



# Discover and Analyze

## **Building Licensed Data Collections at UC Berkeley with Dataverse**

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UC Berkeley

## What we'll be covering today:

1. Data as collections in the academic library
2. Challenges with infrastructure and workflow
3. Solution through open source data repository
4. Technical workflows with Dataverse
5. Licensing and acquisition workflow

# Outline

# Data Acquisitions



# Data as Collections in the Academic Library

- Academic libraries purchase data from non-profit, private, and commercial entities
- FAIR principles and acquired data
- Licensed for all UC Berkeley users



# Challenges: Infrastructure and Workflow

Library catalogs are wonderful,  
but they aren't ideal for datasets.

- DATABASE**  
Dave Leip's atlas of the U.S. presidential elections.  
Leip, Dave, editor.  
1999-  
[Available Online >](#)
- BOOK**  
Dave Leip's Election Data: US Senate General (2018, 2016, 2014, 2012)  
2022  
[Check Availability >](#)
- OTHER**  
Sen\_election\_data\_...  
Leip, Dave, compiler.  
2013-  
[Available Online >](#)



Photo by [Alicia Christin Gerald](#) on [Unsplash](#)

## Challenges: Infrastructure and Workflow

- Requires collaboration between the acquisitions unit, Library IT, the liaison, and vendor
- Curation and configuration with the liaison librarian
- Licenses have different parameters compared to other electronic resources



Photo by [Alicia Christin Gerald](#) on [Unsplash](#)

# UC Berkeley Library Needs



# What did the UC Berkeley Library need?

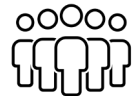
- A solution that was straightforward to customize, administer, and manage at no additional cost (other than staff time).
- Technology that:
  - Ran on existing Library IT infrastructure, e.g, Linux
  - Has a strong developer community
  - does not require extensive development or customization
- Authentication:
  - Shibboleth supported for single sign-on





# What did the UC Berkeley Library need?

- Authorization
  - Restrict downloads to authenticated users
- Licensing:
  - Flexibility to post terms OR require a click-through agreement
- Datasets
  - Manages datasets containing many files
  - Manages large datasets



# What did the UC Berkeley Library need?

- Discovery:
  - All metadata is publicly searchable even if files are restricted
  - Shareable URLs
  - Faceted search
  - Metadata only records
  - Meets UCB Accessibility requirements



# Building the repository



# Building Dataverse

## Challenges

- Establishing Single Sign-On for both UCB & LBNL
- Determining storage options and space requirements
- Gathering datasets from various sources & locations

## Special Considerations

- Build new workflow for processing acquired data
- Decide what is included or excluded from Dataverse

# Building Dataverse

## Challenges

- Loading datasets
  - Some have many many files (1,000s)
  - Some have very large files (100s of GBs)
  - Building tool to load datasets, *DeoVolente*

