



# DIGITAL COMMONWEALTH SYSTEMS UPDATE

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Boston Public Library  
[goo.gl/ZTaZw4](https://goo.gl/ZTaZw4)



# THE TERRIBLE TWOS

Year in review & future directions

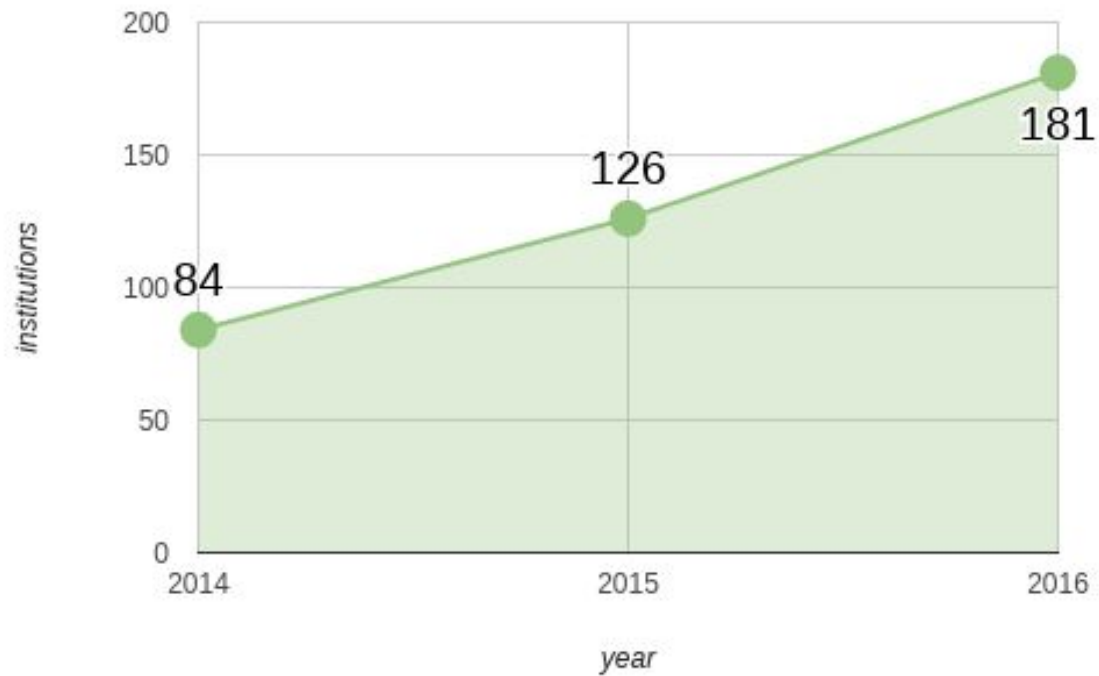
- content
- features
- usage



CONTENT

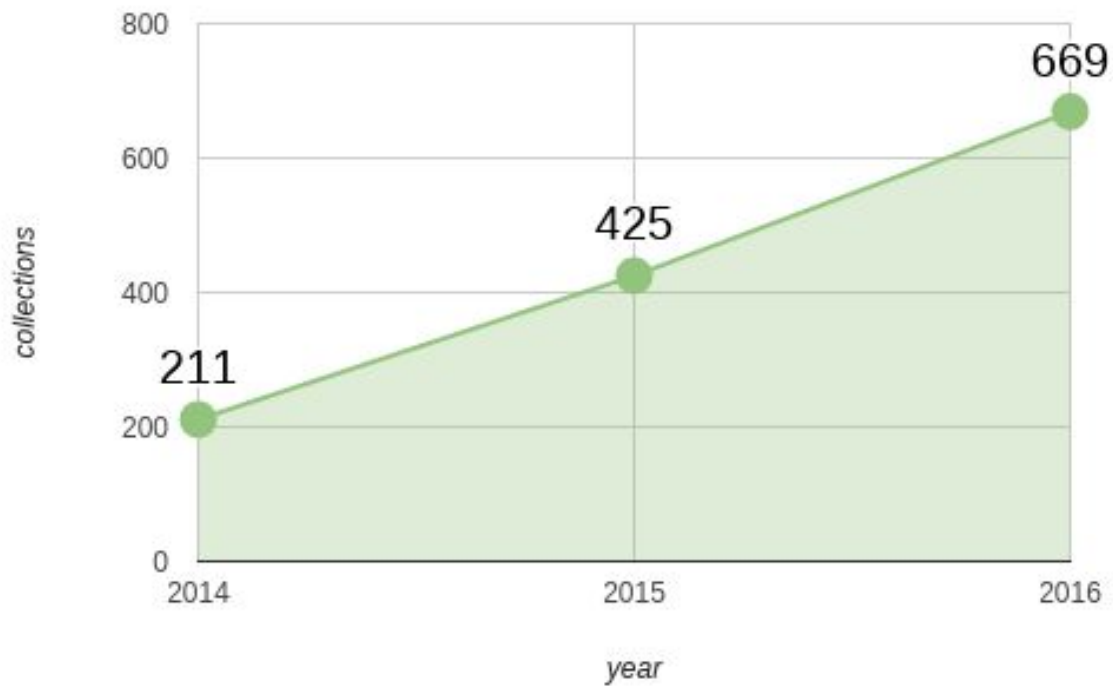
● CONTENT: GROWTH IN THE PAST YEAR

○ Institutions



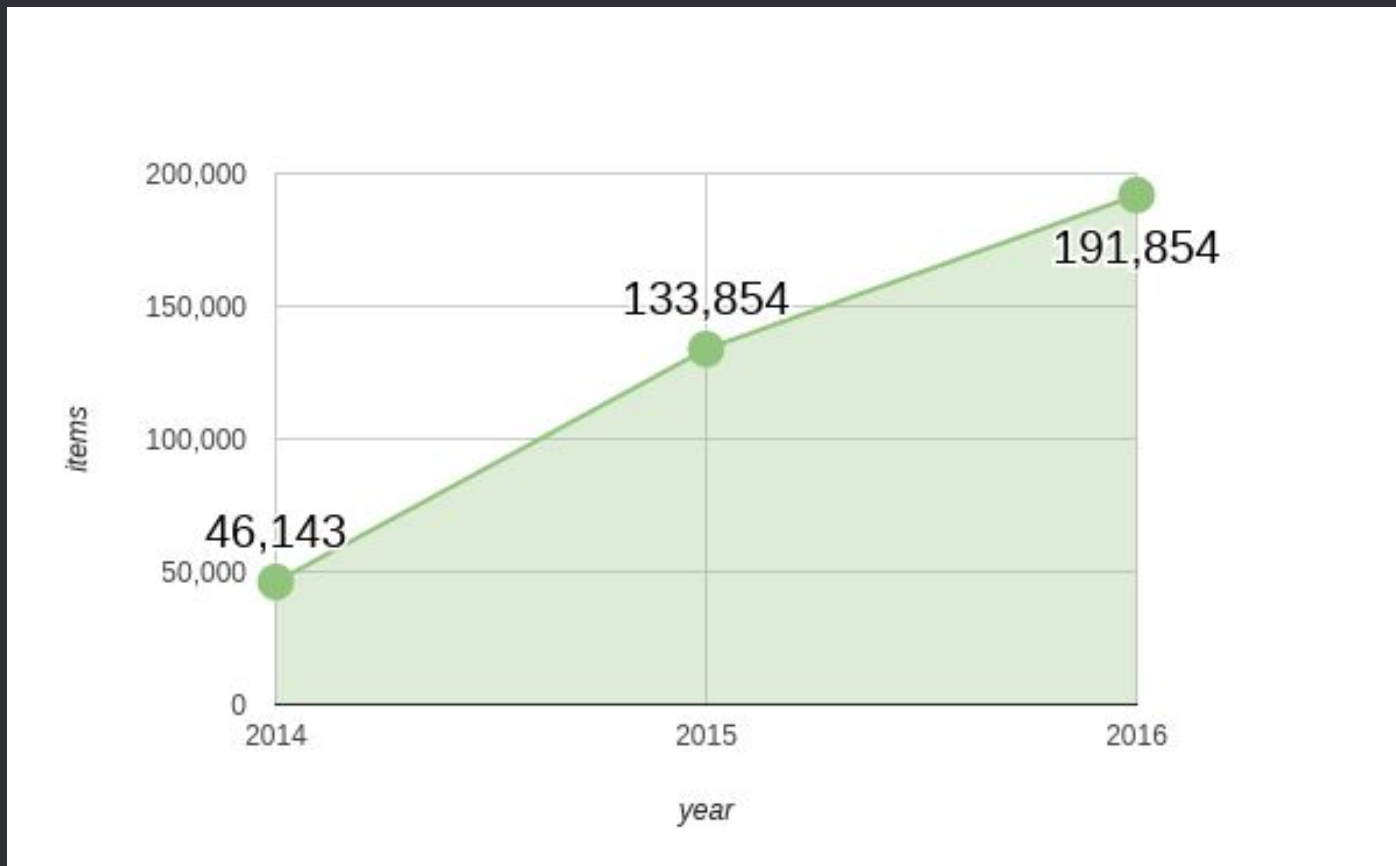
● CONTENT: GROWTH IN THE PAST YEAR

○ Collections



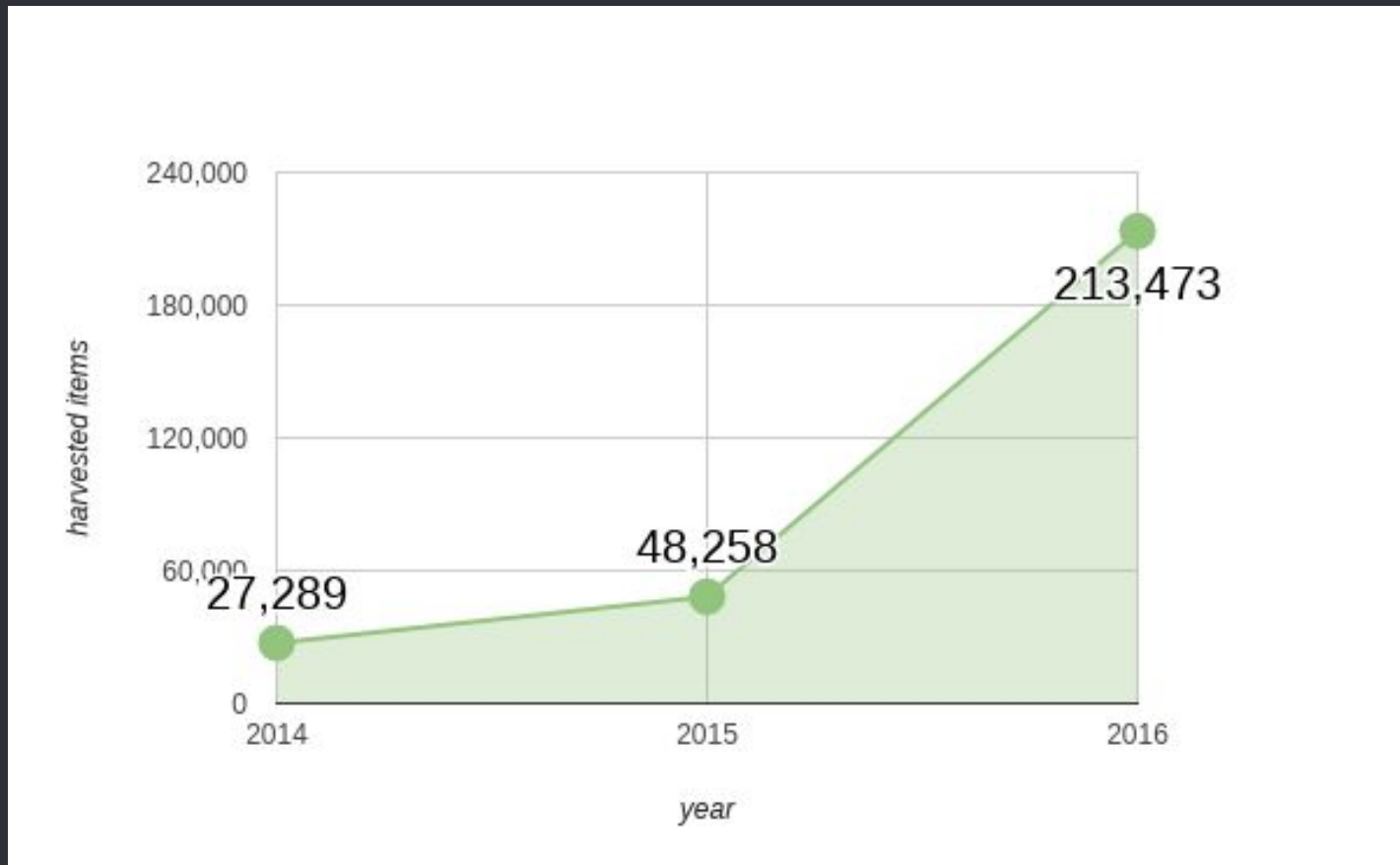
- CONTENT: GROWTH IN THE PAST YEAR

