Building capacity: scanning, collation, metadata, OCR, ingest
- *Woman's Era; Tocsin of Liberty; Lawrence Evening Tribune*
- Focus on smaller runs of historically significant, underrepresented titles

# UPDATES: NEWSPAPERS



## National Digital Newspaper Program

- Two-year grant to contribute 100K pages to **chroniclingamerica.loc.gov**
- Titles selected by committee of librarians, scholars, and educators
- Content will also be available in **digitalcommonwealth.org**



# UPDATES: NEWSPAPERS

## MyHeritage

- Sharing microfilm and digitized images
- 7 million pages scanned to date
- Seeking funding to process materials to NDNP-level specifications
- Pilot project underway focusing on Boston neighborhood newspapers from mid-1800s to mid-1900s

# FEATURES: HOW TO REQUEST

**Contact Us**

We welcome your comments and feedback.

**Your Name:**

**Your Email:**

**Topic:**

**Your Message:**

We welcome suggestions for improved functionality for this site. Please include as much detail as possible with your suggestion.

**[digitalcommonwealth.org/feedback](https://digitalcommonwealth.org/feedback)**

- Select “site feature suggestion”

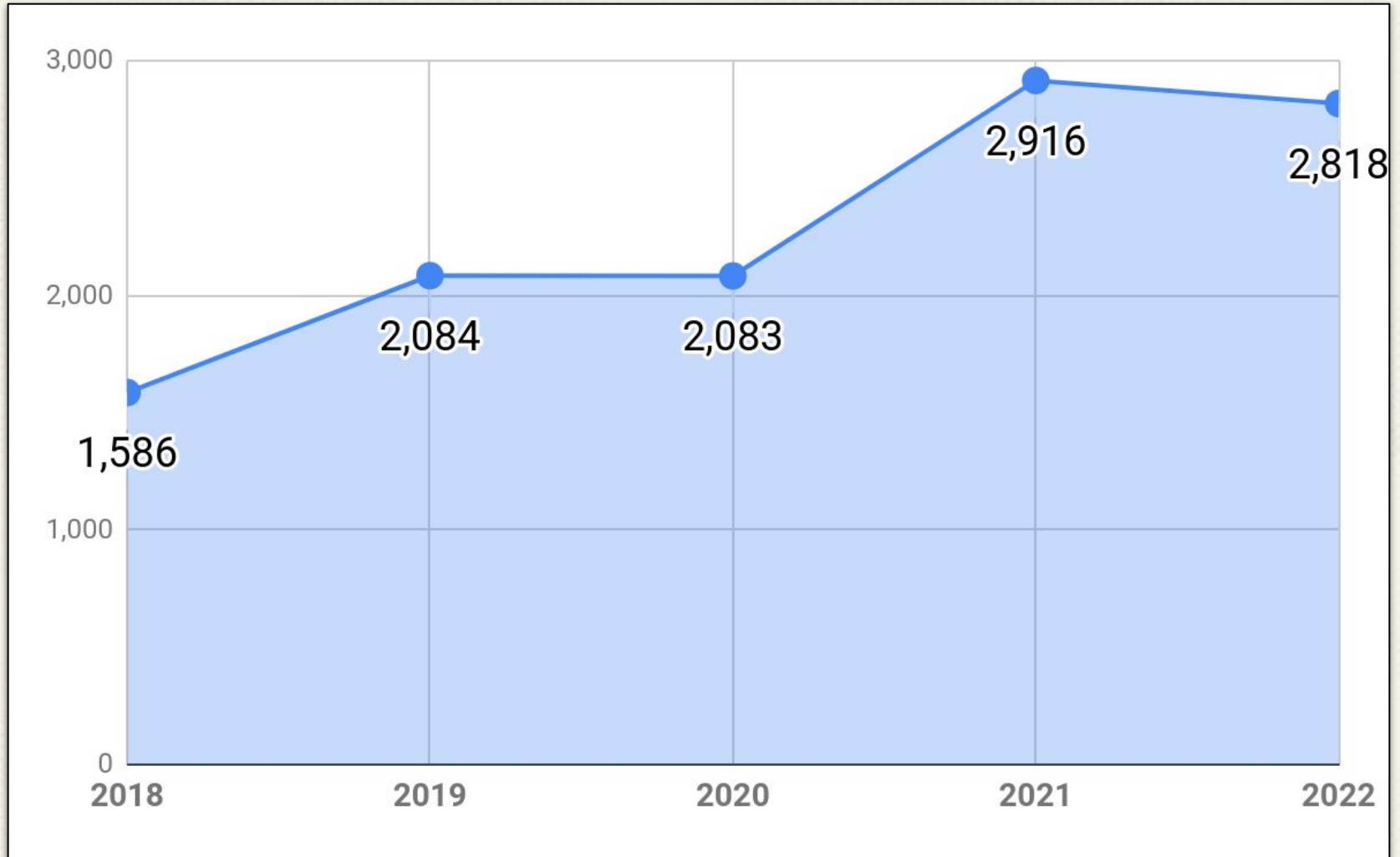
---

# USAGE TRENDS



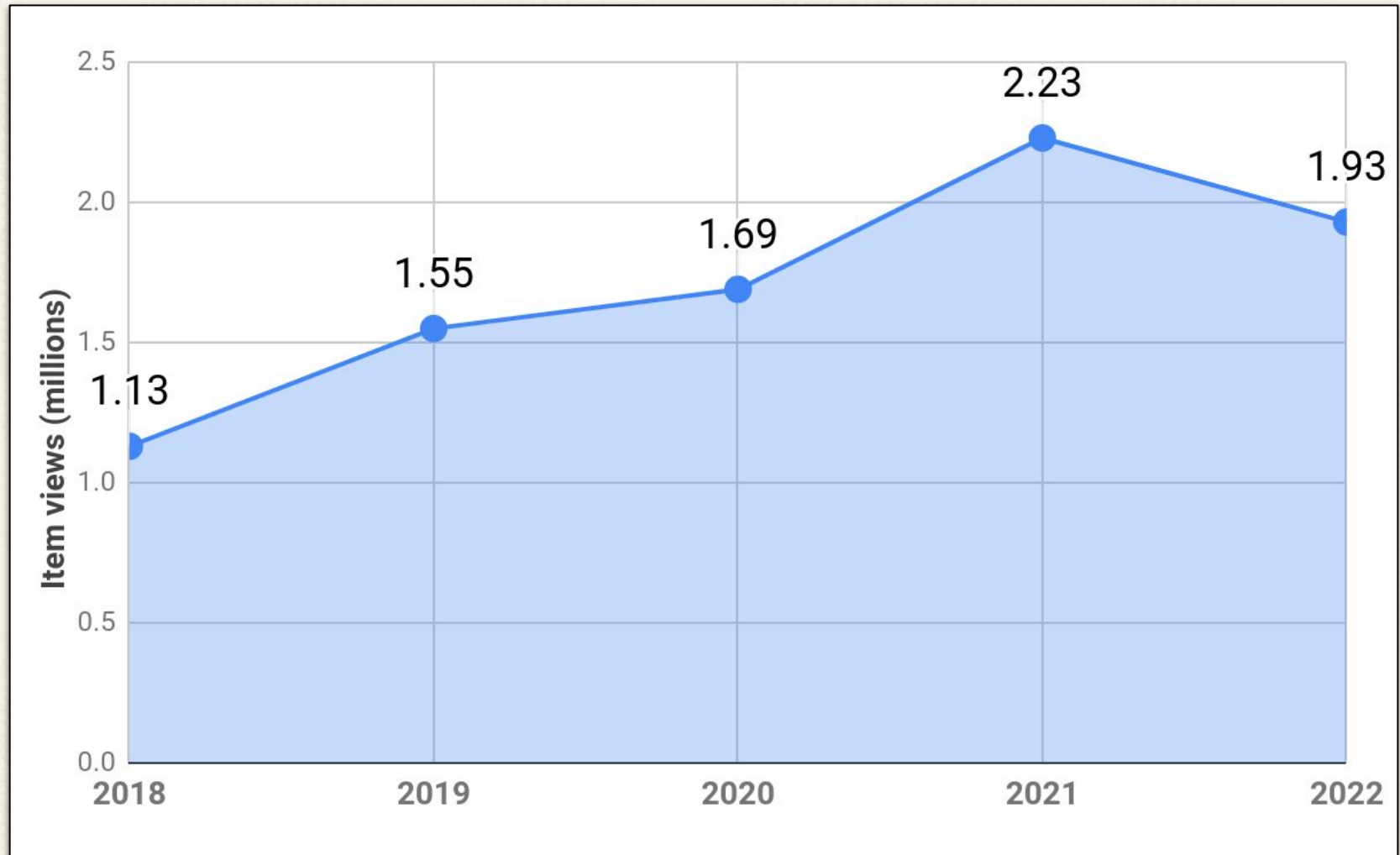
*Two unidentified people with Gemini 12 capsule*  
Boston Public Library; Press Photography from the Brearley Collection  
<<https://ark.digitalcommonwealth.org/ark:/50959/rb68z758v>>