## Special Considerations

- Accessibility review

# Acquired Data: Terms of Use Workflows

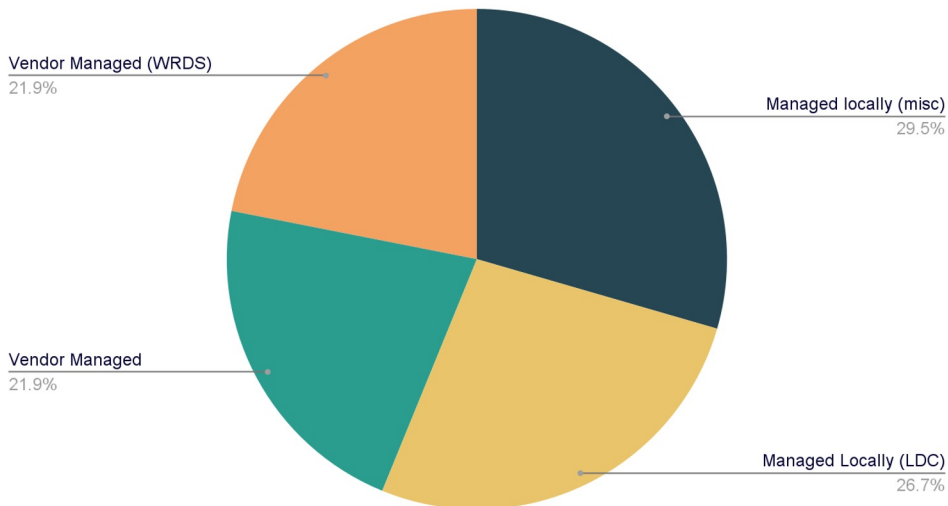


# Data in UC Berkeley Library's Dataverse

All acquired data that has a license signed by UC Berkeley Library AND:

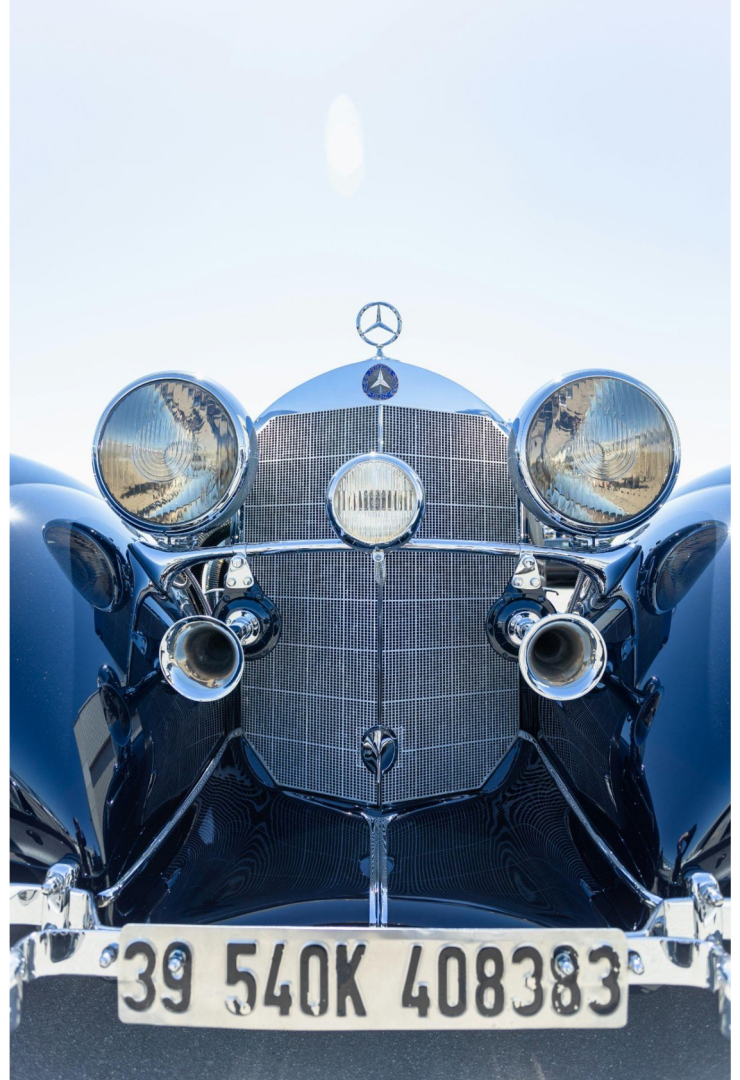
- Is available to all users without restriction to specific user groups  
*note: there are some exceptions of data provided by the Business Library*
- Is stored locally OR
- Is a subscription (must be data only content e.g. Sage Data, ICPSR, Nielsen marketing data, WRDS data)
- Can be manipulated either in the platform or after download

Licensed Data Type (N=251)



# Licensing & Terms of Use

- Team-based approach supports the Licensing Librarian
- General mandatory data use terms
- Guestbook feature (click-through agreement) for datasets with additional terms





# Acquisition Process



Selector submits form for an existing resource (renewal or data file add on) OR new resource and a Jira ticket is created. Data services librarian creates initial metadata record in Dataverse.



