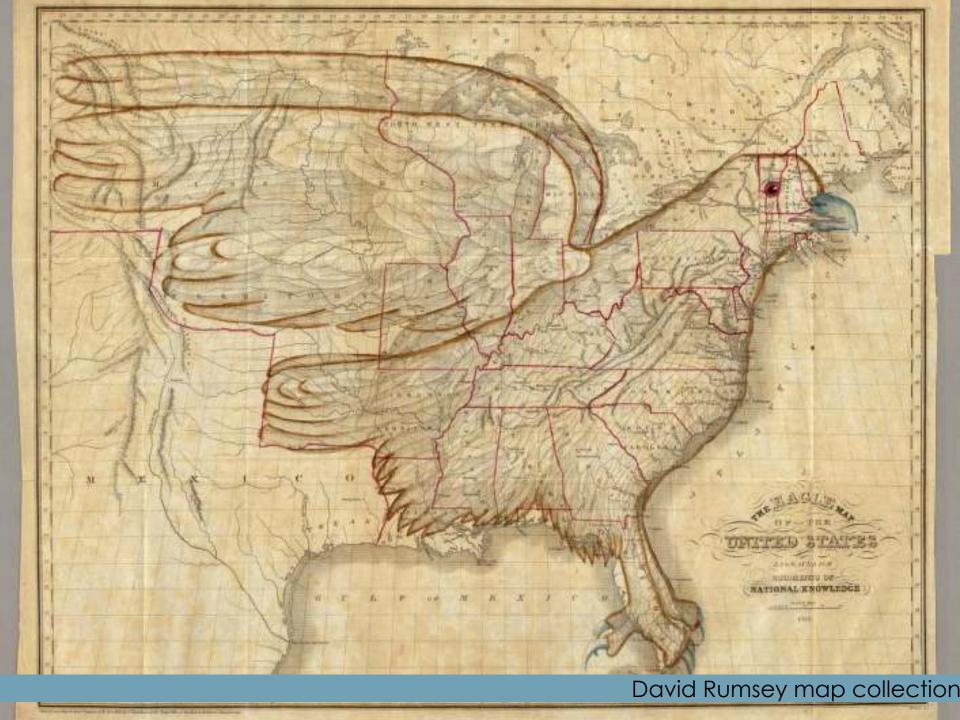
# DIGITAL PUBLIC LIBRARY OF AMERICA

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Data Services Coordinator

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13+ Million Resources and Growing

L-R Minnesota DL, Kentucky DL and Artstor



University of North Carolina Greensboro; University of Utah; David Rumsey; Smithsonian Institution; Waring Historical Library; North Carolina State Archives; Boston Public Library; Walter J. Brown Media Archives and Peabody Awards Collection; Cornell University

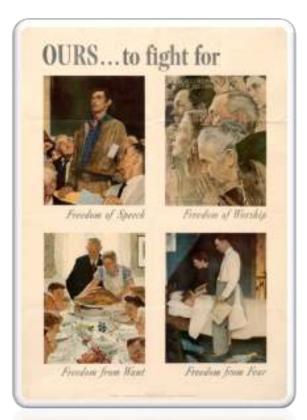
# DPLA is...











a **Portal** 

a Public Option

# DPLA is...

### Sample Code & Libraries

Why reinvent the wheel? Check out the following sample code lode, libraries, and wrappers by emailing us at appropriate.

### **DPyLA**

Developed by Chad Nelson, this is a Python client that serves a

Sevelop with this Python client .