# USAGE: SESSIONS PER DAY

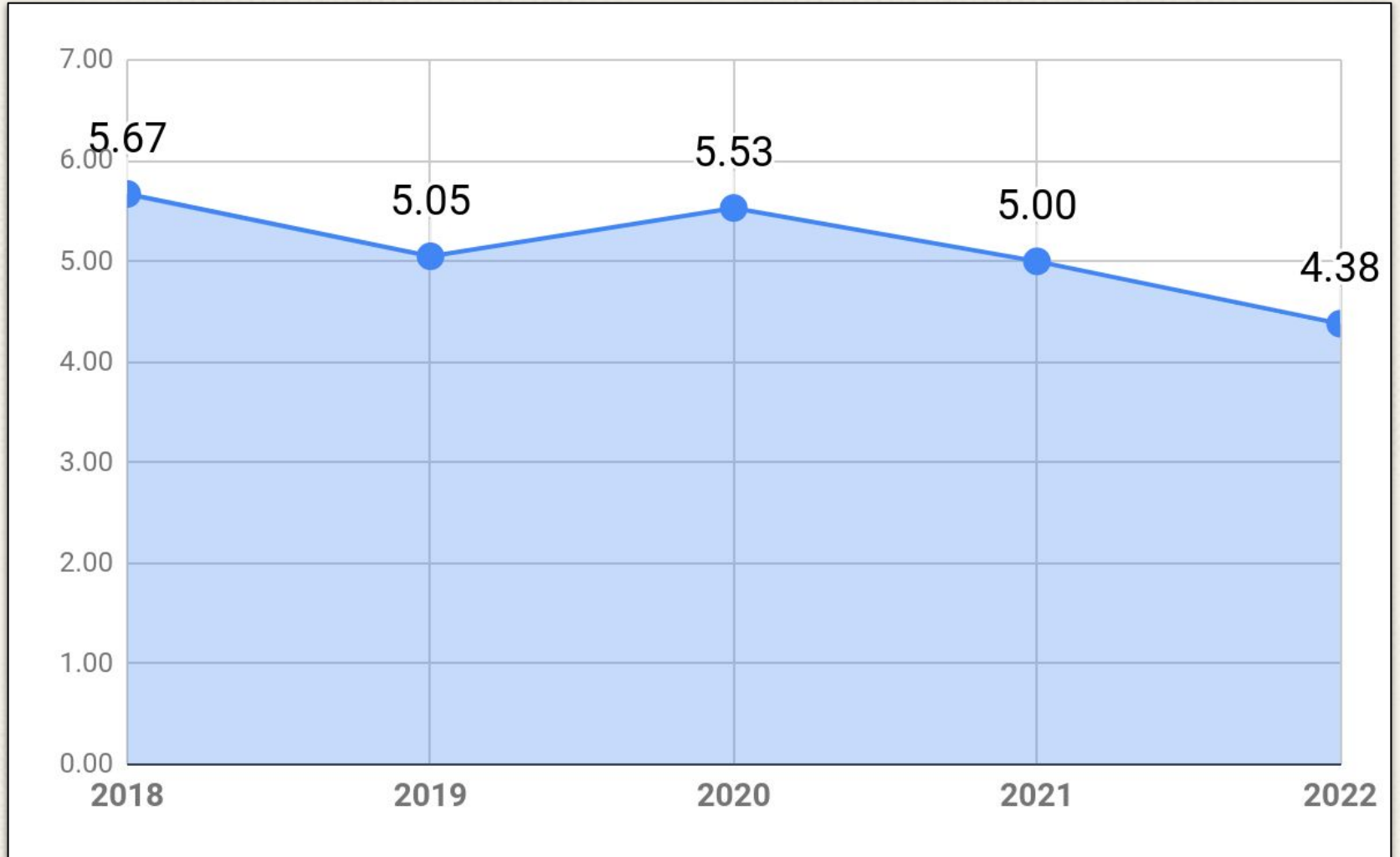




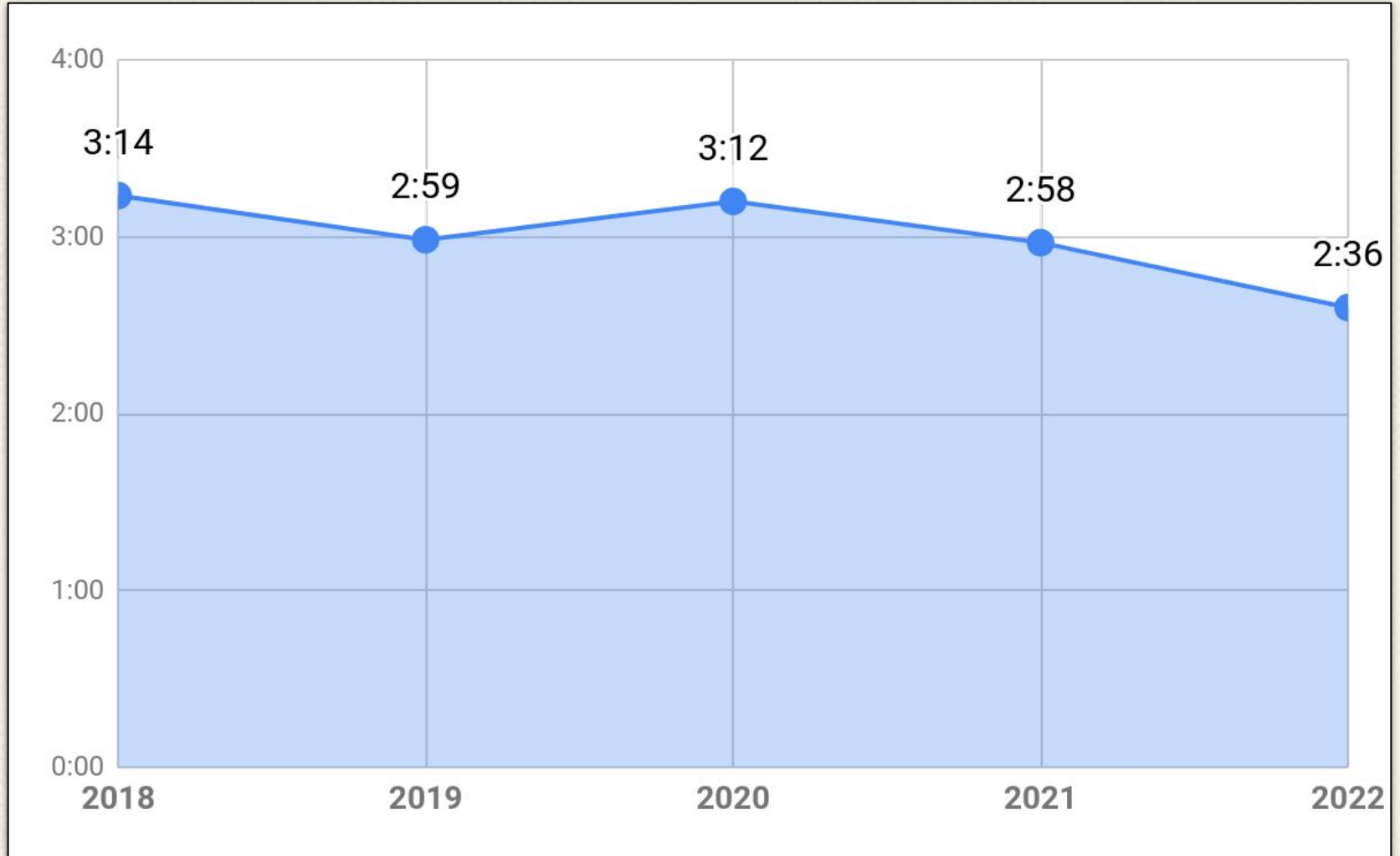
# USAGE: ITEM VIEWS



# USAGE: PAGES PER SESSION

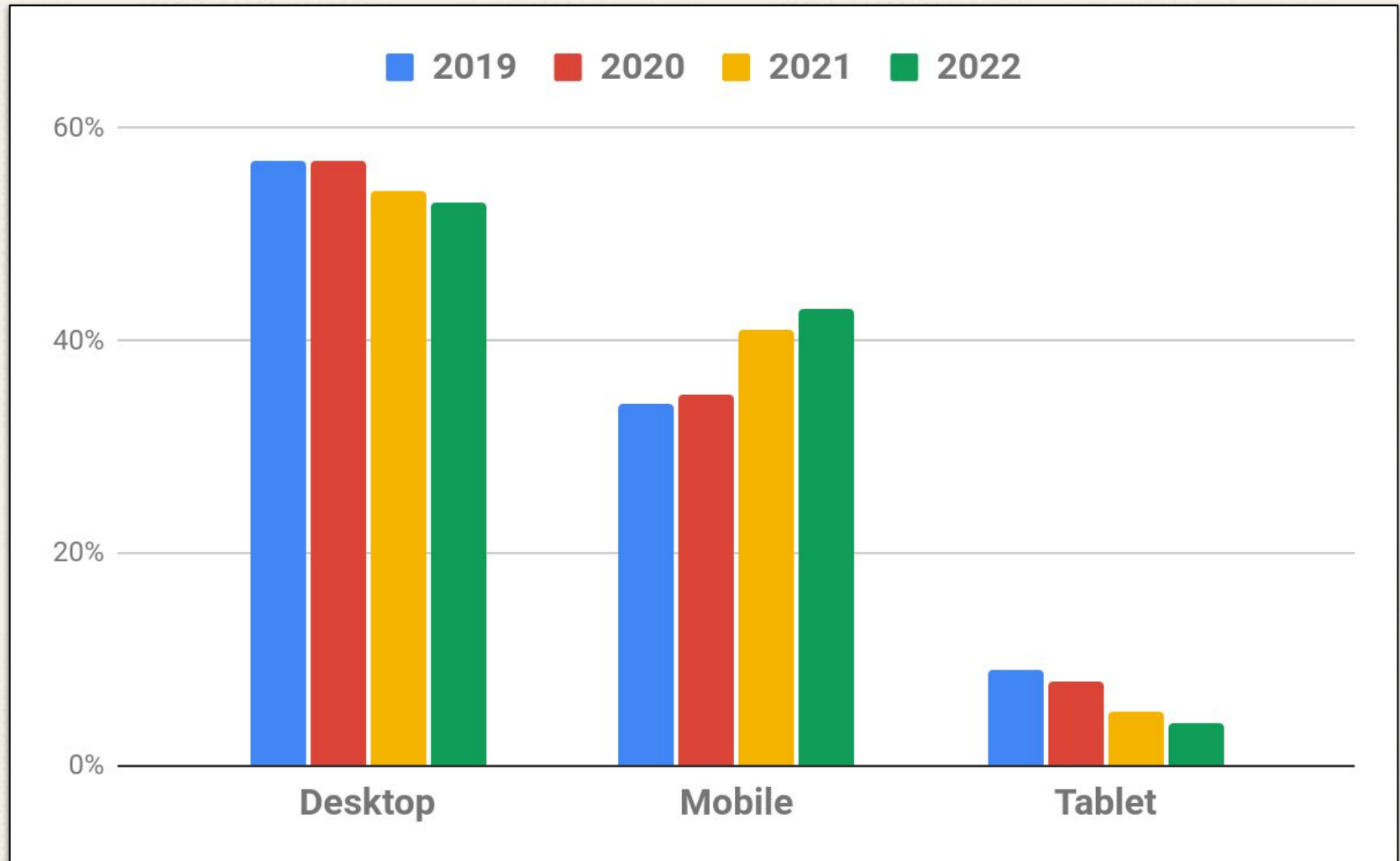


# USAGE: SESSION LENGTH



# USAGE: DEVICES

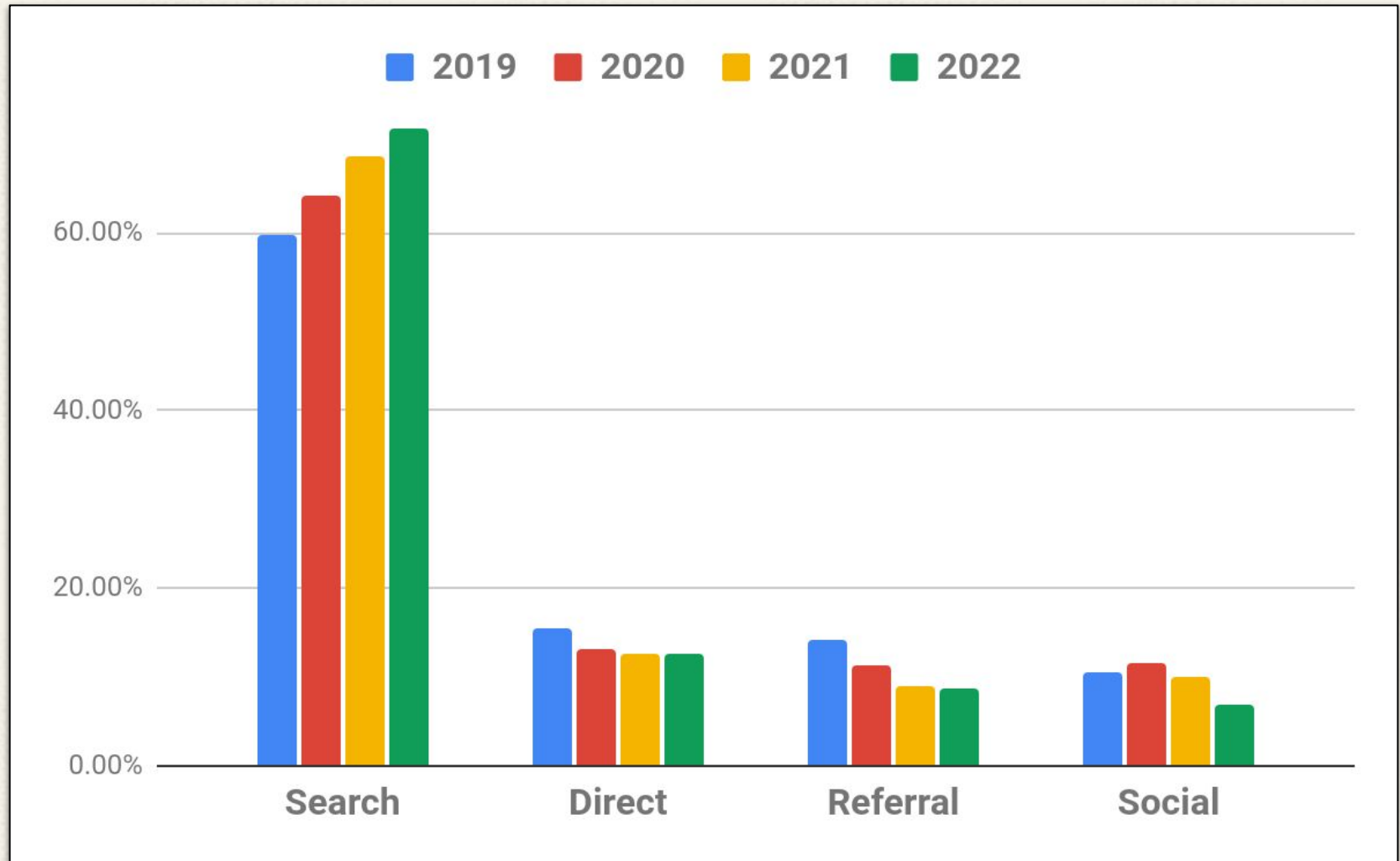
## Last 4 Years





# USAGE: TRAFFIC SOURCES

## Last 4 Years



## USAGE: TOP REFERRING SITES

bpl.org	17,503
dp.la	10,680
revolution250.org	2,543
omnia.ie	2,493
en.wikipedia.org	1,703
sec.state.ma.us	1,507
kottke.org	1,326
classroom.google.com	1,227
brooklinehistoricalsociety.org	1,095
universalhub.com	875