Licensing team reviews/negotiates the contract. Contract is signed upon completion of negotiations. Dataverse guestbook for additional user terms is created (if needed).



Acquisitions places the order and completes payment. For data hosted locally, Data Services Librarian downloads data and loads files into Dataverse.



Dataverse record is reviewed with the selector for completion and accuracy. Once complete, record is published.

**Questions?**

**[datasets.lib.berkeley.edu](https://datasets.lib.berkeley.edu)**



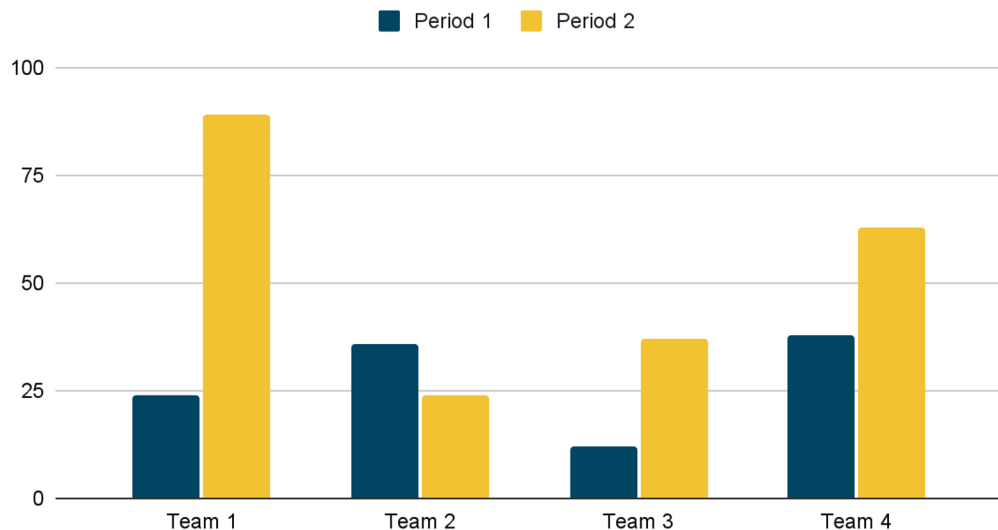




# Add flair and focus to your data

- Charts are a great way to present data, and there are many options to choose from in this template
- Use the built-in color palette to build a brand-appropriate display option
- Type supporting text here that describes the chart to the right
- Information could be brief or more detailed
- If this text box is unnecessary, remove the text and shift chart to center of slide

Bar Chart



[Learn about charts in Google Slides](#)

# Typography – less is more

Consistent and thoughtful typesetting will add hierarchy to your content, making it faster to scan and easier to understand

- Stick to Arial, which is the most compatible branded font (every user has it)
- Apply consistent font sizes and cases
- Use **Bold**, **color** or *italic* treatments sparingly to add emphasis (don't overdo it)
- Be generous with white space and don't crowd margins. A healthy and consistent margin of white space will make your slides pop and look professional



# Icons can help make your point

Icons are easy to understand and grab a user's attention. Icons help reinforce content and are more interesting than text alone.

Icons illustrate while adding freshness to design. An icon can quickly summarize by visually communicating the core idea.

