# BRINGING DATA BACK FROM THE DEAD

DATA PRESERVATION WORKSHOP| SCARY DATA WEEK 2025 JESSICA BREEN, PHD | OLIVIA IVEY, MLIS, MSSW

#### WELCOME & WORKSHOP GOALS

- Learn why online information disappears
- Practice using the Internet Archive's Wayback Machine
- Understand archiving as both a research skill and civic act
- Leave with practical ways to preserve your digital sources

#### THE LOST DATA PROBLEM

Reports, news interactives, and datasets disappear or change every day

URLs in academic citations often break within a few years

Even reputable organizations update pages without saving prior versions

# WHAT ONLINE RESOURCE WOULD YOU MISS IF IT VANISHED?

#### WHY DATA AND INFORMATION VANISH



Institutional change or project retirement



Website redesigns or domain changes



File formats that become unreadable



Policy shifts or broken links



Assumption that "someone else is preserving it"

PRESERVATION
IS NOT AUTOMATIC.

IT'S SOMETHING WE CHOOSE TO DO.

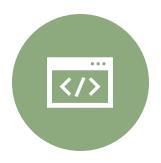
#### THE INTERNET ARCHIVE



A nonprofit digital library that preserves websites, books, media, and data portals



Houses the Wayback Machine, a searchable archive of web pages since 1996



Anyone can add pages, no login or special software required



All saved pages are public and citable

#### WAYBACK MACHINE AS A RESEARCH TOOL

#### Archiving helps you:

- Capture the version of a source you <u>actually</u> used
- Cite it confidently even if it changes later
- Compare older and newer versions of a page
- Document the evolution of ideas or narratives



# WAYBACK MACHINE AS A CIVIC TOOL

#### Archiving also helps:

- Preserve public information and accountability
- Keep government and research data accessible to all
- Empower individuals—not just libraries or agencies—to steward digital knowledge



#### FINDING WEBSITES IN THE INTERNET ARCHIVE

- I. Go to web.archive.org
- 2. Enter the URL of a webpage you want to look up into the Wayback Machine
  - a) Example: https://brookings.edu/or https://epa.gov/climate-change
- 3. Click Browse History
- 4. Explore the timeline to see how often it's been saved
- 5. Click a blue date dot to view that version of the page

#### **ARCHIVING A WEBSITE**

- I. Go to web.archive.org
- 2. Find "Save Page Now."
- 3. Paste the URL of any live page  $\rightarrow$  click **Save Page**
- 4. Once the archiving is done you can use the provided link to see what was saved

#### Try saving one of these:

- A class reading or resource from a faculty website
- A digital news story or visualization you've used in a project

## HANDS-ON: DATA RESCUE TIME (20 MIN)

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Choose a website relevant to your studies or interests

02

Use the Wayback Machine to:

- View earlier snapshots
- Save the current version
- Note what content is missing or incomplete

03

Share something surprising you found or saved

### WHAT DOES THE INTERNET ARCHIVE ACTUALLY SAVE?

- ✓ Page text and HTML structure
- ✓ Most static images (JPEG, PNG, GIF)
- Many PDFs and downloadable files linked directly on the page
- Basic CSS for layout and some simple scripts
- X Password-protected or database-driven content
- X Interactive elements (maps, embedded videos, forms)
- X Large datasets or files stored on external servers
- X Content blocked by site owners with robots.txt or paywalls

# BEYOND THE INTERNET ARCHIVE

- <u>DataLumos</u> for depositing civic and social science data
- Internet Archive Scholar preserved research outputs
- AU Government Information Data Rescue LibGuide helps locate missing U.S. government data



#### **DISCUSSION: ETHICS & IMPACT**



Who gets to decide what's worth preserving?



Are there materials that shouldn't be archived?



How do individual actions connect to larger preservation efforts?



What roles do libraries, students, and researchers share in this work?

The web is fragile. Archiving makes it durable

The Wayback
Machine supports
research
integrity and
civic
participation

Anyone can help preserve digital knowledge

Open repositories like **DataLumos** ensure datasets stay available longterm

#### KEY TAKEAWAYS

#### RESOURCES

- web.archive.org Wayback Machine
- <u>datalumos.icpsr.umich.edu</u> Open data repository
- scholar.archive.org Archived scholarly outputs
- <u>AU Government Information Data Rescue LibGuide</u> Finding guide for missing governmental data

# THANK YOU!