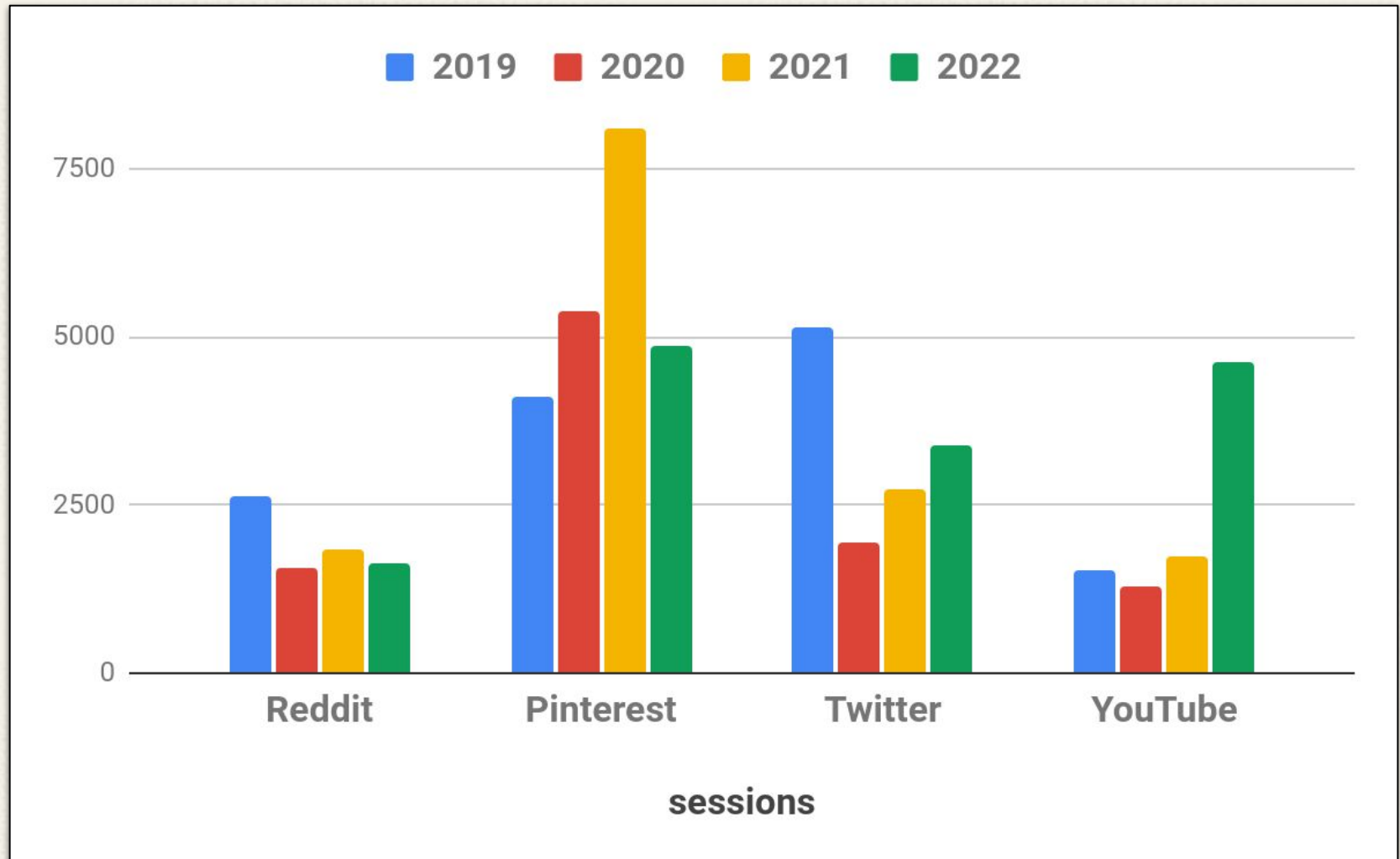
## USAGE: REFERRING SITES

### HONORABLE MENTIONS

jphs.org	720
medfordhistorical.org	667
bostonbasinhills.org	665
pem.org	627
thomascranelibrary.org	507
mass.gov	494
guides.newtonfreelibrary.net	473
libguides.uml.edu	381
newbedford-ma.gov	375
lawrencehistory.org	356