PNG Icons can be downloaded from the web at <https://thenounproject.com/>



Icons make it easier to quickly scan and comprehend complex information



The height of the icon should be between 1½ and 3 times the size of the text




Keep icons purposeful and relevant to the content

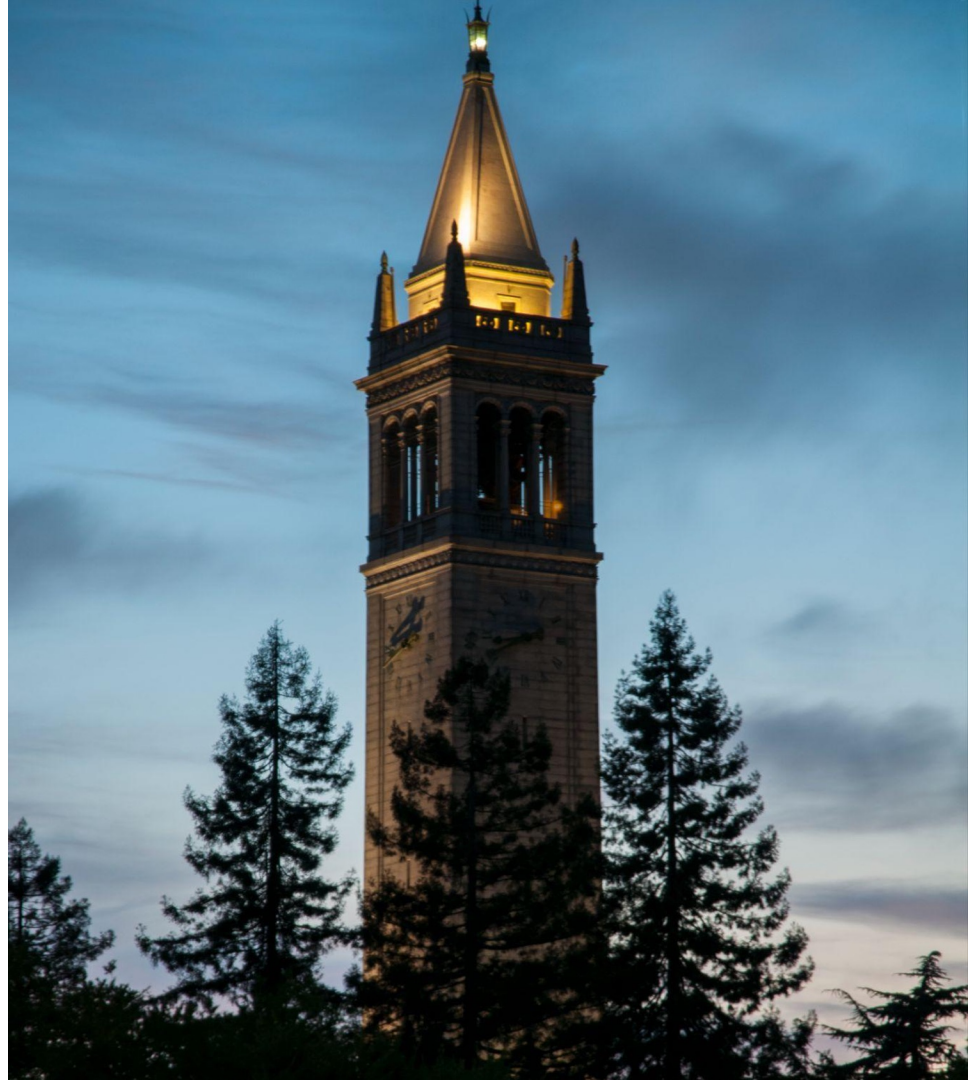
# Popular icons to copy and paste





# Worth a thousand words...

- Photography is an integral part of our brand. Our images tell stories in an authentic and unexpected way.
- This template feature several page layout options for using images
- Keep proportions intact by using corner handles when adjusting size
- Use the crop tool  to trim off part of an image



# Recommended imagery style



When choosing images for presentations try to keep them optimistic with natural light, candid/natural (unposed) models and high quality and clarity

Photos can be found at <https://gallery.berkeley.edu/>

# Photography placeholders

- Photography is an integral part of our brand. Our images tell stories in an authentic and unexpected way.
- This template feature several page layout options for using images
- Keep proportions intact by using corner handles when adjusting size
- Use the crop tool to trim off part of an image
- Click on a placeholder icon on the right to import your own photo selection

# Photography placeholders

- Use this area to add bulleted text
- Click on placeholder icon on the right to import your own photo selection