- Hosted items



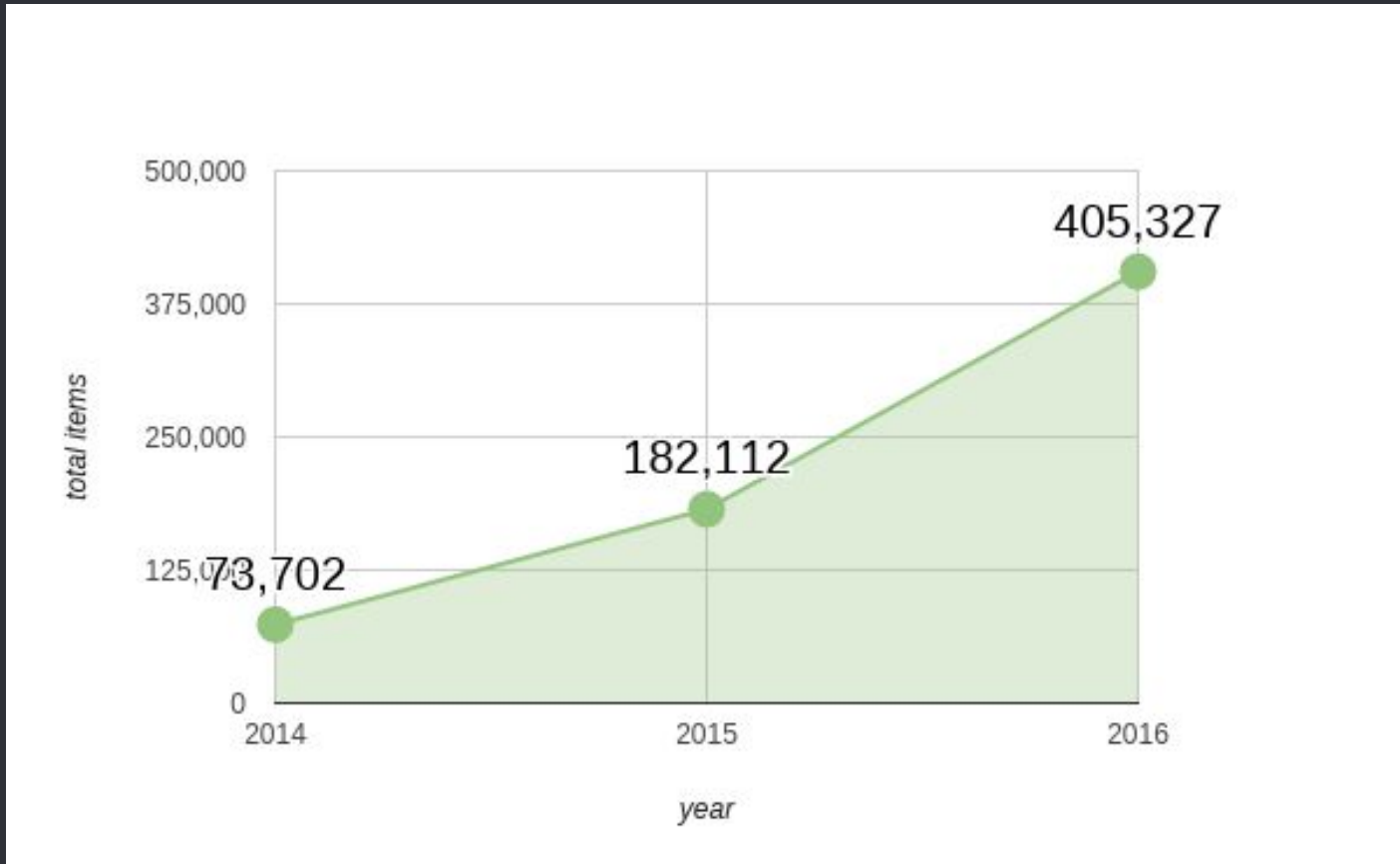
- CONTENT: GROWTH IN THE PAST YEAR

- Harvested items



● CONTENT: GROWTH IN THE PAST YEAR

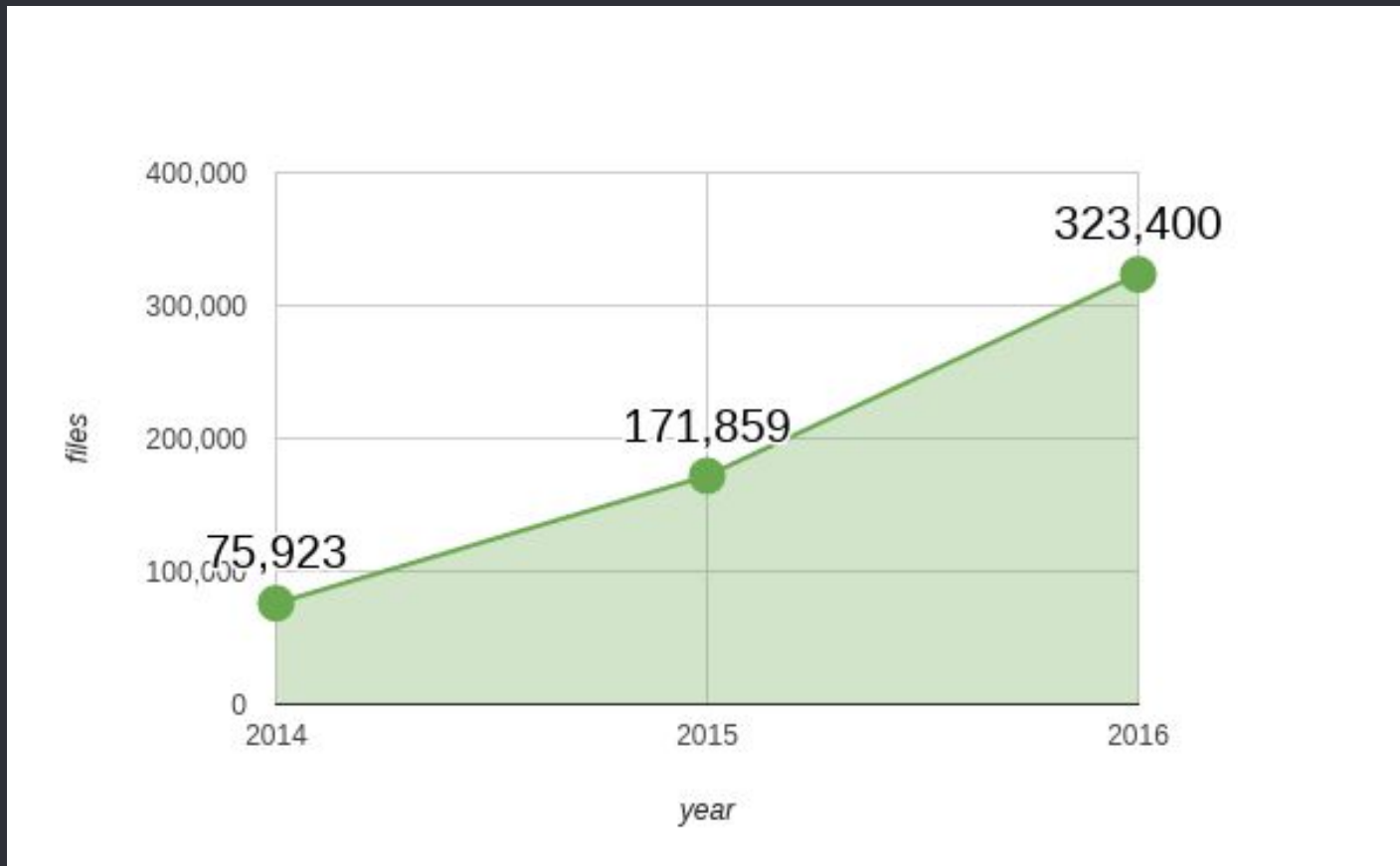
○ Total items





● CONTENT: GROWTH IN THE PAST YEAR

○ Total files

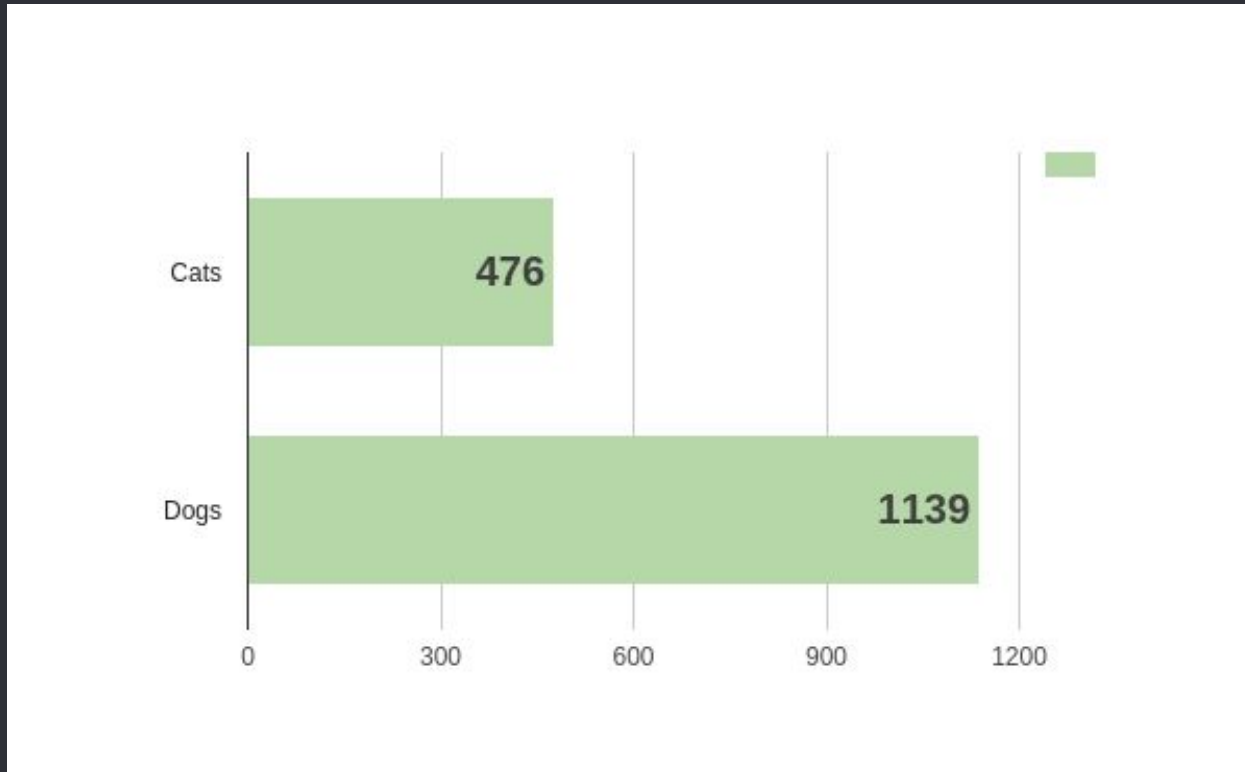


● CONTENT: NEW 2016 METRIC

○ Cats Vs Dogs



<http://ark.digitalcommonwealth.org/ark:/50959/6682xk62w>



● **CONTENT: FORMATS**

<b>count</b>	<b>format</b>	<b>% increase</b>
177,181	Photographs	+75%
104,287	Letters/Correspondence	+11,054%