# USAGE: SOCIAL

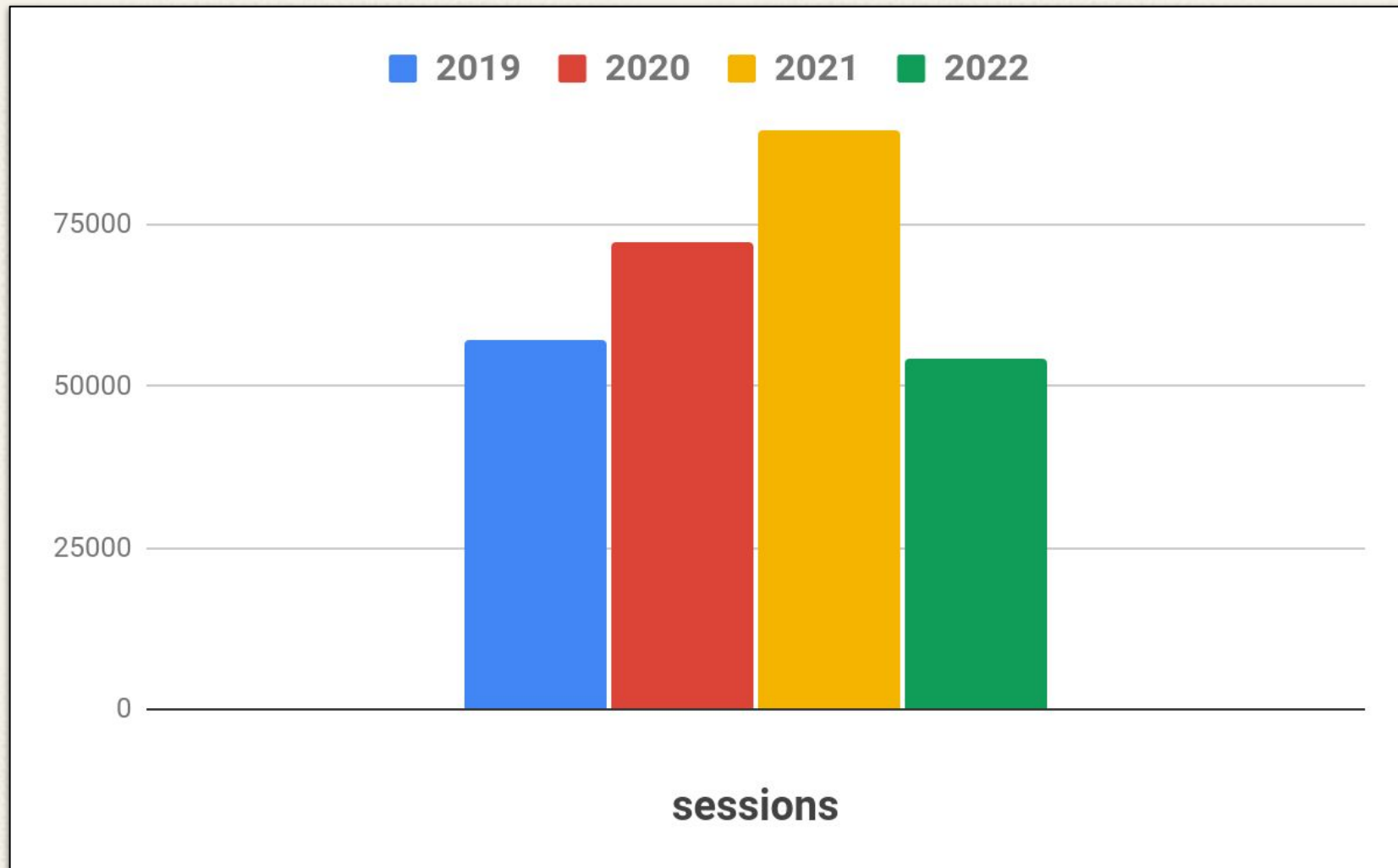
## Last 4 Years



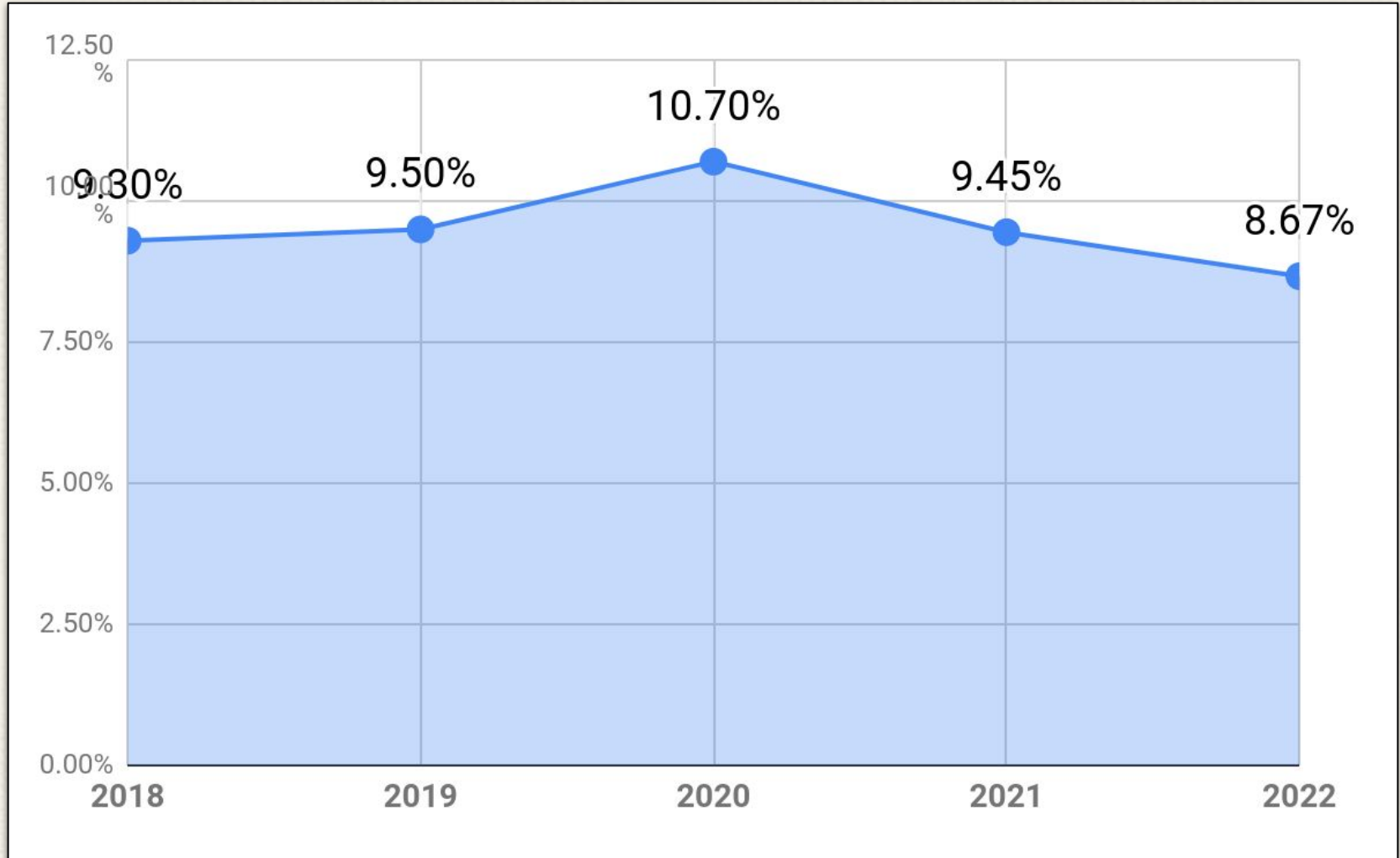


# USAGE: FACEBOOK

## Last 4 Years



# USAGE: SITE SEARCH SESSIONS WITH SEARCHES Last 5 Years



# USAGE: SITE SEARCH

## SEARCH TERMS

leviathan **Liberator** Al perry **map** slavery somerville **escher**  
**apollo 8** christmas marblehead baseball **Charlestown**  
north andover railroad **Northeastern** basketball Samuel Chamberlain  
jamaica plain cambridge **larz anderson** braves field **roxbury** Medford  
**central power station** amesbury civil war salem  
**salem willows** china billerica **boston** West Roxbury  
boston harbor ships **Malden** Stoughton FayFoto busing for school integration chicopee  
brookline south boston **Squantum** Almhouse **Quincy** Methuen  
**MICHAEL JORDAN** fens framingham school penn central expressway quabbin new bedford  
**christmas** truro gardening **Leslie Jones** egypt **dorchester**  
battleship worcester **yearbooks** **The newshour with jim Lehrer**  
Hopkinton oak hill the lancaster oak



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# MOST-VIEWED ITEMS



*Rocket display in National Air and Space Museum*  
Northeastern University Library; Chinese Progressive Association Records  
<<http://hdl.handle.net/2047/d20192691>>



## TOP 20 ITEMS

- April 2021 - March 2022
- Unique page views
- Includes change from previous year
  - Baseline: -13%

## TOP 20 ITEMS

#20: 922 views (-8%)



Ascending and descending

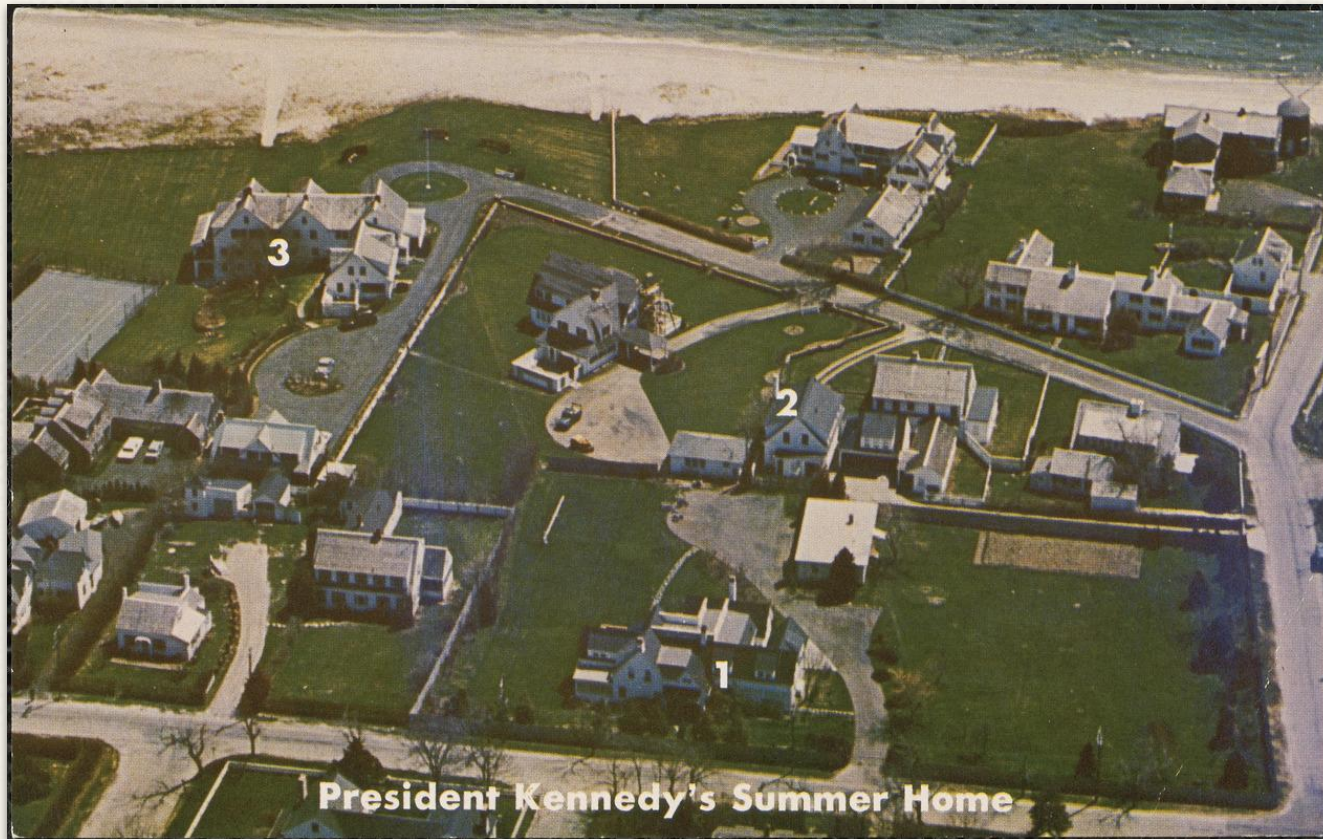
Boston Public Library; M. C. Escher (1898-1972). Prints and Drawings

<https://ark.digitalcommonwealth.org/ark:/50959/3r076s51v>



## TOP 20 ITEMS

#19: 929 views (+216%)



Aerial view of Kennedy Compound, Hyannis Port, Mass.