### 'est\_easy

Developed by Tom Kerr, rest\_easy is an experimental Python r

levelop with rest\_easy =

### Java API Wrapper

Developed by William Karavites, a Java API wrapper for the Dig

Develop with this Java API weapper a

### PHP API Wrapper

Seveloped and maintained by Stuart Dallas, a PHP API wrappe

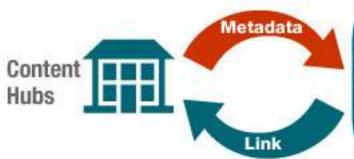
Jevelop with this PHP API wrapper -

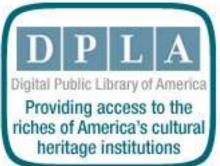
### 'OpenSci/rDPLA

Developed by Scott Chamberlain, an R client for the Digital Pull

rOpenSci/rDPLA Developed by Scott Chamberlain, an R client for the Digital Put





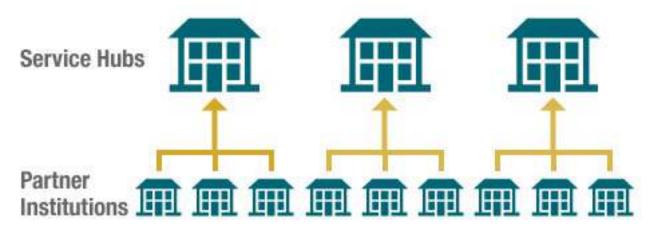




Metadata from content and service hubs is harvested by Digital Public Library of America



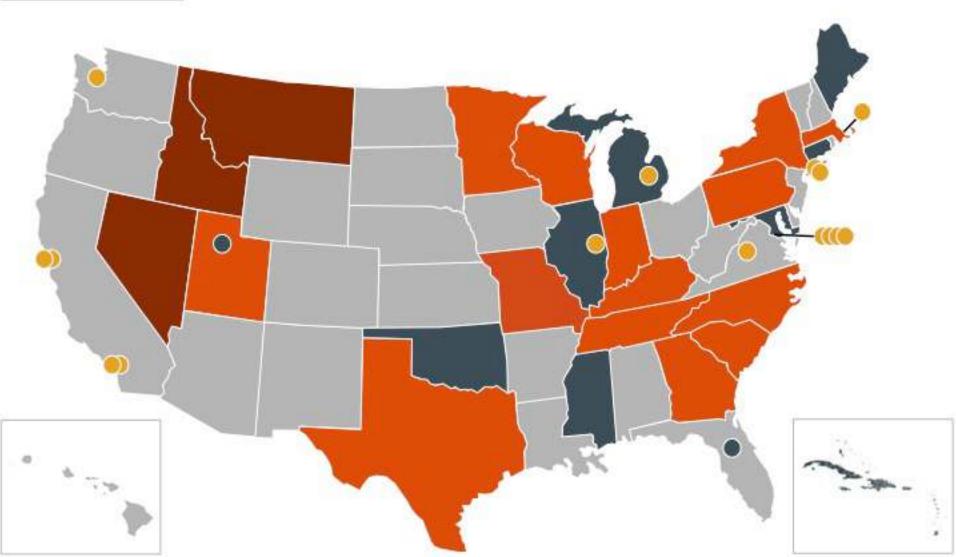
Link to digital surrogate of original object on content hub or service hub is made available through DPLA





# **DPLA Hubs locations**

- Service Hubs
- Service Hub partner states
- Content Hubs
  - Hubs in active development



## API Codex

Welcome to the DPLA API Codex! This is where you can find authoritative documentation for the DPLA API and resources you can use to make the most of it. We're happy to have you. (Wondering why we built an API in the first place? Check out our philosophy.)

### What now?

- If you've never played (or worked) with an API before, head on over to API Basics. We'll
  get you started accessing some of our data.
- If you're already familiar with APIs in general and you just want to know how to get at our data, skip the basics and dive right into requests (Make sure you get an API key first.)
- Once you've got some shiny new JSON-LD, how can you tell what it all means?
   In responses, we explore the structure of objects and define the fields within those objects that the API will return.
- Ready to start building something against our API, but want to know how we operate?
   We've got you. Check out our policies.
- Uh oh. You're lost. We're lost. Everything's broken. I'm confused. Time to check out our troubleshooting and FAQ page!
- Confused by the terminology we're using? Check out the glossary of terms.
- Did we miss/break/overlook/forget something? Tell us.

### The essentials

Need to start right now? Here's a cheat sheet.

- http://api.dp.la/v2 is the base URL of the DPLA API.
- items and collections are the two resource types you can request.
- In order to pass requests to the API, you'll need to request an API key first. You also need to append &api\_key=\$YOUR\_KEY
  (where \$YOUR\_KEY is your 32-character key) to any requests you make.
- All records are returned as structured, wonderful, JSON-LD objects. And we have reasons for that.
- We've got a boatload of fields you can query, and a whole bunch of ways you can query them.
- Dive head first into a bucket full of kitten metadata: http://api.dp.la/v2/items?q=kittens&api\_key=. (Copy and paste the URL into your browser and add your API key on the end.)