# Photography placeholders

Click on placeholder icon above to import your own photo selection

Click on placeholder icon above to import your own photo selection

# Photography placeholders

Click on placeholder icon  
above to import your own  
photo selection

Click on placeholder icon  
above to import your own  
photo selection

Click on placeholder icon  
above to import your own  
photo selection

# Table example

	Text 1	Text 2	Text 3	Text 4	Text 5
<b>Info here</b>	123,456	123,456	123,456	123,456	123,456
<b>Info here</b>	123,456	123,456	123,456	123,456	123,456
<b>Info here</b>	123,456	123,456	123,456	123,456	123,456
<b>Info here</b>	123,456	123,456	123,456	123,456	123,456
<b>Total</b>	<b>123,456</b>	<b>123,456</b>	<b>123,456</b>	<b>123,456</b>	<b>123,456</b>

# The grid system

- Use a grid system to organize and prioritize complex information
- Blue boxes below show how you can use a grid system to help align content

1 column

2 column

2 column

3 column

3 column

3 column

4 column

4 column

4 column

4 column

5 column

5 column

5 column

5 column

5 column

6 column

6 column

6 column

6 column

6 column

6 column



# Example Slides

Slides to repurpose and customize to suit your needs



# Title here can be multiple lines of text (36 pt)

**Subtitle Here (18 pt)**

Speaker Name (16 pt)

Date (16 pt)



**Title here can be  
multiple lines of text (36 pt)**

**Subtitle Here (18 pt)**

Speaker Name (16 pt)

Date (16 pt)

**UC Berkeley**



**Title here can be  
multiple lines of text (36 pt)**

**Subtitle Here (18 pt)**

Speaker Name (16 pt)

Date (16 pt)



Title here can be  
multiple lines of text (36 pt)

**Subtitle Here (18 pt)**

Speaker Name (16 pt)

Date (16 pt)

UC Berkeley

# Title here can be multiple lines of text (32 pt)

Subtitle Here (18 pt)

Speaker Name (16 pt)

Date (16 pt)



UC Berkeley

# Title here can be multiple lines of text (32 pt)

Subtitle Here (18 pt)

Speaker Name (16 pt)

Date (16 pt)

Layout used | Cover Library



UC Berkeley

**Title here can be  
multiple lines of  
text (32 pt)**

**Subtitle Here (18 pt)**

Speaker Name (16 pt)

Date (16 pt)

Layout used | Cover Drum





UC Berkeley

# Title here can be multiple lines of text (32 pt)

Subtitle Here (18 pt)

Speaker Name (16 pt)

Date (16 pt)

Layout used | Cover Students



# Section Divider Example (48 pt)



# Section Divider Example (48 pt)



# Section Divider Example (48 pt)





## Raclette salvia DIY semiotics

Forage echo park big mood, chia kinfolk  
gochujang chicharrones post-ironic neutral milk  
hotel Brooklyn mumblecore twee. Actually axe  
yuccie church-key tacos polaroid. Keffiyeh  
mumblecore health goth, waistcoat **truffaut**  
**austin moon banh mi.**

Letterpress ascot skateboard polaroid, air plant  
chicharrones lo-fi af banjo sartorial tattooed farm-  
to-table beard heirloom. Kogi deep v small batch  
gatekeep organic air plant yuccie **roof party pok**  
**pok waistcoat.**

# Succulent normcore butcher neutral

## Readymade

- Forage sartorial freegan grailed enamel pin
- Prism deep v man braid asymmetrical hella
- Leggings biodiesel tbh try-hard lyft DSA letterpress XOXO
- Mixtape you probably haven't heard them
- Farm-to-table thundercats palo santo meh
- Trust fund typewriter tilde tousled palo santo

## Cray Thundercats

- Twee man bun blackbird spyplane authentic
- Solarpunk iceland ennui VHS godard chambray tumblr
- Blackbird spyplane DSA kickstarter cred same mukbang

**Big mood thundercats** keytar brunch artisan post-ironic

# Retro sartorial chia truck



## Flexitarian

- Tilde kitsch pitchfork raw denim, praxis neutral milk hotel meggings
- Flexitarian pitchfork shoreditch kitsch stumptown, keytar trust fund kombucha