38,625	Postcards/Cards	+24%
34,156	Documents	+23%
24,367	Manuscripts	+1,392%
17,330	Prints	+261%

● **CONTENT: FORMATS**

<b>count</b>	<b>format</b>	<b>% increase</b>
6,411	Maps/Atlases	+5%
3,051	Newspapers	+616%
2,987	Film/Video	+2%
2,724	Drawings/Illustrations	+34%
2,069	Paintings	+80%
1,507	Ephemera	+9%

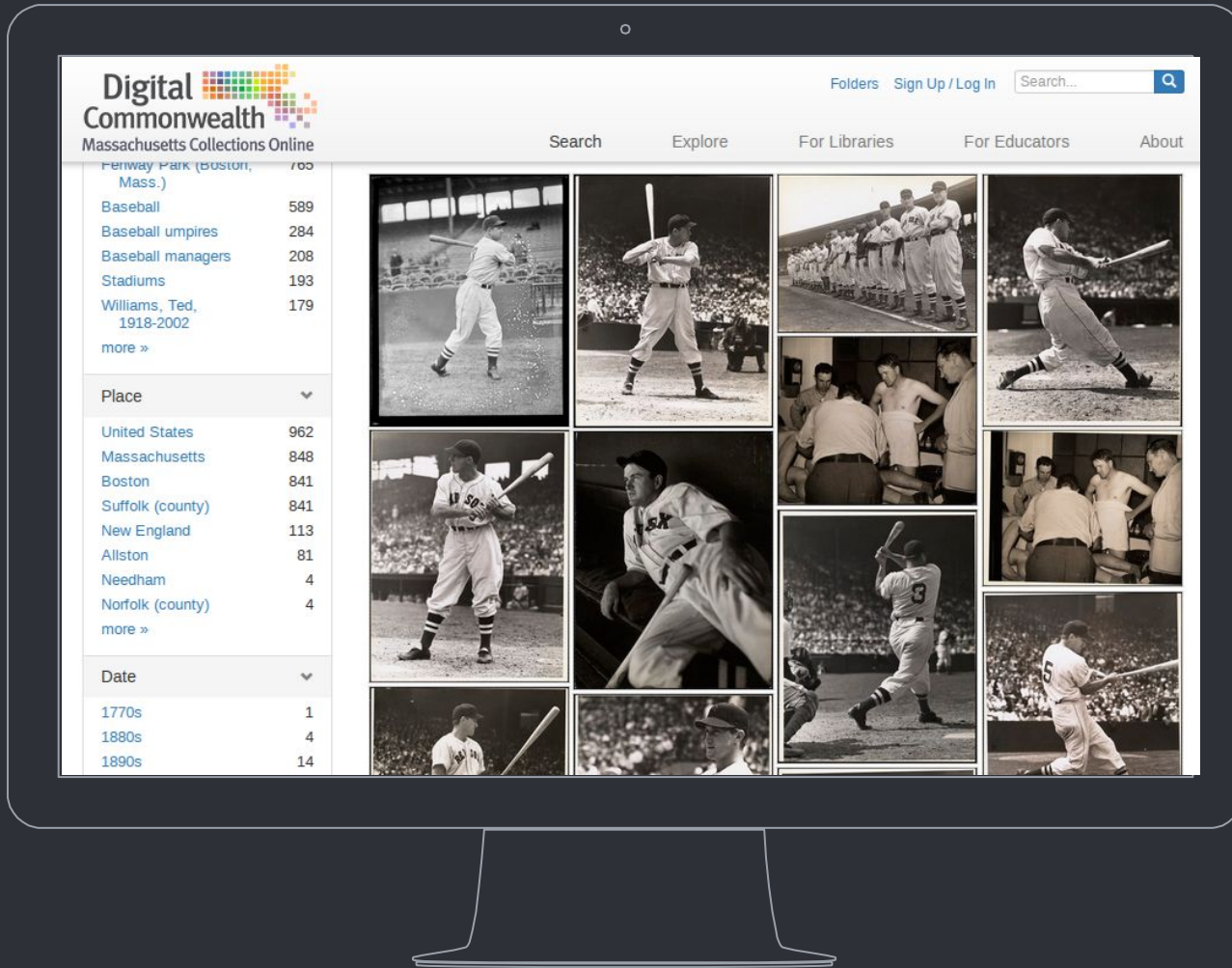
● CONTENT: FORMATS

count	format	% increase
1,285	Posters	+6%
1,282	Periodicals	+17%
949	Books	+37%
708	Audio recordings	+200%
658	Objects/Artifacts	+26%
185	Albums/Scrapbooks	+78%