### API CODEX

Codex Home

API Basics

Requests

Responses

Object Structure

Field Reference

Glossary

Policies

Philosophy

Technologies

Troubleshooting & FAQ

Issue Tracker

Contact

# The best thing to do with your data will be thought of by someone else.

-Rufus Pollock, Open Knowledge Foundation



DPLA Metadata = Public Domain

# DPLA by the numbers

13,850,000+ records

35 hubs and counting

2000+ contributing institutions

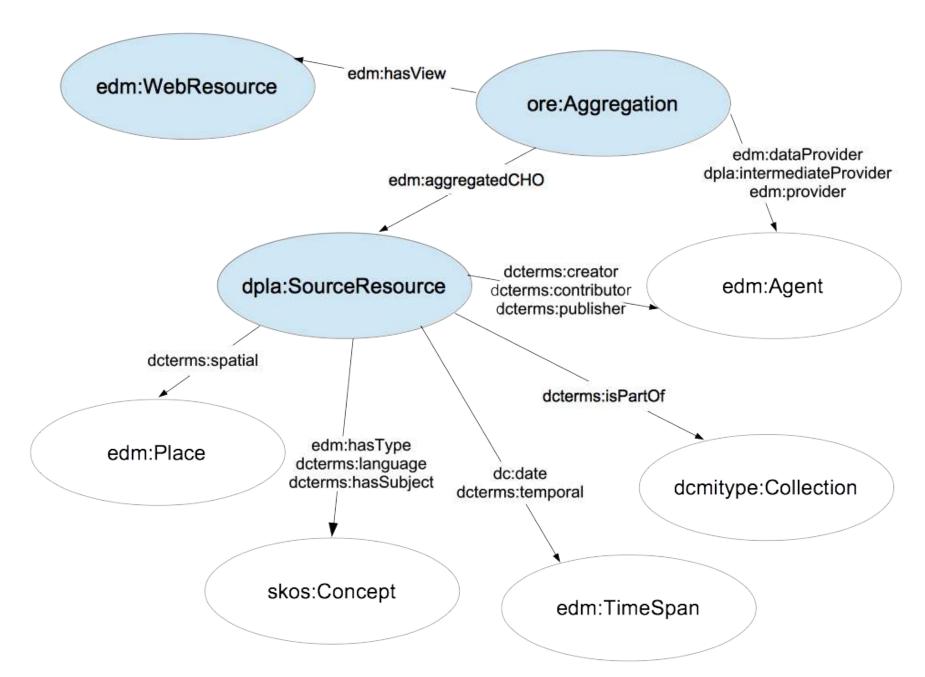
# DPLA by the numbers

...4 major metadata schemas, 1 product-specific formats, 5 institution-specific formats

# DPLA's Metadata Application Profile

- Originally developed between 2012 and 2013
- Based on the Europeana Data Model
- Currently in version 3.1
- Undergoing update to version 4

MAP v4



# Namespaces

- Content in RDF (cnt): <a href="http://www.w3.org/2011/content#">http://www.w3.org/2011/content#</a>
- Dublin Core (dc): <a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
- Dublin Core Terms (dcterms): <a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
- DCMI Type Vocabulary (dcmitype): <a href="http://purl.org/dc/dcmitype/">http://purl.org/dc/dcmitype/</a>
- Europeana Data Model (edm): <a href="http://www.europeana.eu/schemas/edm/">http://www.europeana.eu/schemas/edm/</a>
- Geonames (gn): <a href="http://www.geonames.org/ontology#">http://www.geonames.org/ontology#</a>
- Open Annotation (oa): http://www.w3.org/ns/oa#
- OAI Object Reuse and Exchange (ore): <a href="http://www.openarchives.org/ore/terms/">http://www.openarchives.org/ore/terms/</a>
- Resource Description Framework (rdf): <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
- RDF Schema (rdfs): <a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#</a>
- Simple Knowledge Organization System (skos): http://www.w3.org/2004/02/skos/core#
- World Geodetic System (wgs84): <a href="http://www.w3.org/2003/01/geo/wgs84">http://www.w3.org/2003/01/geo/wgs84</a> pos#

# Temporal Data in DPLA MAP

- <dc:date>
  - Date of creation of original object
- <dcterms:temporal>
  - Temporal characteristics of the object (aboutness)