Historical Society of Old Yarmouth Archives and Local History Collection

<https://ark.digitalcommonwealth.org/ark:/50959/fx71d959s>

## TOP 20 ITEMS

#18: 957 views (+24%)



Last of Baby Face Nelson

Boston Public Library; Leslie Jones Collection

<https://ark.digitalcommonwealth.org/ark:/50959/sj139q94k>



## TOP 20 ITEMS

#17: 962 views (+57%)

**EXPLICIT CONTENT WARNING** ×

**This item contains content that could be offensive to some viewers or inappropriate for minors.**

Click "View Content" to continue to the item or "Back to Search" to return to the search results page.

For more information, please see our [Statement on Potentially Offensive and Harmful Content](#).

[View Content](#) [Back to Search](#)

Nudists perform play "Barely Proper," Assonet

Boston Public Library; Spencer Grant Collection

<https://ark.digitalcommonwealth.org/ark:/50959/qr46r4908>



## TOP 20 ITEMS

#16: 977 views (+28%)



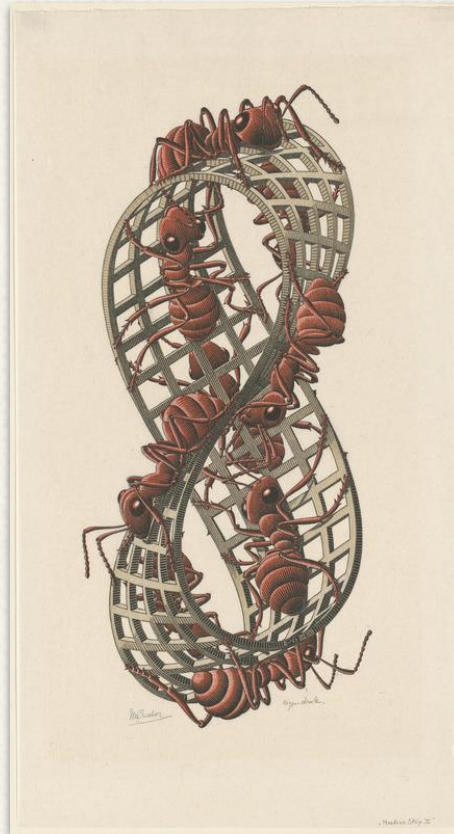
## Tidal Currents through Vineyard and Nantucket Sounds

Harvard Forest Archives; Harvard Forest Martha's Vineyard Collection

<https://ark.digitalcommonwealth.org/ark:/50959/vh53xt772>

## TOP 20 ITEMS

#15: 1,033 views (+70%)



Möbius strip II (red ants)

Boston Public Library; M. C. Escher (1898-1972). Prints and Drawings

<https://ark.digitalcommonwealth.org/ark:/50959/3r076s371>

## TOP 20 ITEMS

#14: 1,157 views (-75%)

**K. K. K.**

If you are interested in becoming a member of the Knights of the Ku Klux Klan, or if you desire more information about it, fill out this slip and mail to

P. O. BOX 374, PENNS GROVE, N. J.

The requirements for membership are that you be White, Native-born, Protestant Gentile American who believes in the United States of America above any other Government, civil, political or ecclesiastical; who will support the principles of Free Public Schools, Free Speech, Free Press, Separation of Church and State, Liberty, White Supremacy, Just Laws, the Pursuit of Happiness and the Sanctity of the Home.

Name \_\_\_\_\_

Residence \_\_\_\_\_

Occupation \_\_\_\_\_ Age \_\_\_\_\_

Address to which You Want Mail Sent \_\_\_\_\_

In Which County do You Live? \_\_\_\_\_

To What Church Do You Belong? \_\_\_\_\_

To What Fraternal Order Do You Belong \_\_\_\_\_

☐ I am interested in becoming a member.

☐ I desire further information regarding the K. K. K.

NOTE: Your communication will be regarded as confidential.

### K. K. K. application form

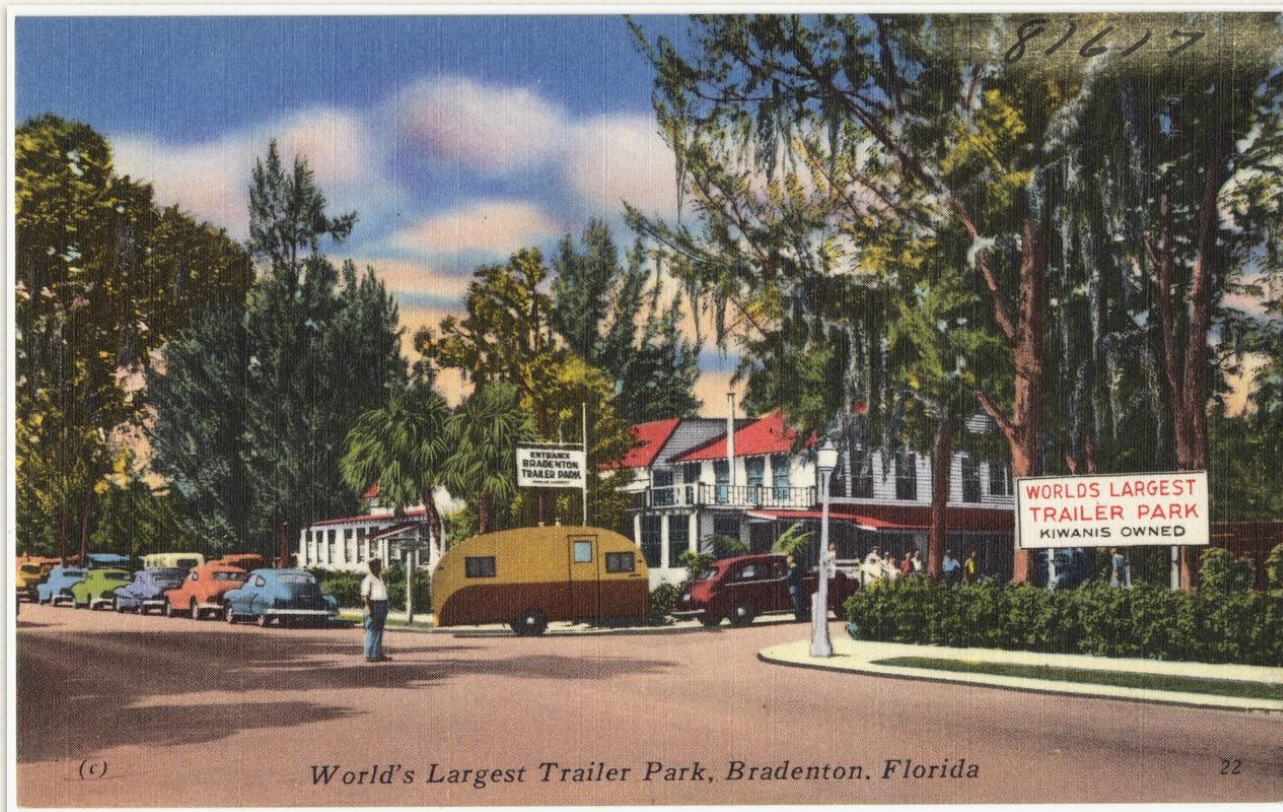
University of Massachusetts Amherst Libraries; W. E. B. Du Bois Papers