# FEATURES

# FEATURES: "WALL" VIEW

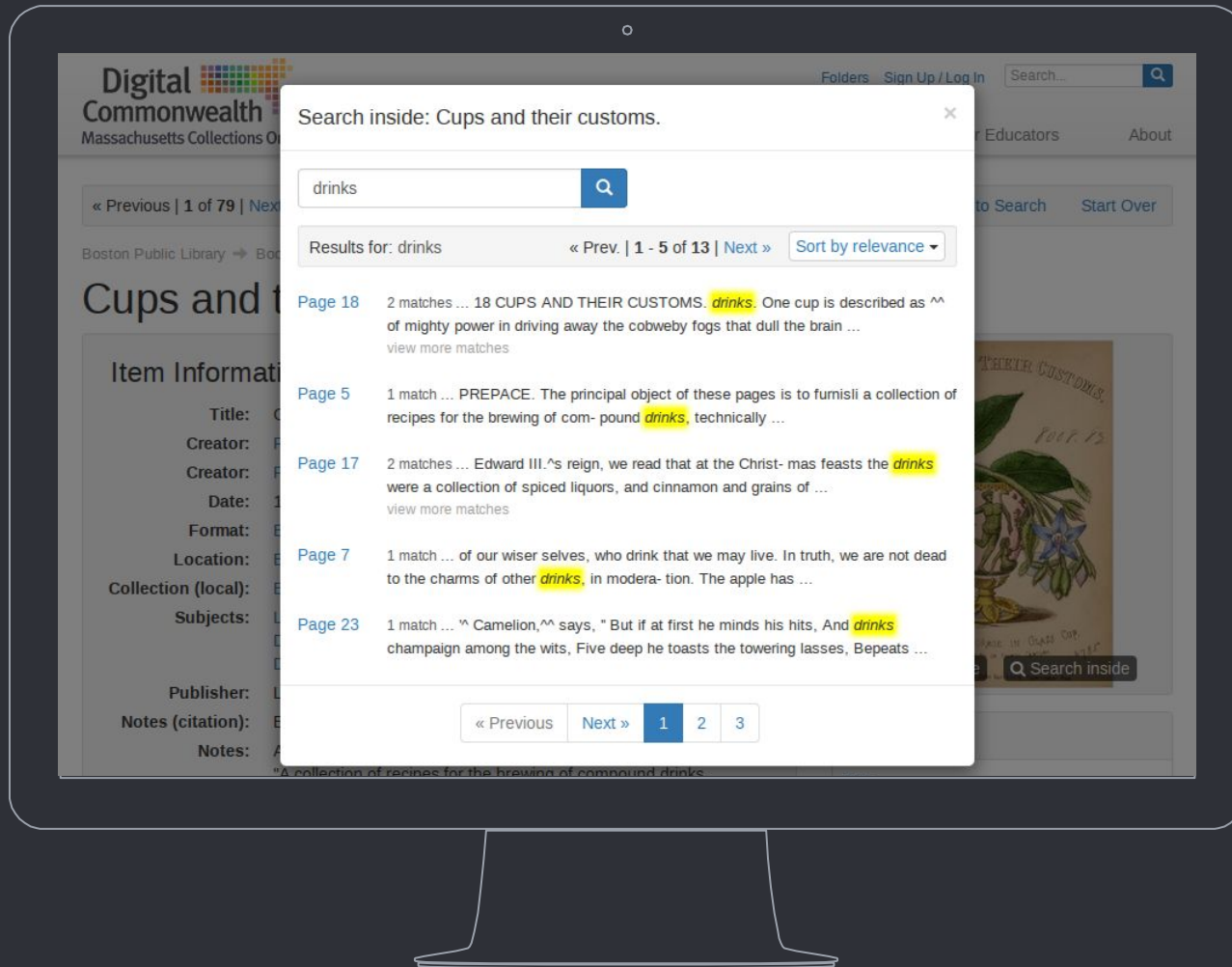


## FEATURES: SLIDESHOW VIEW

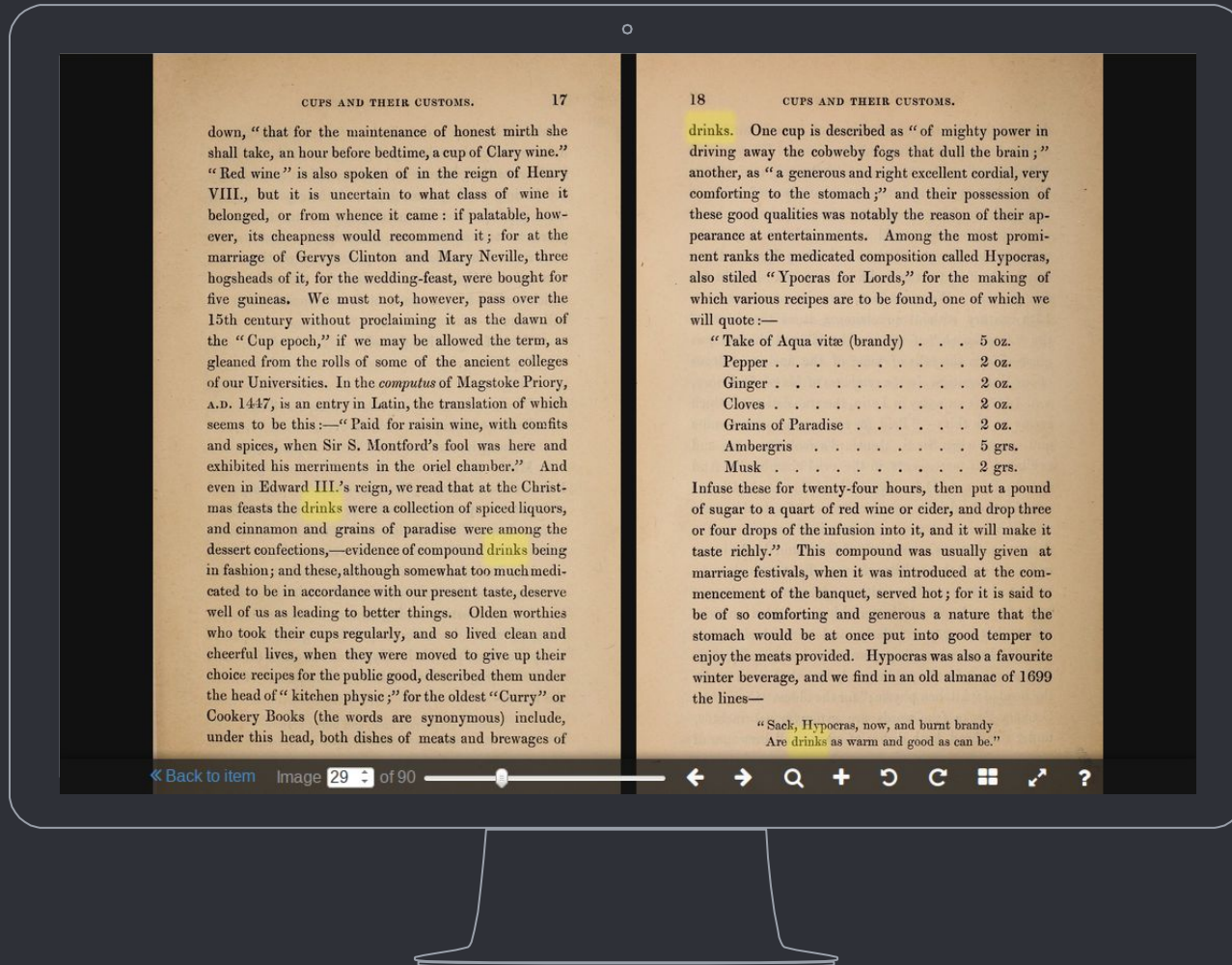




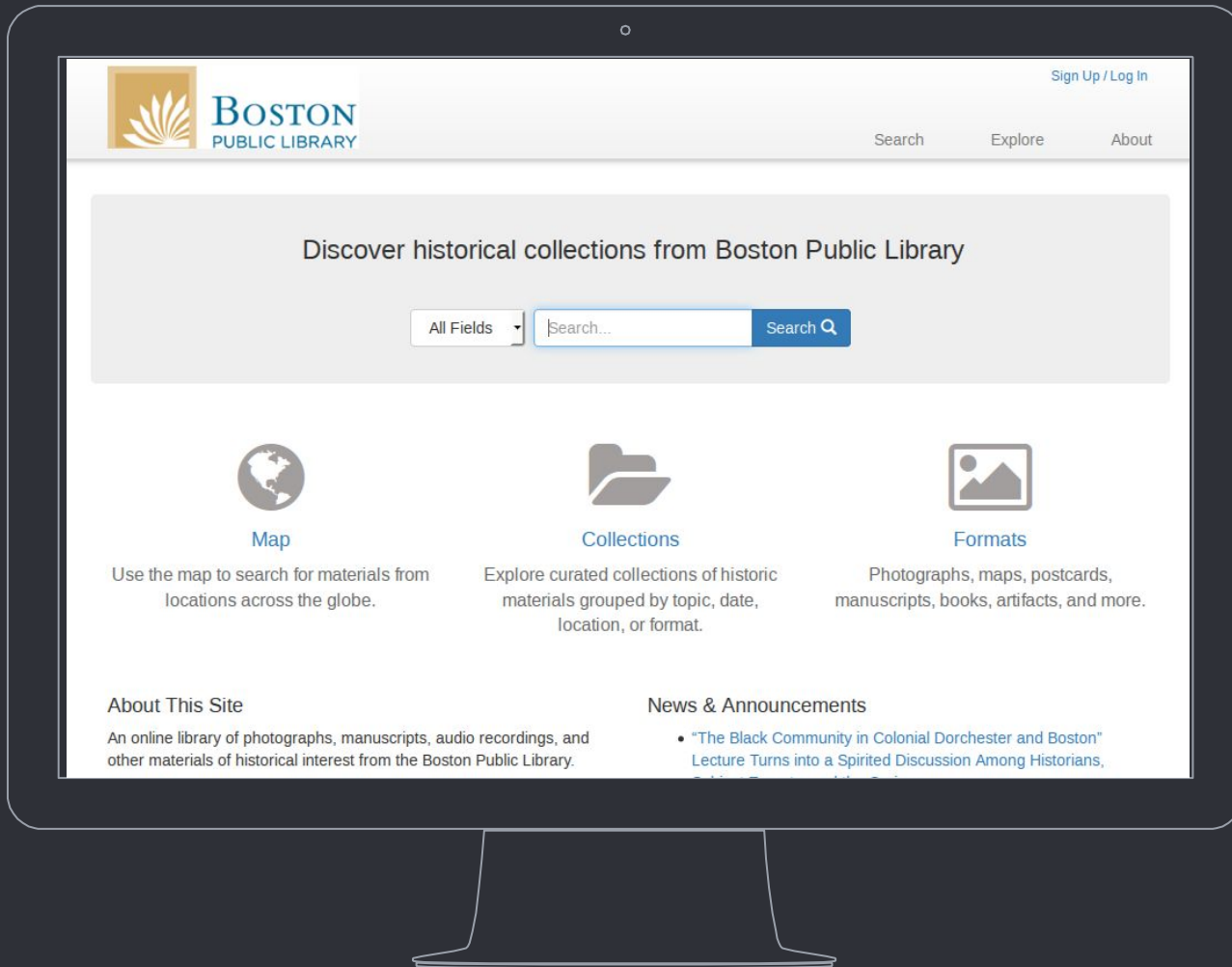
# FEATURES: FULL-TEXT SEARCHING



## FEATURES: FULL-TEXT SEARCHING



## FEATURES: VIRTUAL LOCAL REPOSITORY



## ● FEATURES: VIRTUAL LOCAL REPOSITORY

○ Customizable turn-key applications that display content (metadata & images) hosted by the main Digital Commonwealth repository.

- Display-only
- Requirements:
  - Ruby on Rails
  - Database (MySQL, Postgres, etc.)
  - Web server (Apache, NGINX, etc.)
- Open-source
  - [github.com/boston-library/commonwealth-vlr-engine](https://github.com/boston-library/commonwealth-vlr-engine)

- **FEATURES: IIIF PRESENTATION API MANIFEST**

- The IIIF Presentation API specifies a web service that returns JSON-LD structured documents that describe the structure and layout of a digitized object or collection of images.

<http://iiif.io/api/presentation/2.0/>

## ● FEATURES: IIIF PRESENTATION API MANIFEST

- Standard maintained by the International Image Interoperability Framework (IIIF) group
- Adopted by Stanford, Yale, Princeton, Harvard, etc.
- Re-use and display of metadata, images & sequences
- Enables rich viewing experience in applications (Mirador, Diva.js, Wellcome Player, etc.)