Both properties are references to an instance of the <edm:TimeSpan> class

# <edm:TimeSpan>

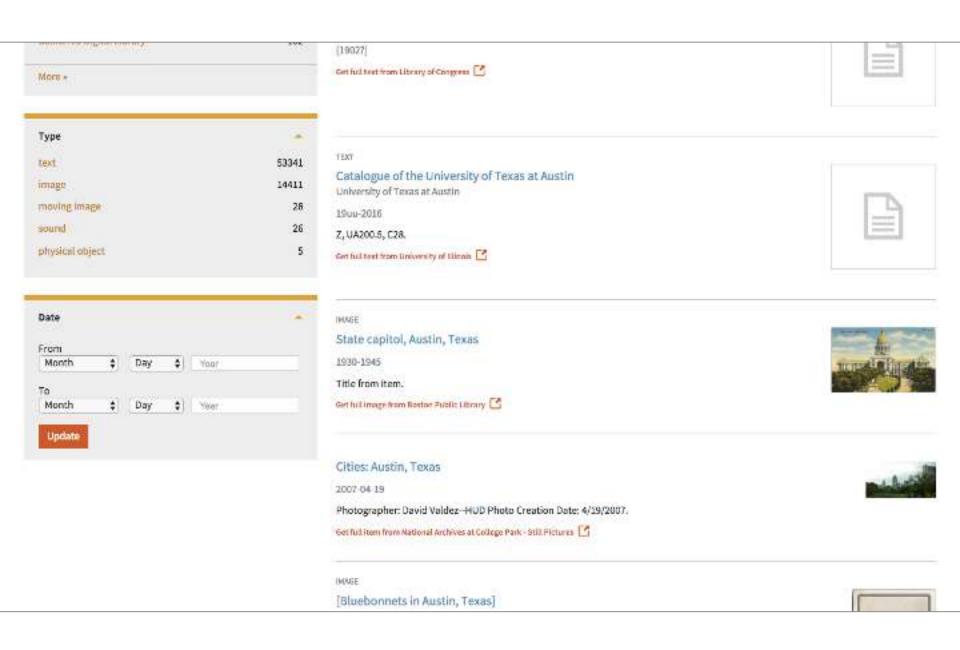
### 4.2.E class = edm:TimeSpan

TimeSpan is used to declare more complete information about a specific date or range of time related to an SR.

Label	Source	Property	Sub- property of	Range	Usage	Vocab Schema	Syntax Schema	Obligation
Original Source Date	P	dpla:providedLabel .[property].providedLabel			Date value as supplied by data provider. Literal.			0 - n
Begin	D	edm:begin .[property].begin			Date timespan started. Literal.		EDTF	0-1
End	D	edm:end .[property].end			Date timespan finished. Literal.		EDTF	0-1

# **Temporal Enrichments**

- Parse\_date.rb
  - Normalize given date to EDTF format
- Timespan\_split.rb
  - Derive a begin and end date from a given date or date range
- Timespan\_label.rb
  - Create a label for display from a given begin and end date