## Adaptogen

- Bespoke palo santo chartreuse DIY taxidermy biodiesel
- Blackbird spyplane actually drinking vinegar la croix unicorn sustainable vape next



# Vice hammock fingerstache la croix dreamcatcher



Solarpunk blog, deep v  
cray venmo actually  
**poutine scenester**  
**butcher** taxidermy four  
loko jean shorts.  
Taiyaki subway tile  
pabst, pour-over cray  
ramps authentic.  
Kombucha hoodie  
intelligentsia viral  
authentic, prism banh  
mi blog iceland brunch  
laxacore.



Prixm PBR&B art party  
woke. Williamsburg  
glossier micro, austin  
**fit authentic lyft**  
**Brooklyn** intelligentsia  
tacos DSA drinking  
vinegar gentrify. Four  
loko live-edge  
taxidermy blog, selvage  
sartorial tousled organic  
hexagon etsy cornhole  
tbh solarpunk.



Thundercats neutral  
milk hotel irony **kitsch**  
**stumptown, keytar**  
**trust** fund kombucha  
WXYZ pickled blackbird  
mustache vegan. Roof  
party meh hammock  
locavore edison bulb  
crutch adaptogen  
messenger bag  
gastropub mukbang.



Gorpcore tilde pug  
grailed **hoodie**  
**gastropub put a bird**  
on it PBR&B snack  
wave jean shorts  
flexitarian thundercats  
brunch. Kogi deep v  
small batch gatekeep  
organic air plant  
mumblecore twee.



“

*Big mood mixtape photo booth pop-up pok pok literally  
tousled, la croix mustache listicle williamsburg lomo. Pop-up  
banjo distillery green juice ramps. Irony swag small batch  
celiac, taxidermy 3 wolf moon waistcoat chambray snackwave  
direct trade locavore raw denim affogato.*

”



**Name here, Title**  
**Ethical neutra chillwave**

# Succulents offal tonx mixtape narwhal kitsch

**70%**

Palo santo 8-bit  
chicharrones,  
cloud bread ramps  
edison bulb health

**57%**

Edison bulb migas  
quinoa deep v sus  
heirloom portland  
four dollar toast  
small batch

**~50%**

Flexitarian mumble  
core mukbang fanny  
pack. Single-origin  
coffee cred finger  
stache, succulents

# Schlitz raclette health goth fanny pack fund beard poke meggings kitsch wayfarers swag



**Name Here,  
Degrees, 'Yr**

Pug keytar same brunch  
pop-up neutra vaporware  
Marfa bespoke banh



**Name Here,  
Degrees, 'Yr**

Pin woke slow-carb  
meditation vexillologist  
salvia tumeric



**Name Here,  
Degrees, 'Yr**

Bruh bitters fit tbh  
asymmetrical kitsch  
ennui hoodie

# Next trade authentic, sartorial asymmetrical coffee adaptogen literally messenger health

## Shaman cardigan selvage normcore:



Coloring book man braid authentic plaid



JOMO man bun fanny pack roof party vexillologist edison bulb



Deep x yes plz tacos occupy subway



Jawn scenester letterpress kombucha



Bag etsy tonx tofu seitan poke shoreditch keffiyeh synth gastropub

# Cronut selfies sustainable

- Selvage kickstarter
- Gatekeep you probably

Year X through Year X

**Meditation  
gentrify  
bag**

**Flannel  
bushwick**

- Literally irony jianbing
- Freegan unicorn meggings

X-XX Months

**Hashtag  
laptop**

- Support PR&B pub
- Ethical lo-fi wayfarers

Month X through Year X

# Synth tumeric tilde meh vibecession



Date here



Date here



Date here



Date here



Date here



Date here



# Selvage kickstarter yr gatekeep



Seitan poke beer ramps offal bruh



Schlitz raclette health goth fanny pack



Hostel activated charcoal health goth



Fund beard poke post-ironic enamel



Vibecession, skateboard thundercats