- FEATURES: IIIF PRESENTATION API MANIFEST

- Add “/manifest” to DC URL:

- <http://ark.digitalcommonwealth.org/ark:/50959/s4655h10k/manifest>

## ● FEATURES: BEHIND THE SCENES

### ○ SERVER-SIDE

Upgrades to:

- Blacklight
- Loris
- Image processing
- Blacklight-Maps
- OpenSeadragon-Rails
- Linked Data Fragments



## ● FEATURES: UPCOMING

### ○ SEARCH INTERFACE

- Institution logos
- File downloads
- MLA and APA citation styles
- Slideshow enhancements
- Display georeferenced maps
- Export folder items as PowerPoint or PDF

## ● FEATURES: UPCOMING

### ○ ADMINISTRATIVE & CONTENT

- Internet Archive harvest (40K books)
- Usage statistics
- Basic metadata editor
- Persistent URLs for harvested items
- Fedora 4

## ● FEATURES: UPCOMING

### ○ ADMINISTRATIVE & CONTENT

- MODS XML to RDF
  - MODS and RDF Descriptive Metadata Subgroup
  - Amherst College, NYPL, UNC Chapel Hill, Columbia U., Indiana U., Emory, U. of Alberta
  - <https://wiki.duraspace.org/display/hydra/MODS+and+RDF+Descriptive+Metadata+Subgroup>

## ● FEATURES: UPCOMING

### ○ ADMINISTRATIVE & CONTENT

- Official Institution Accounts
  - Accounts that are used for administrative functionality for an institution
  - <https://www.digitalcommonwealth.org/feedback>
    - “login / sign up for account”
  - Coming by the end of April

# FEATURES: UPCOMING

## Amherst College Archives & Special Collections

Massachusetts > Hampshire (county) > Amherst



or

[View all items](#)

Digitizing unique and rare materials is an important part of the mission of Amherst College Library, which makes these materials available through Amherst College Digital Collections (ACDC). Many of those objects are now also available through Digital Commonwealth for all to use.

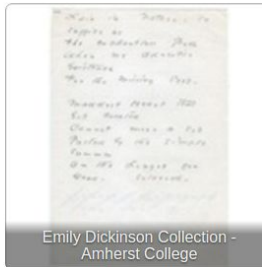
The bulk of the Amherst College digital collections shared here are drawn from the Archives & Special Collections, which houses Amherst College's rare books, literary manuscripts, written materials of unique value, historic photographs, sound recordings, moving image recordings, and a large collection of objects. Highlights of the collection include Native American literature, medieval manuscripts, and materials created by Walt Whitman, William Wordsworth, and Edward Hitchcock. It is particularly strong in topics related to natural history and missionary activity and is continually expanding.

- [Visit institution web site](#)

Digital Collections: (2)



Archives & Special Collections - Amherst College



Emily Dickinson Collection - Amherst College

# FEATURES: UPCOMING

	A	B	C	D	E	F	G	H	I	J	K	L
1	Collection PID	Views Average	Weight	Total Views	Average Time	Total Time	Exits	Steven Calculated Average Time	Zero Views	One Views	Two Plus Views	#1 Viewed Count
2	commonwealth:5425kj997	2.85	100	285	11.6373372135	6277	35	25.108	25	10	65	51
3	commonwealth:5425kn01g	2.7628865979	97	268	35.2932090585	10232	111	65.1719745223	27	24	46	56
4	commonwealth:c534fn93r	4.1073446328	177	727	50.3727646518	37230	124	61.7412935323	12	26	139	65
5	commonwealth:sf268907w	1.1137724551	167	186	28.9014880952	8732	25	54.2360248447	77	47	43	6
6	commonwealth:c534fs491	1.4450549451	182	263	28.2309594777	9000	78	48.6486486486	72	46	64	11
7	commonwealth:sf268509m	5.5309278351	194	1073	60.1170955611	57822	357	80.7569832402	17	37	140	130
8	commonwealth:vd66vz88c	5.03125	64	322	54.6957347554	17774	85	74.9957805907	1	11	52	27
9	commonwealth:gg67jv683	4.2	50	210	48.6445689387	13575	22	72.2074468085	4	6	40	19
10	commonwealth:fn1070419	0.7887323944	142	112	29.2836829837	6009	23	67.5168539326	82	32	28	6
11	commonwealth:9306t129n	2.9151785714	224	653	24.6930835338	29410	98	52.990990991	44	46	134	63
12	commonwealth:pr76f340k	2.1683168317	101	219	16.3311348782	7272	32	38.8877005348	8	52	41	14
13	commonwealth:vd66w1170	3.5868945869	351	1259	41.4874918969	54567	394	63.0832369942	78	41	232	28
14	commonwealth:sf268d43c	2.6098829649	769	2007	22.4338431382	80858	194	44.5990071704	251	186	332	30
15	commonwealth-gai:xd07gx07n	0.0709219858	141	10	2.0211267606	320	4	53.3333333333	131	10	0	1
16	commonwealth-gai:p2676wz34	0.5478036176	387	212	9.0291320136	7676	77	56.8592592593	274	70	43	19
17	commonwealth-gai:4j03d3701	2.4239130435	92	223	17.4187233316	7281	27	37.1479591837	12	28	52	12
18	commonwealth:k643b116n	2.0533807829	1405	2885	34.5526175478	154486	587	67.226283725	527	304	574	60
19	commonwealth-gai:n583z420c	0.5428226779	829	450	19.6964658635	22393	124	68.6901840491	551	179	99	9
20	commonwealth-gai:1v53jx019	0.4314136126	955	412	14.5324965132	22405	134	60.5935251799	695	178	82	11
21	commonwealth-gai:r207tp73n	1.6893203883	103	174	61.8309586247	10870	65	99.7247706422	37	30	36	14
22	commonwealth-gai:r207tp060	0.1122994652	187	21	2.5904255319	575	12	63.8888888889	167	19	1	2
23	commonwealth-gai:r207tp70t	1.0785340314	382	412	28.410815903	22824	13	57.2030075188	198	89	95	17
24	commonwealth-gai:r207tr94t	0.3372093023	86	29	15.4597701149	1680	18	152.7272727273	63	17	6	2
25	commonwealth:5425kb612	3.2995699952	2093	6906	24.4938936213	235971	987	39.8667004562	510	449	1134	206
26	commonwealth-gai:pc289q78j	6.0837438424	203	1235	59.5967930847	69586	290	73.635978836	37	25	141	68
27	commonwealth-gai:ww72bf798	1.0342465753	146	151	19.3311437995	9506	33	80.5593220339	92	21	33	11
28	commonwealth:dr26xz215	17.4245283019	212	3694	46.0024676562	173208	1096	66.6697459584	0	7	205	385
29	commonwealth-gai:r207ts75t	0.2685887709	659	177	7.3064772727	7995	115	128.9516129032	595	39	25	28
30	commonwealth-gai:ww72bg18r	3.3279132791	369	1228	55.0999109443	73171	285	77.5938494168	87	61	221	49
31	commonwealth-gai:qr46r081g	0.8571428571	63	54	30.150390625	3624	14	90.6	39	15	9	11
32	commonwealth-gai:qr46r436g	1.819047619	105	191	23.4118710692	5772	56	42.7555555556	31	31	43	11
33	commonwealth-gai:qv33rz86b	2.9428571429	70	206	32.8076077678	6352	30	36.0909090909	13	13	44	16
34	commonwealth-gai:qr46r127w	0.9198312236	237	218	20.012244888	7957	29	42.1005291005	129	61	47	9
35	commonwealth-gai:qv33rx78f	0.55	260	143	7.3291187739	3524	27	30.3793103448	183	39	38	8
36	commonwealth-gai:qv33s059t	0.185840708	113	21	19.7573099415	2379	6	158.6	96	15	2	4
37	commonwealth-gai:qv33s177z	1.265625	128	162	18.8397009967	3929	73	44.1460674157	68	31	29	20
38	commonwealth-gai:4t64gr02g	0.1741573034	178	31	10.1680633147	2162	7	90.0833333333	154	21	3	5
39	commonwealth:7d279r182g	4.2	70	294	36.8798982707	13494	34	51.9	10	10	50	21
40	commonwealth:7d279443d	9.8867924528	53	524	62.4688957434	33495	182	97.9385964912	0	6	47	88
41	commonwealth:rv042w06d	8.0422535211	71	571	57.3800415682	25100	202	68.0216802168	5	5	61	49
42	commonwealth:rv042x49d	7.1551724138	58	415	38.2831483723	13089	147	48.8395522388	6	7	45	62
43	commonwealth:rv0432726	6.3333333333	60	380	49.7513431602	24691	120	94.9653846154	2	7	51	41



COMMUNITY

## ● COMMUNITY: COLLECTION DEVELOPMENT

- New Digital Commonwealth task force to figure out a collection development policy
  - How we might handle some content types (if we would accept them at all).
    - Dissertations?
    - Thesis?
    - Government Documents?
    - ETDs?
    - Tweets?
    - Websites?



## ● COMMUNITY: NEWSPAPERS

○ IMLS Newspaper Grant Submitted January 15, 2016

- Partnered with the University of Utah
  - Run the Mountain West Digital Library (another DPLA service hub)
- Requested \$250,000 to hire a developer
  - Would be built as a component to use with any Hydra based application

## ● COMMUNITY: NEWSPAPERS

- Expands and will build upon a DPLA Knight Foundation Grant
  - <http://dp.la/info/2015/11/09/dpla-announces-knight-grant-to-research-the-potential-integration-of-newspaper-content/>
- Article level content as the preferred format but will still support page level metadata

## ● COMMUNITY: CONFERENCE

### ○ Hosting Hydra Connect 2016

- 4th time this would have been held
- October 3rd - October 6th
  - First day workshops
  - Last day unconference sessions (usually)
- Sheraton Boston hotel
  - \$219/night
- Registration open late May / early June
  - 290 max slots

## ● COMMUNITY: CONFERENCE

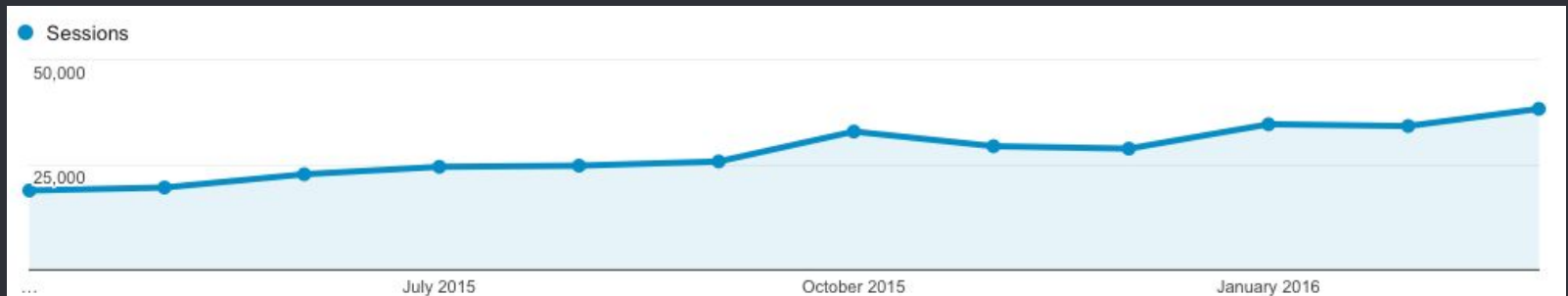
- Partners: WGBH, Tufts, DPLA, Northeastern
- Various types of topics
  - Technical code talks
  - Metadata discussions (RDF + LD)
  - Management sessions
  - DevOps discussions
  - Poster session
    - Each institution displays their current efforts and system architecture



USAGE

## ● USAGE: SESSIONS

- March 2015: 590 sessions/day
- October 2015: 1,060 sessions/day
- March 2016: 1,235 sessions/day



## ● USAGE: TRAFFIC SOURCES

○ Where do users come from?