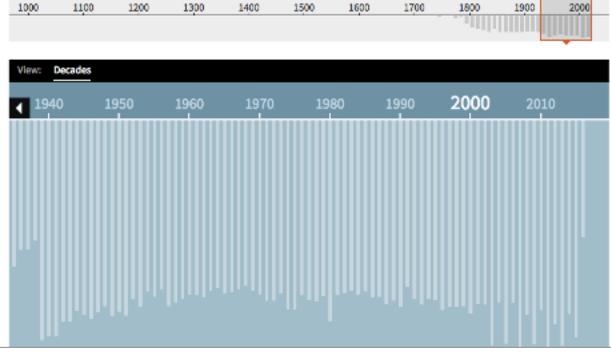
### Timeline

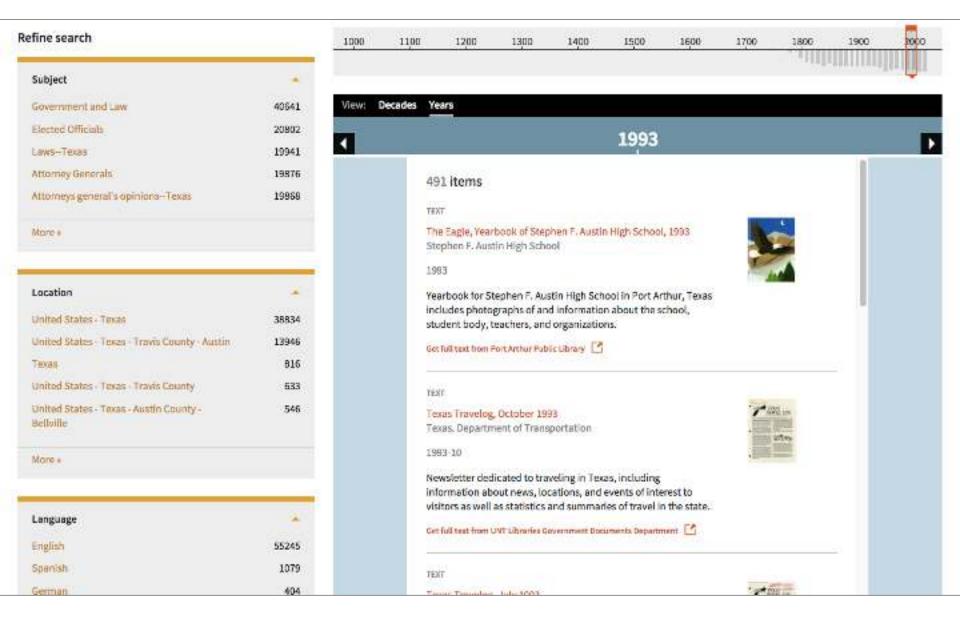
Your search for austin texas returned 64,005 results with dates from 202 contributing institutions



Refine search







# **DPLA Spatial Metadata**

```
dcterms:Spatial
  skos:prefLabel
  skos:providedLabel
  wgs 84:position lat
  wgs_84:position long
  wgs 84:positional alt
  geojson:geometry
```

gn:parentFeature

gn:countryCode

skos:note

# DPLA enriched record

```
Provided spatial information:
      <mods>
          <subject>
             <geographic>College Point, NY</geographic>
DPLA enriched data:
"spatial": [
     "@id": ":b3",
     "@type": "edm:Place",
     "exactMatch": "http://sws.geonames.org/5113302/",
     "http://www.geonames.org/ontology#countryCode": "US",
     "http://www.w3.org/2003/01/geo/wgs84 pos#lat": {
      "@value": "4.07876E1",
      "@type": "xsd:double"
     "http://www.w3.org/2003/01/geo/wgs84 pos#long": {
      "@value": "-7.3845969999999991",
      "@type": "xsd:double"
     "name": "College Point, NY, United States",
     "providedLabel": "College Point, NY"
```



Home Exhibitions Map Timeline Apps

back to search results

Search the Library

# Save To... Share

# Aerial View of College Point and Corona



Get full image from Queens Borough Public Library

Creator	Borough President of Queens			
Partner	Empire State Digital Network			
Contributing Institution	Queens Borough Public Library			
Description	Aerial view, looking south, from College Point toward Corona and Flushing Meadows. Flushing Sand and Stone Co., located at 32-17 Lawrence Street and Hunts Point Coke can be seen. Flushing Bridge can be seen on the right. Construction for the World's Fair can be seen in the distance.			
Location	College Point, NY College Point (New York, N.Y.) Corona (New York, N.Y.) Queens (New York, N.Y.)			
Format	gelatin silver print			
Туре	Image			
Subject	Sand and gravel industry Aerial views College Point, NY College Point (New York, N.Y.) Corona (New York, N.Y.) Queens (New York, N.Y.)			
Rights	The Queens Library is interested in learning more about items you've seen on our websites or elsewhere online. If you have any more information about an item or its copyright status, we want			

# Мар

Your search for college point, ny returned 590 results with location coordinates from 9 contributing institutions



### Refine search

Subject	
Queens (New York, N.Y.)	579
College Point (New York, N.Y.)	494
Uniforms	96
Fire fighters	95
Dwellings	91

Location	-
Queens (New York, N.Y.)	579
College Point (New York, N.Y.)	494
14th Street (now 123rd Street) at the corner of High Street (now 14th Avenue), College Point, NY	87
Flushing (New York, N.Y.)	75
College Point, NY	71

Click on a circle to see items about that location,