<http://credo.library.umass.edu/view/full/mums312-b157-i167>



## TOP 20 ITEMS

#13: 1,172 views (-34%)



World's largest trailer park, Bradenton, Florida

Boston Public Library; Tichnor Brothers Postcard Collection

<https://ark.digitalcommonwealth.org/ark:/50959/mp48sw766>



# TOP 20 ITEMS

#12: 1,187 views (+149%)



Map of Connecticut, circa 1625, Indian trails, villages, sachemdoms

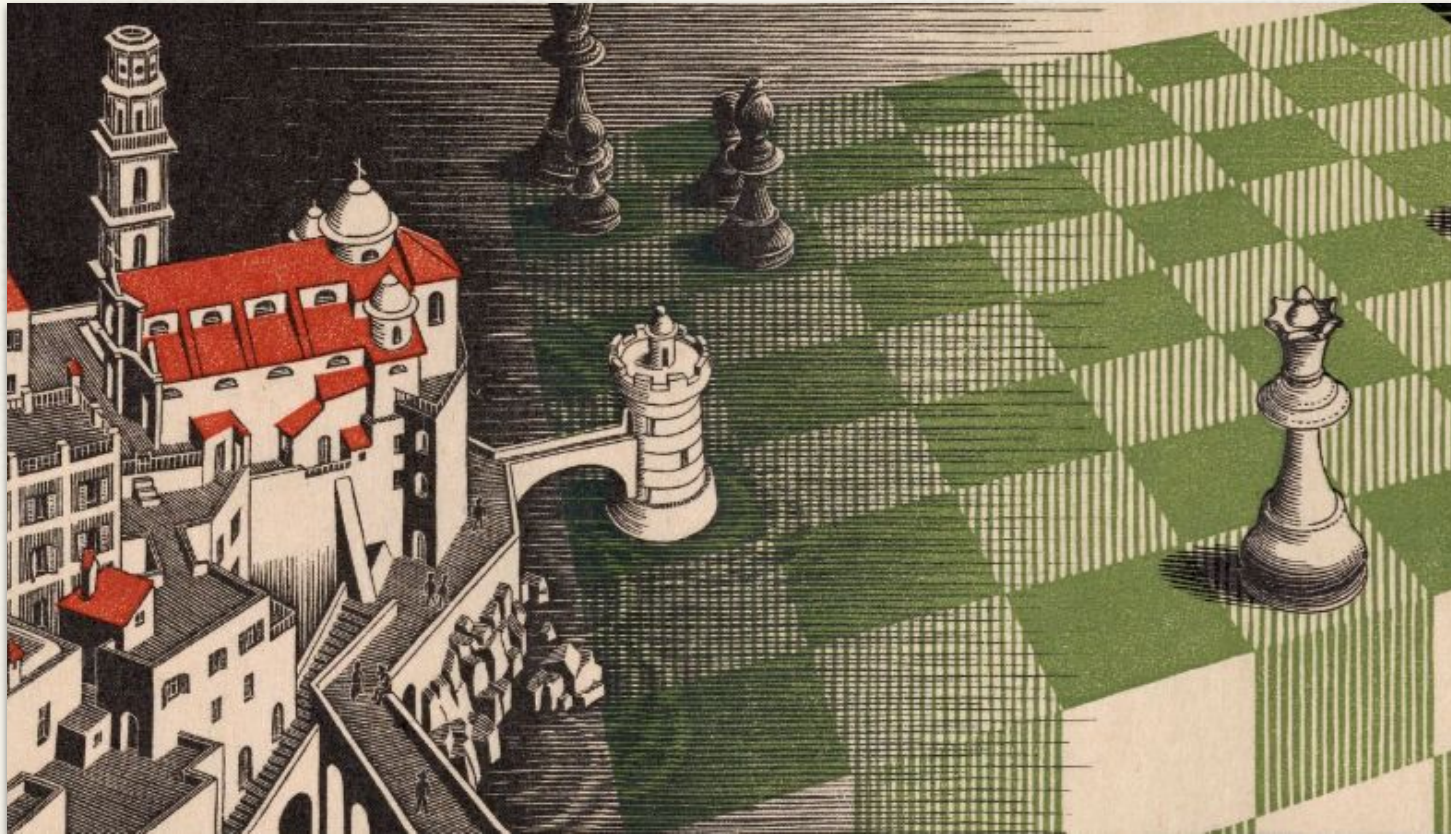
Boston Public Library; Norman B. Leventhal Map Center Collection

<https://ark.digitalcommonwealth.org/ark:/50959/0r96fm716>



## TOP 20 ITEMS

#11: 1,194 views (+75%)



### Metamorphosis II

Boston Public Library; M. C. Escher (1898-1972). Prints and Drawings

<https://ark.digitalcommonwealth.org/ark:/50959/ww72cb78j>

## TOP 20 ITEMS

#10: 1,263 views (+26%)

**EXPLICIT CONTENT WARNING** ×

**This item contains content that could be offensive to some viewers or inappropriate for minors.**

Click "View Content" to continue to the item or "Back to Search" to return to the search results page.

For more information, please see our [Statement on Potentially Offensive and Harmful Content](#).

[View Content](#) [Back to Search](#)

Nude colony picture from German magazine

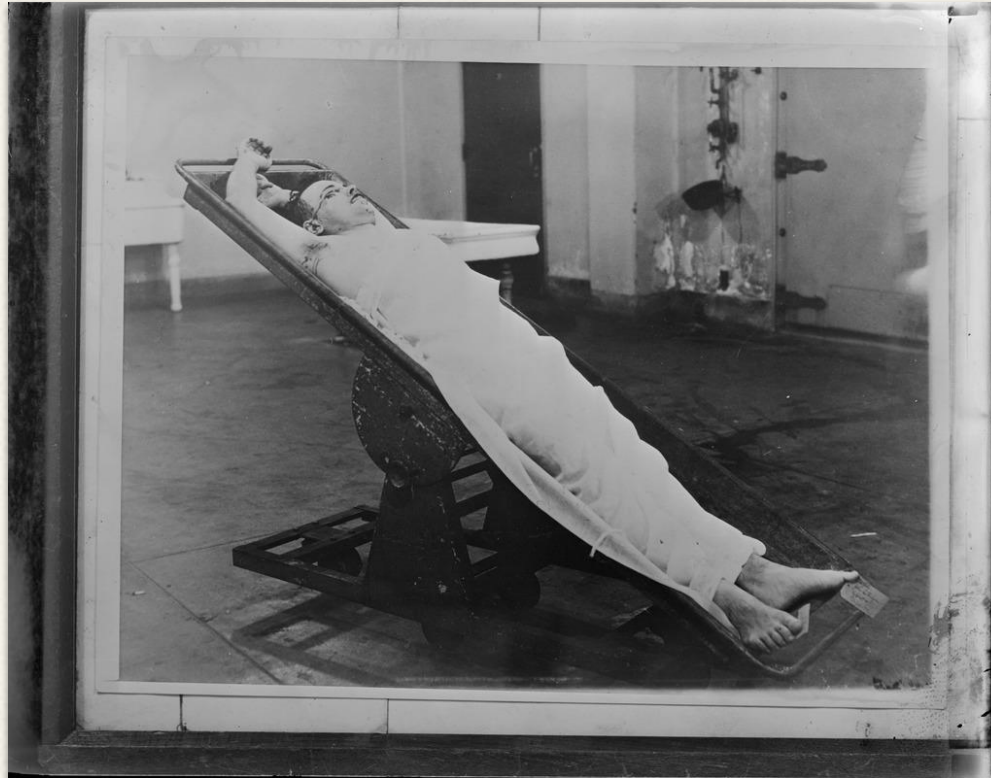
Boston Public Library; Leslie Jones Collection

<https://ark.digitalcommonwealth.org/ark:/50959/sj139r66m>



## TOP 20 ITEMS

#9: 1,350 views (+234%)



John Dillinger killed at last

Boston Public Library; Leslie Jones Collection

<https://ark.digitalcommonwealth.org/ark:/50959/sj139q807>

## TOP 20 ITEMS

#8: 1,426 views (+185%)



Rocky Marciano and Barbara Cousins on their wedding day

Boston Public Library; Press Photography from the Brearley Collection

<https://ark.digitalcommonwealth.org/ark:/50959/1831dk84n>



## #7: 1,495 views (-40%)



<https://ark.digitalcommonwealth.org/ark:/50959/x633f923g>



## TOP 20 ITEMS

#6: 3,018 views (+20%)

### EXPLICIT CONTENT WARNING

**This item contains content that could be offensive to some viewers or inappropriate for minors.**

Click "View Content" to continue to the item or "Back to Search" to return to the search results page.