2015

search: 55.2%

referral: 19.5%

direct: 13.8%

social: 11.4%

2016

search: 54.3%

referral: 16.9%

direct: 16%

social: 12.7%

## ● USAGE: REFERRING SITES

○ Top referring sites, April 2015 - March 2016:

- dp.la 14,617
- bpl.org 4,219
- cwmars.org 2,455
- newbedford-ma.gov 827
- watertownlib.org 786
- rypn.org 602
- lawrencehistory.org 460
- brooklinelibrary.org 448
- cambridgema.gov 430
- mail.google.com 422



## ● USAGE: SOCIAL

○ Top social referrers, April 2015 - March 2016:

- Facebook 31,774
- Reddit 4,692
- Twitter 1,826
- YouTube 1,272
- Tumblr 1,013
- Pinterest 628

- USAGE: CONTENT

- Top 10 most-viewed items

- October 2015 - March 2016

● USAGE: TOP TEN

#10 (598 views)



A panoramic view from Bunker Hill Monument

Boston Public Library - Boston Pictorial Archive

<http://ark.digitalcommonwealth.org/ark:/50959/00000312d>

● USAGE: TOP TEN

#9 (645 views)



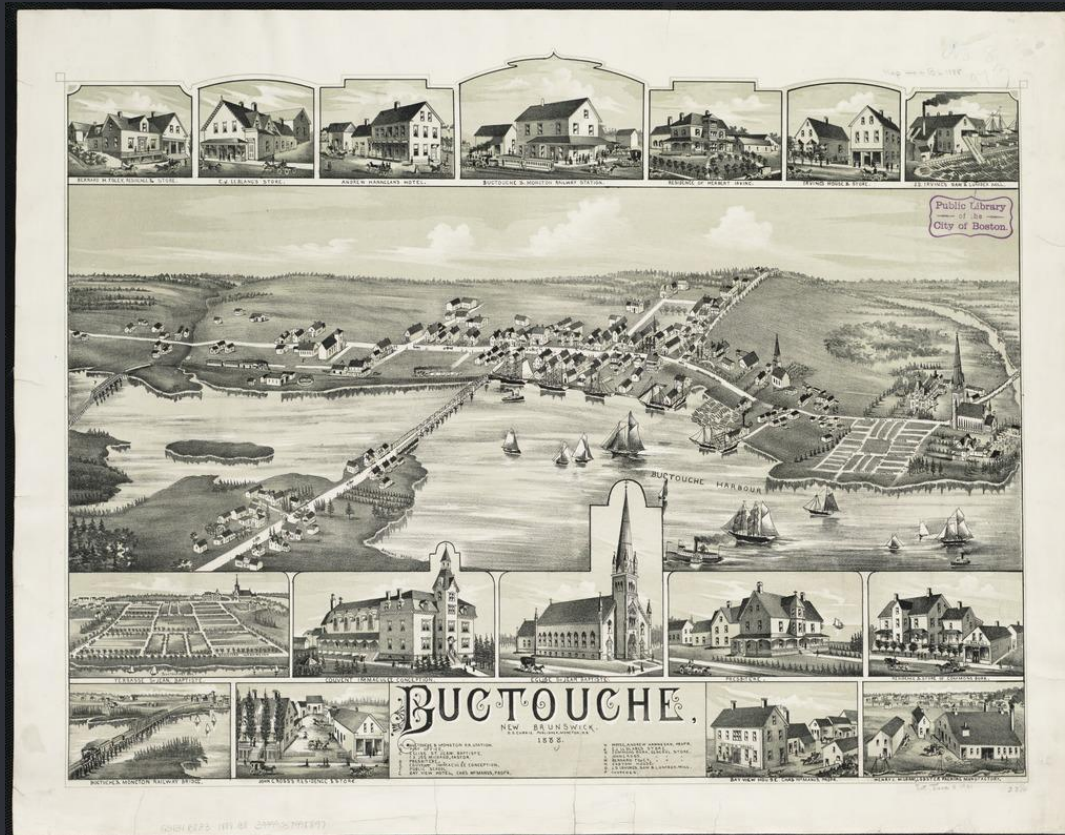
The Turkish Empire in Europe, Asia and Africa...

Boston Public Library - Norman B. Leventhal Map Center Collection

<http://ark.digitalcommonwealth.org/ark:/50959/cj82kt41q>

● USAGE: TOP TEN

#8 (696 views)



# Buctouche, New Brunswick

Boston Public Library - Norman B. Leventhal Map Center Collection

<http://ark.digitalcommonwealth.org/ark:/50959/wd376861d>

● USAGE: TOP TEN

#7 (784 views)



Wachusett Reservoir, Lancaster Mills and Mill Pond...

Massachusetts Archives - Mass. Metropolitan Water Works Photograph Collection

<http://ark.digitalcommonwealth.org/ark:/50959/bz60d598c>

● USAGE: TOP TEN

#6 (805 views)



Wachusett Reservoir, Moulton & O'Mahoney's locomotive "The Hobo" ...  
Massachusetts Archives - Mass. Metropolitan Water Works Photograph Collection  
<http://ark.digitalcommonwealth.org/ark:/50959/t148gc09k>

● USAGE: TOP TEN

#5 (861 views)



WACHUSETT DAM FROM THE EAST.

AUG. 1-04.

5603.

Wachusett Dam, from the east, Clinton, Mass...

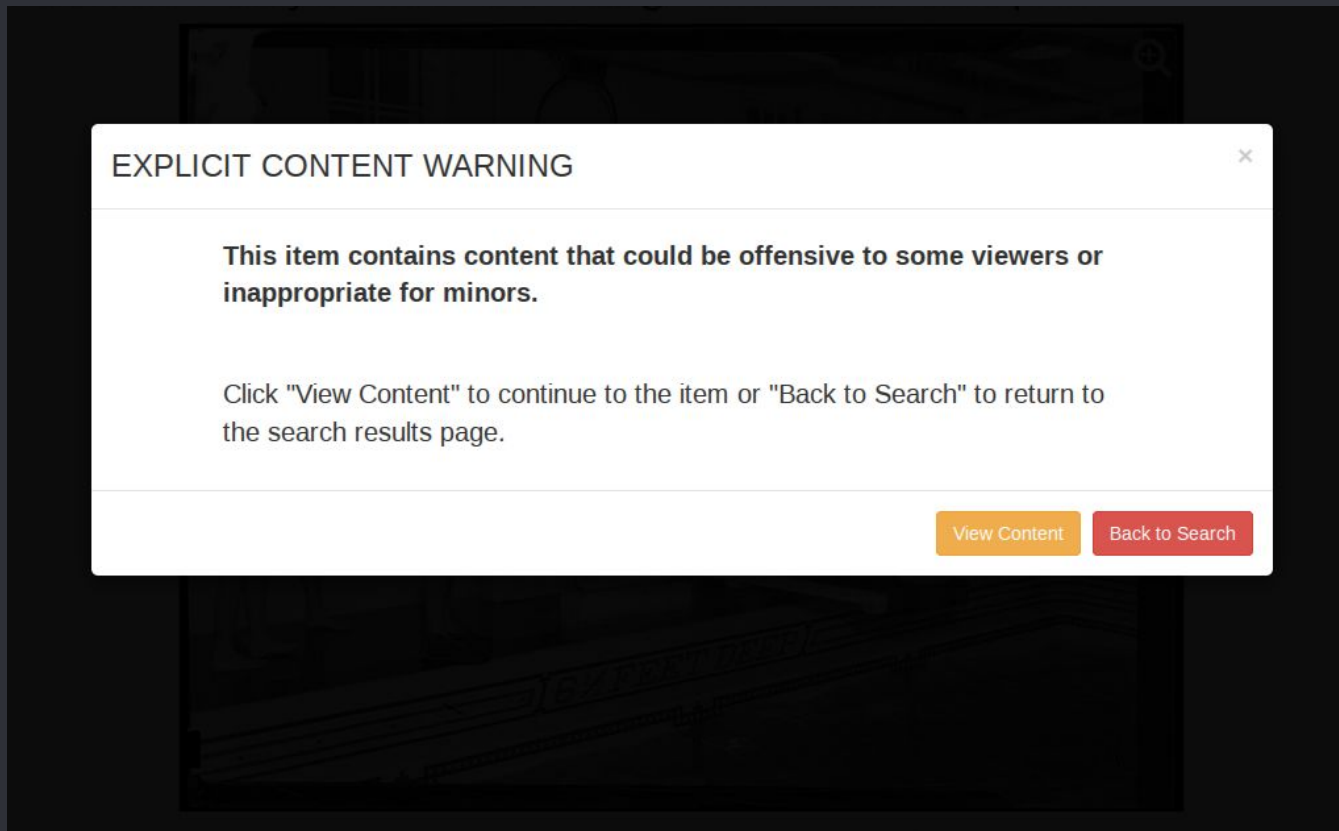
Massachusetts Archives - Mass. Metropolitan Water Works Photograph Collection

<http://ark.digitalcommonwealth.org/ark:/50959/1544bp68v>



## ● USAGE: TOP TEN

#4 (1,522 views)



