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>
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
NEW: INSTITUTIONS

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

- 2018: 1,125
- 2019: 1,445
- 2020: 1,557
- 2021: 1,616
- 2022: 1,668
NEW: COLLECTIONS
NEW: ITEMS

<table>
<thead>
<tr>
<th>Year</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>565,512</td>
</tr>
<tr>
<td>2019</td>
<td>703,149</td>
</tr>
<tr>
<td>2020</td>
<td>817,016</td>
</tr>
<tr>
<td>2021</td>
<td>909,261</td>
</tr>
<tr>
<td>2022</td>
<td>942,172</td>
</tr>
</tbody>
</table>
HARVESTED v. HOSTED ITEMS

- Harvested: 60.0% (568,425)
- Hosted: 40.0% (373,747)
HARVESTED v. HOSTED ITEMS
Last 5 Years
NEW HARVESTS

○ Yiddish Book Center

RE-HARVESTS

○ Northeastern University Library
○ SAILS Library Network
NEW: FILES
PRIMARY FILES ONLY

2018: 448,455
2019: 554,242
2020: 635,817
2021: 690,879
2022: 737,932
NEW: STORAGE (TB)
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?

Toy Rocket Radio
Historic New England; Digitized Museum Collections
<http://gusn.us/246036>
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>
DC3: ADVANTAGES

- 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
- IIIF 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
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/>
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: 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
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

digitalcommonwealth.org/feedback

○ Select “site feature suggestion”
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

Graph showing sessions per day from 2018 to 2022.
USAGE: ITEM VIEWS

- 2018: 1.13
- 2019: 1.55
- 2020: 1.69
- 2021: 2.23
- 2022: 1.93

Item views (millions)
USAGE:
PAGES PER SESSION

<table>
<thead>
<tr>
<th>Year</th>
<th>Pages per Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>5.67</td>
</tr>
<tr>
<td>2019</td>
<td>5.05</td>
</tr>
<tr>
<td>2020</td>
<td>5.53</td>
</tr>
<tr>
<td>2021</td>
<td>5.00</td>
</tr>
<tr>
<td>2022</td>
<td>4.38</td>
</tr>
</tbody>
</table>
USAGE:
SESSION LENGTH

- 2018: 3:14
- 2019: 2:59
- 2020: 3:12
- 2021: 2:58
- 2022: 2:36
USAGE: DEVICES
Last 4 Years
USAGE:
TRAFFIC SOURCES
Last 4 Years

Graph showing the usage of different traffic sources from 2019 to 2022:
- **Search**
  - 2019: Approximately 60.00%
  - 2020: Slightly lower than 2019
  - 2021: Highest among the years
  - 2022: Lower than 2021
- **Direct**
  - 2019: Lower percentage
  - 2020: Slightly higher than 2019
  - 2021: Lower than 2019
  - 2022: Lower than 2021
- **Referral**
  - 2019: Slightly lower than 2020
  - 2020: Lower than 2019
  - 2021: Slightly lower than 2020
  - 2022: Lower than 2021
- **Social**
  - 2019: Lower percentage
  - 2020: Lower than 2019
  - 2021: Lower than 2020
  - 2022: Lower than 2021
## USAGE:
### TOP REFERRING SITES

<table>
<thead>
<tr>
<th>Website</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>bpl.org</td>
<td>17,503</td>
</tr>
<tr>
<td>dp.la</td>
<td>10,680</td>
</tr>
<tr>
<td>revolution250.org</td>
<td>2,543</td>
</tr>
<tr>
<td>omnia.ie</td>
<td>2,493</td>
</tr>
<tr>
<td>en.wikipedia.org</td>
<td>1,703</td>
</tr>
<tr>
<td>sec.state.ma.us</td>
<td>1,507</td>
</tr>
<tr>
<td>kottke.org</td>
<td>1,326</td>
</tr>
<tr>
<td>classroom.google.com</td>
<td>1,227</td>
</tr>
<tr>
<td>brooklinehistorical.society.org</td>
<td>1,095</td>
</tr>
<tr>
<td>universalhub.com</td>
<td>875</td>
</tr>
<tr>
<td>Website</td>
<td>Mention</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>jphs.org</td>
<td>720</td>
</tr>
<tr>
<td>medfordhistorical.org</td>
<td>667</td>
</tr>
<tr>
<td>bostonbasinhills.org</td>
<td>665</td>
</tr>
<tr>
<td>pem.org</td>
<td>627</td>
</tr>
<tr>
<td>thomascranelibrary.org</td>
<td>507</td>
</tr>
<tr>
<td>mass.gov</td>
<td>494</td>
</tr>
<tr>
<td>guides.newtonfreelibrary.net</td>
<td>473</td>
</tr>
<tr>
<td>libguides.uml.edu</td>
<td>381</td>
</tr>
<tr>
<td>newbedford-ma.gov</td>
<td>375</td>
</tr>
<tr>
<td>lawrencehistory.org</td>
<td>356</td>
</tr>
</tbody>
</table>
USAGE: SOCIAL
Last 4 Years
USAGE: SITE SEARCH
SESSIONS WITH SEARCHES
Last 5 Years

- 2018: 9.80%
- 2019: 9.50%
- 2020: 10.70%
- 2021: 9.45%
- 2022: 8.67%
USAGE: SITE SEARCH

SEARCH TERMS

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
Malden
boston harbor ships  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
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
Nudists perform play "Barely Proper," Assonet

Boston Public Library; Spencer Grant Collection

https://ark.digitalcommonwealth.org/ark:/50959/qr46r4908
Tidal Currents through Vineyard and Nantucket Sounds

Harvard Forest Archives; Harvard Forest Martha's Vineyard Collection

https://ark.digitalcommonwealth.org/ark:/50959/vh53xt772
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. application form

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

http://credo.library.umass.edu/view/full/mums312-b157-i167
World's largest trailer park, Bradenton, Florida

Boston Public Library; Tichnor Brothers Postcard Collection

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

Nude colony picture from German magazine

Boston Public Library; Leslie Jones Collection

https://ark.digitalcommonwealth.org/ark:/50959/sj139r66m
John Dillinger killed at last

Boston Public Library; Leslie Jones Collection

https://ark.digitalcommonwealth.org/ark:/50959/sj139q807
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
TOP 20 ITEMS

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

Peters World map

Boston Public Library; Norman B. Leventhal Map Center Collection

https://ark.digitalcommonwealth.org/ark:/50959/x633f923g
Row of naked boys stand on diving board at indoor pool

Boston Public Library; Leslie Jones Collection

https://ark.digitalcommonwealth.org/ark:/50959/sj139t64g
Row of naked boys stand on diving board at indoor pool

Boston Public Library; Leslie Jones Collection
https://ark.digitalcommonwealth.org/ark:/50959/sj139t62x

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
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
[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
TOP 20 ITEMS

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

Nudist beauty contest winner, Assonet

Boston Public Library; Spencer Grant Collection

https://ark.digitalcommonwealth.org/ark:/50959/qb98mv10z
Gleason's new standard map of the world

Boston Public Library; Norman B. Leventhal Map Center Collection

https://ark.digitalcommonwealth.org/ark:/50959/7h149v85z
USAGE: THOUGHTS

- 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
WE HAVE WORK TO DO

○ 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>