For more information, please see our [Statement on Potentially Offensive and Harmful Content](#).

View ContentBack to Search

Row of naked boys stand on diving board at indoor pool

Boston Public Library; Leslie Jones Collection

<https://ark.digitalcommonwealth.org/ark:/50959/sj139t64g>

## TOP 20 ITEMS

#5: 3,439 views (+85%)

### EXPLICIT CONTENT WARNING

**This item contains content that could be offensive to some viewers or inappropriate for minors.**

Click "View Content" to continue to the item or "Back to Search" to return to the search results page.

For more information, please see our [Statement on Potentially Offensive and Harmful Content](#).

View ContentBack to Search

Row of naked boys stand on diving board at indoor pool

Boston Public Library; Leslie Jones Collection

<https://ark.digitalcommonwealth.org/ark:/50959/sj139t62x>

## TOP 20 ITEMS

#4: 4,017 views (+66%)



The bloody massacre perpetrated in King-Street Boston

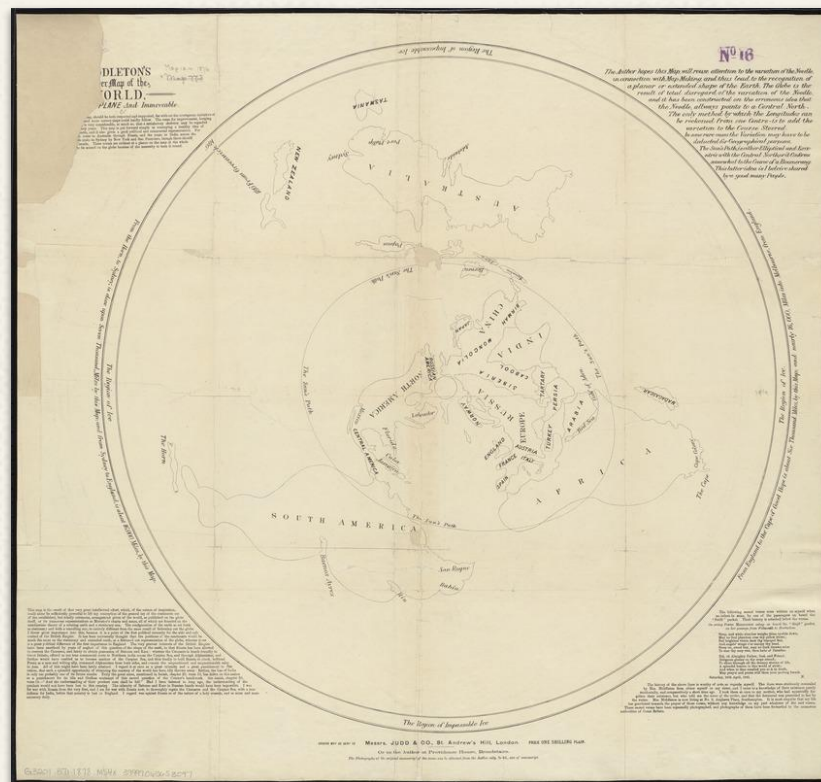
Boston Public Library; Colonial and Revolutionary Boston (Collection of Distinction)

<https://ark.digitalcommonwealth.org/ark:/50959/vh53x3780>



# TOP 20 ITEMS

#3: 4,752 views (+520%)



[Mid]dleton's [pione]er map of the [w]orld, [as a?] plane and immoveable

Boston Public Library; Norman B. Leventhal Map Center Collection

<https://ark.digitalcommonwealth.org/ark:/50959/7h149v83d>



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## TOP 20 ITEMS

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#2: 8,657 views (-13%)



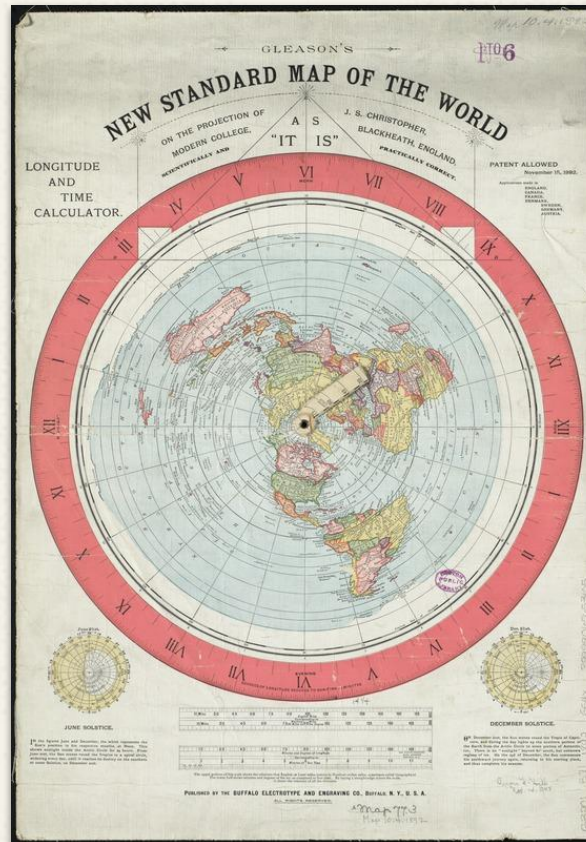
Nudist beauty contest winner, Assonet

Boston Public Library; Spencer Grant Collection

<https://ark.digitalcommonwealth.org/ark:/50959/qb98mv10z>

# TOP 20 ITEMS

#1: 24,129 views (+22%)



Gleason's new standard map of the world

Boston Public Library; Norman B. Leventhal Map Center Collection

<https://ark.digitalcommonwealth.org/ark:/50959/7h149v85z>

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## USAGE: THOUGHTS

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- Top 20 item views make up only 3% of total
- A single news article or social media post can significantly influence overall usage
- Numbers down from last year, but still seeing steady growth
- Increasing engagement from Wikipedia and Google Classroom



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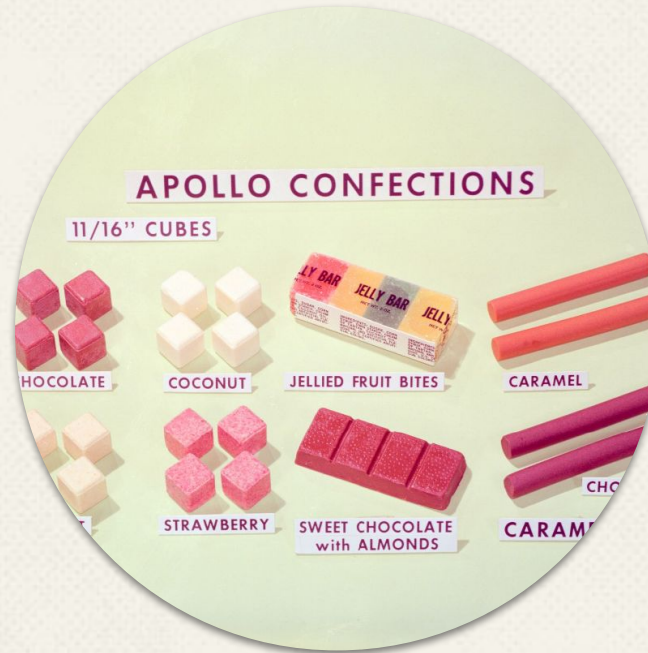
## **WE HAVE WORK TO DO**

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- Better contextualization of problematic content
- Increase diversity of digital collections
- Promote collections more actively on social media
- Connect existing users to more items of interest
- Disseminate content outside our own silo
- More educational resources, curated collections
- Connect historical materials to current events



# IT'S BEEN A TREAT!



Feedback Welcome:

eenglish [at] bpl [dot] org  
@ebenenglish (twitter, github)

*Apollo confections*

U.S. Army Natick Soldier Systems Center; Natick Soldier Systems Center Photographic Collection  
<<https://ark.digitalcommonwealth.org/ark:/50959/44558h18j>>