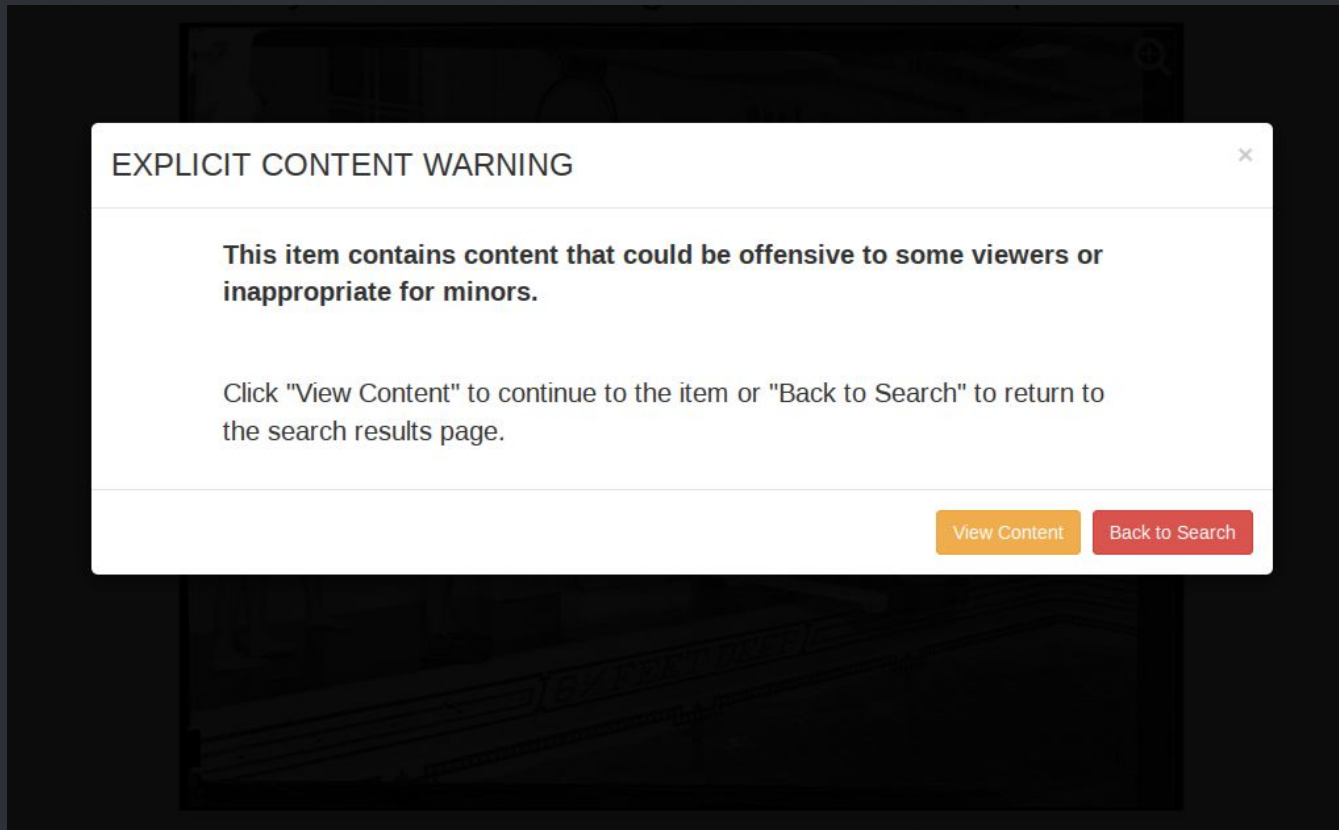
Row of naked boys stand on diving board at indoor pool

Boston Public Library - Leslie Jones Collection

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

## ● USAGE: TOP TEN

#3 (1,545 views)



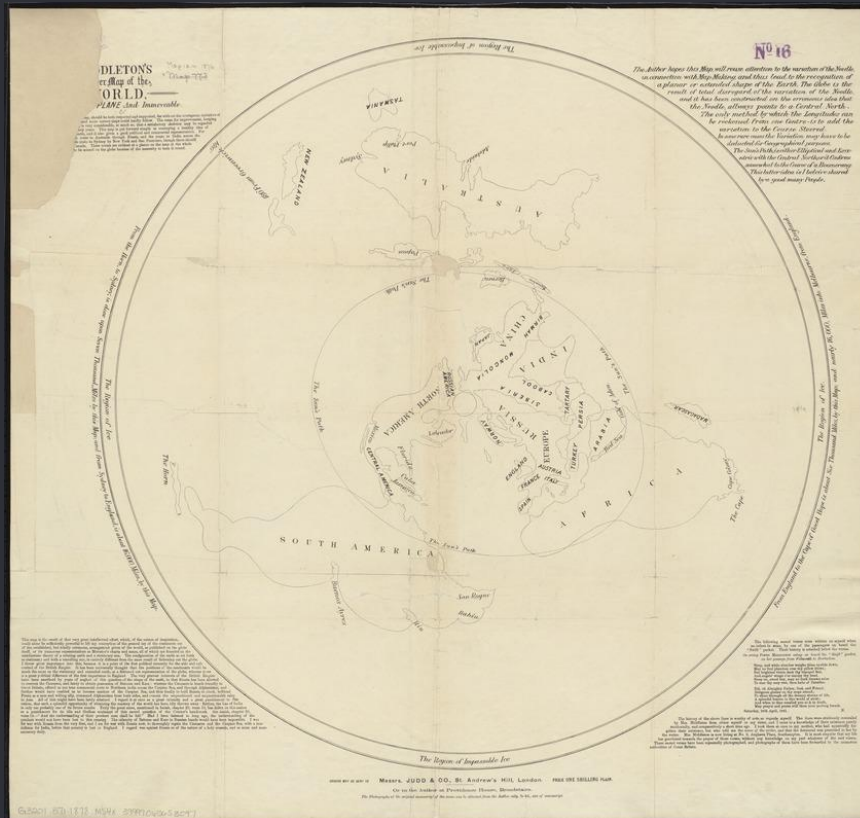
Row of naked boys stand on diving board at indoor pool

Boston Public Library - Leslie Jones Collection

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

# USAGE: TOP TEN

## #2 (2,969 views)



[Mid]dleton's [pione]er map of the [w]orld...

Boston Public Library - Norman B. Leventhal Map Center Collection

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

● USAGE: TOP TEN

#1 (20,861 views)



Gleason's new standard map of the world

Boston Public Library - Norman B. Leventhal Map Center Collection

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

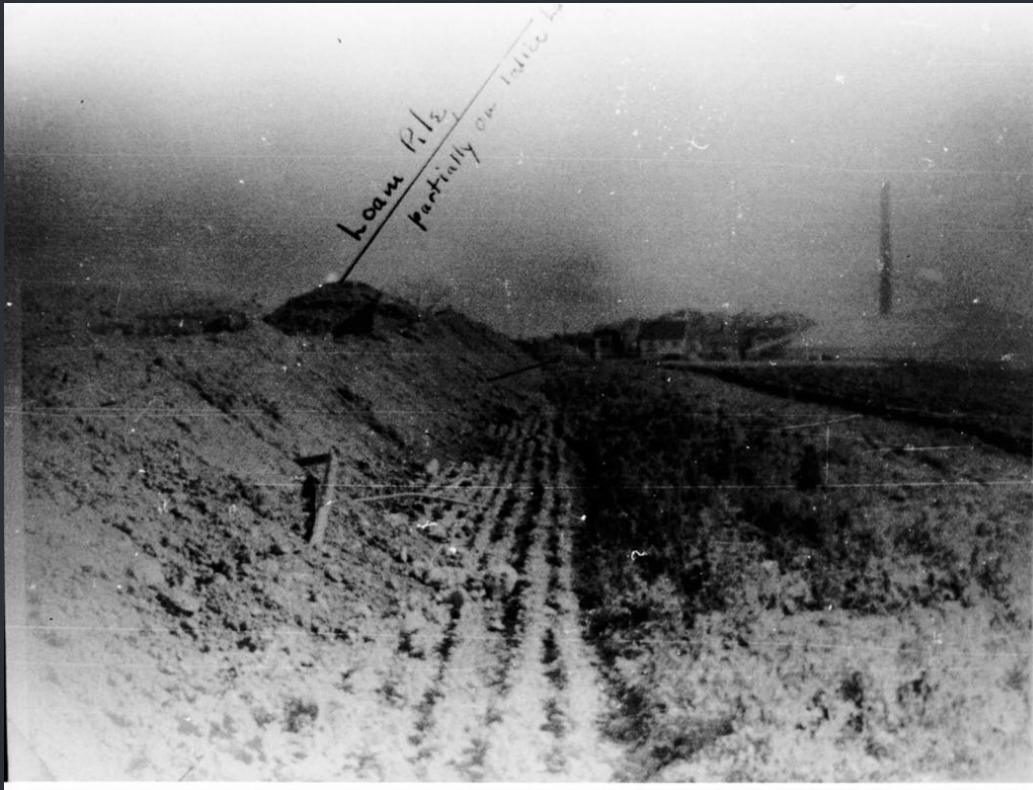
● USAGE: CONTENT

○ Top Five Most-Popular Collections

- October 2015 - March 2016
- At least 50 items in collection
- Average view count for items

● USAGE: COLLECTION TOP 5

#5 (14.4 average views per item)



Watertown Houses

Watertown Free Public Library

<https://www.digitalcommonwealth.org/collections/commonwealth:rv043402x>

● USAGE: COLLECTION TOP 5

#4 (15.6 average views per item)



Photographic Collection of the Jacob Edwards Library

Jacob Edwards Library

<https://www.digitalcommonwealth.org/collections/commonwealth:fb494n22f>

● USAGE: COLLECTION TOP 5

#3 (17.4 average views per item)



Watertown Businesses

Watertown Free Public Library

<https://www.digitalcommonwealth.org/collections/commonwealth:dr26xz215>



● USAGE: COLLECTION TOP 5

#2 (19.8 average views per item)



Brockton: The Early Years as a City in Photographs, 1881-1950

Brockton Public Library

<https://www.digitalcommonwealth.org/collections/commonwealth:j67314798>

## USAGE: COLLECTION TOP 5

#1 (21 average views per item)



Massachusetts Metropolitan Water Works Wachusett Reservoir Land Survey Plans Indexing Real Estate Photographs, 1896-1898

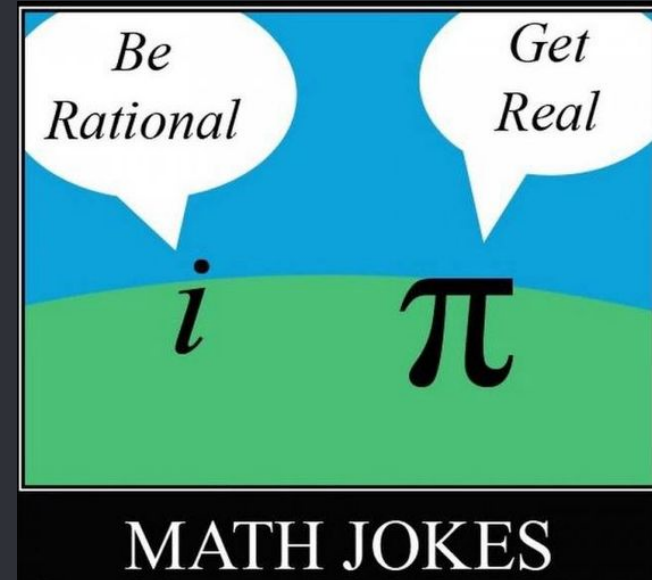
Massachusetts Department of Conservation and Recreation

<https://www.digitalcommonwealth.org/collections/commonwealth:f4752n42x>

## ● USAGE: SITEWIDE ANALYSIS

# ○ MORE NUMBERS = MORE FUN

- October 2015 - March 2016
- Must have existed as of December 31st, 2015
- Doesn't include DPLA traffic for harvested items.



<http://favim.com/image/2855945/>

## ● USAGE: BASELINE

	All Objects
Total Records	<b>228,743</b>
Average Views	<b>2.54</b>
Percent with 1+ Views	<b>56%</b>
Average Time on Page	<b>54.98 seconds</b>

## ● USAGE: SUBJECTS

	No Subjects	Topic Subject Only	Geographic Subjects Only	Both Topic and Geographic
Total Records	<b>7,928</b>	<b>79,629</b>	<b>6,859</b>	<b>134,327</b>
Percentage of Records	<b>3.5%</b>	<b>34.8%</b>	<b>3.0%</b>	<b>58.7%</b>
Average Views	<b>1.51</b>	<b>1.55</b>	<b>2.39</b>	<b>3.19</b>
Percent with 1+ Views	<b>45%</b>	<b>42%</b>	<b>51%</b>	<b>65%</b>

## ● USAGE: ABSTRACT AND NOTES

	No Abstract or Notes	Abstract Only	Notes Only	Both Abstract and Notes
Total Records	<b>10,697</b>	<b>12,791</b>	<b>182,329</b>	<b>22,926</b>
Percentage of Records	<b>4.7%</b>	<b>5.6%</b>	<b>79.7%</b>	<b>10.0%</b>
Average Views	<b>1.27</b>	<b>2.63</b>	<b>2.48</b>	<b>3.60</b>
Percent with 1+ Views	<b>34%</b>	<b>51%</b>	<b>56%</b>	<b>66%</b>

## ● USAGE: DATES

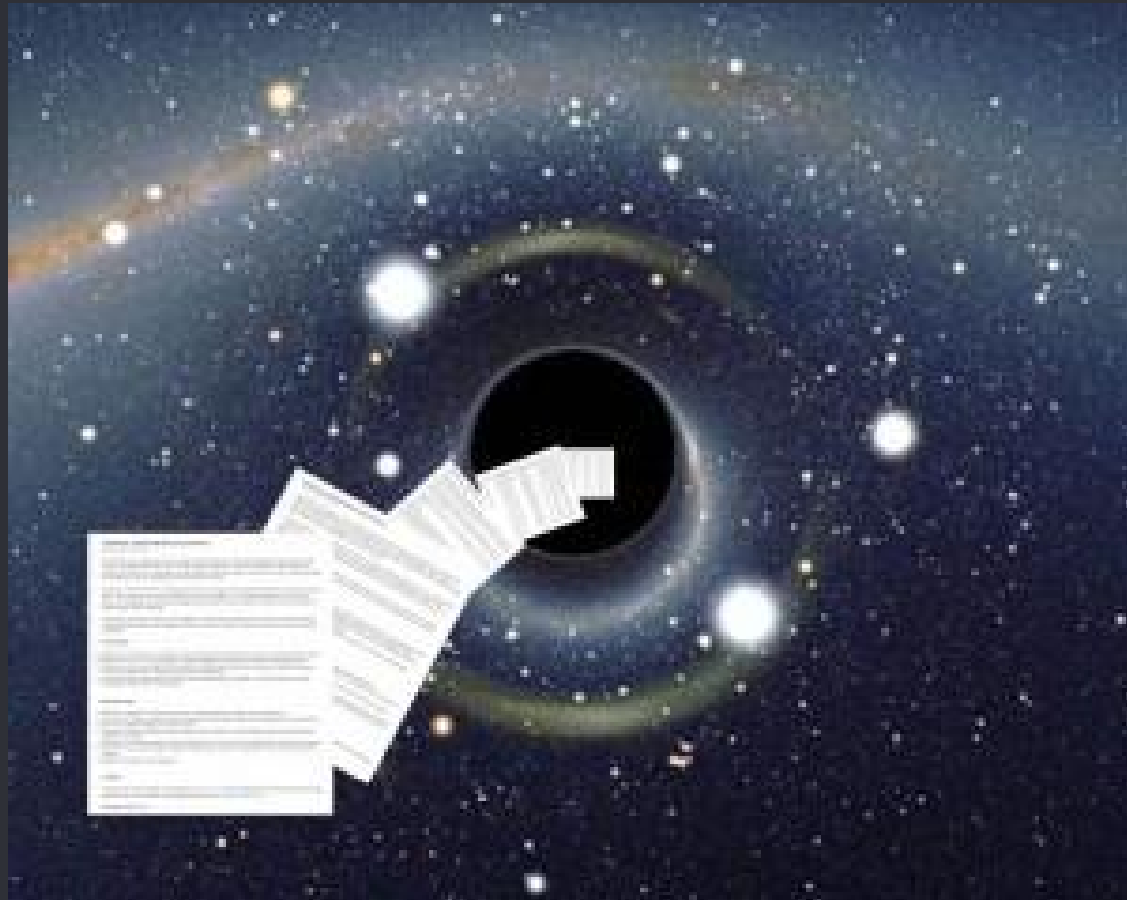
	No Date(s)	With Date(s)
Total Records	<b>8,196</b>	<b>220,547</b>
Percentage of Records	<b>3.6%</b>	<b>96.4%</b>
Average Views	<b>2.26</b>	<b>2.55</b>
Percent with 1+ Views	<b>50%</b>	<b>56%</b>

## ● USAGE: HOSTED VS HARVESTED

	Hosted Items	Harvested
Total Records	<b>172,476</b>	<b>56,267</b>
Percentage of Records	<b>75.4%</b>	<b>24.6%</b>
Average Views	<b>3.16</b>	<b>0.63</b>
Percent with 1+ Views	<b>66%</b>	<b>25%</b>



● USAGE: AVOID THE BLACK HOLE

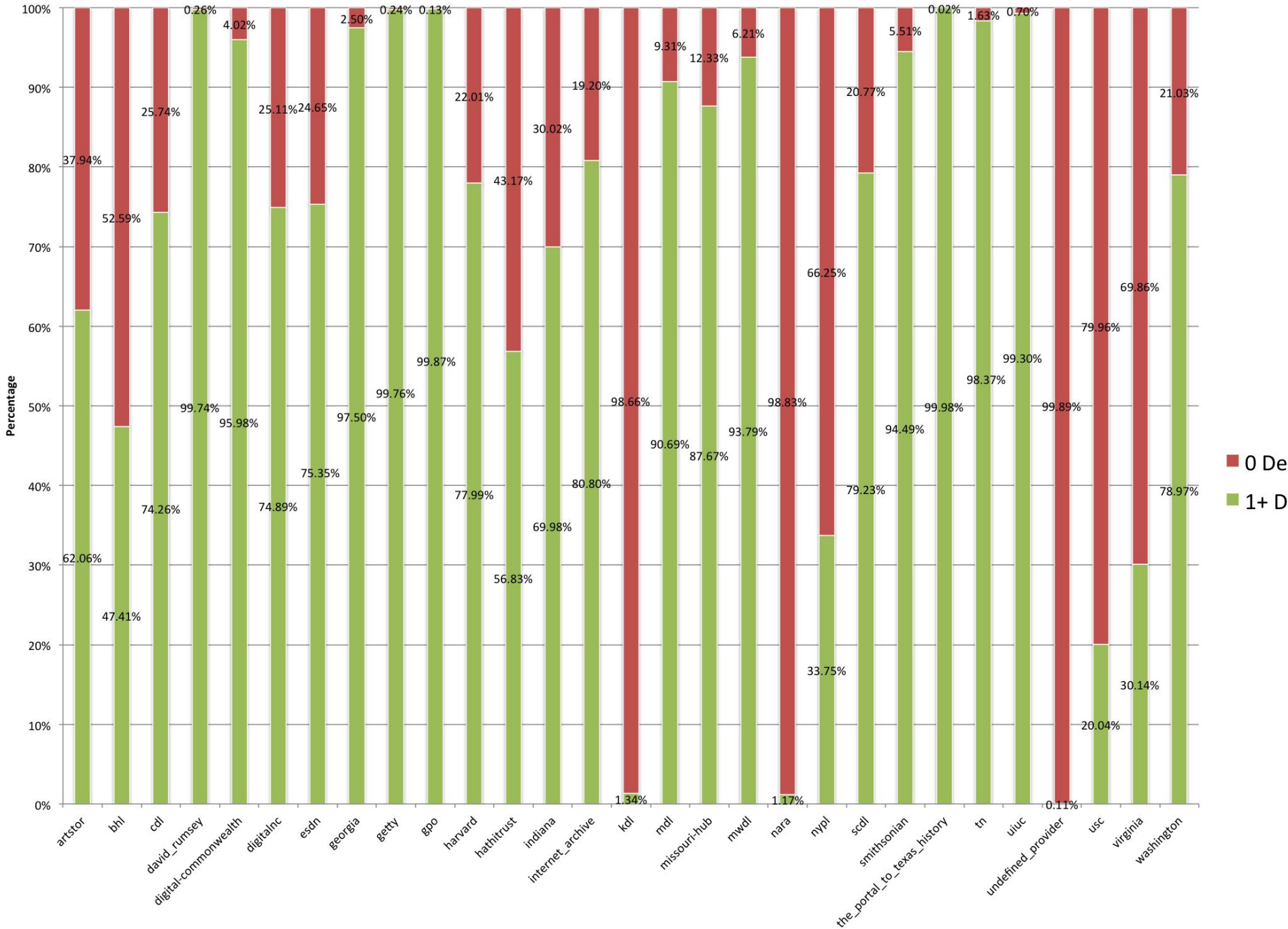


<http://www.blogging4jobs.com/hr/avoid-the-black-hole-when-applying-for-jobs-online>

## ● USAGE: CONTENT HUB COMPARISON

- A look at description use in DPLA
  - Credit and further good reading at: <http://vphill.com/journal/post/5889/>
  - Note: DPLA dumps abstract and notes into the same description field.

# Percent of records without and with descriptions present





# THANKS!

Questions?

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[goo.gl/ZTaZw4](https://goo.gl/ZTaZw4)