IMPROVING UX IN DIGITAL COLLECTIONS

PROJECT OVERVIEW

May 2024

INTRODUCTION

COLLECTION

Code of Federal Regulations

The Code of Federal Regulations (C.F.R.) is "the codification of the general and permanent rules by the department and agencies of the Federal Government." This is a historical collection of the Code...

Collection Items: View 232,465 Items

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Shipping list no.: 200... 0268-P. Distributed to some depository libraries in microfiche. Includes bibliographical references. "Serial no. 10." Also available in digital form on the Library of Congress Web site.

STUDENT

Sam Solomon is a graduate student of the University of Washington's MLIS program and an independent researcher on this project. She designed this report and presentation.

SPONSOR

Jennifer González is a Librarian (Senior Legal Information Specialist) in the Digital Resources Division of the Law Library of Congress. She maintains and oversees metadata projects within the digital collections.

PROJECT BACKGROUND

The Law Library of Congress has compiled and provided digital access to the publications of the Federal Register from 1936 to 1993 and the Code of Federal Regulations from 1938 to 1995. The digital collections require updated organization and metadata to optimize user experience.

This project researched LLOC and similar collections to identify suggestions for improving UX design through actionable solutions.

LIBRARY OF CONGRESS COLLECTION

COLLECTION

Code of Federal Regulations

The Code of Federal Regulations (C.F.R.) is "the codification of the general and permanent rules by Department and ...es of the Federal ...ent." This is a ...ollection of the

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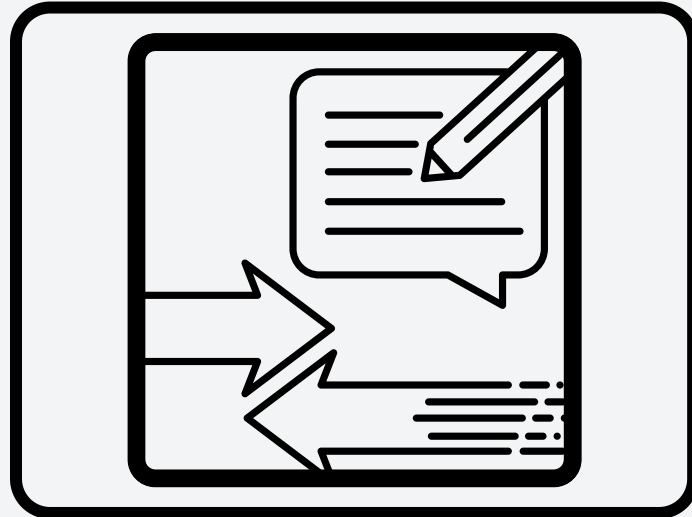
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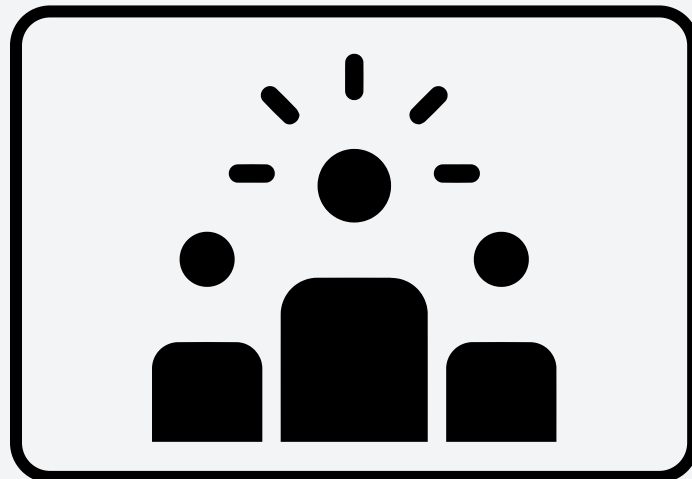livin...
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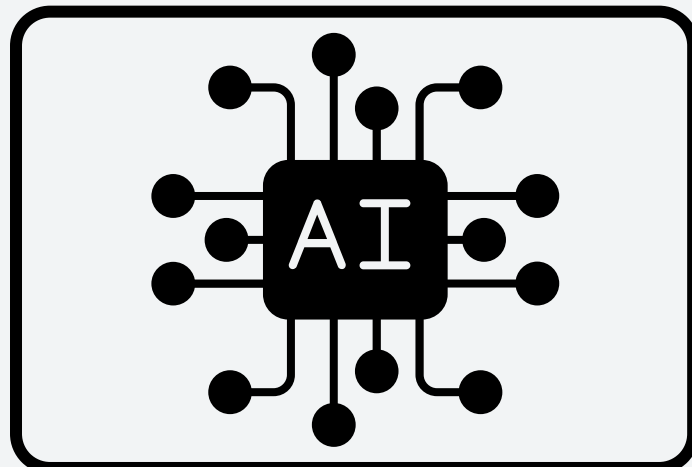datin...
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OBJECTIVES

01 UX / UI DESIGN
IDENTIFY OPPORTUNITIES FOR IMPROVEMENT

02 ACCESSIBILITY
INCREASE ACCESS TO AND WITHIN THE COLLECTIONS

03 USER ENGAGEMENT
IMPROVE ENGAGEMENT WITH VISUAL DESIGN

04 ETHICAL AI
OPTIMIZE COLLECTIONS, WITHOUT COMPROMISING SECURITY AND ACCESS

RESEARCH APPROACH

Summary of actions and research surprises.

01 DATA COLLECTION

I reviewed over 1000 item records in each collection. Key features of the approach for individual records included evaluating metadata, URL, and the link to PDF. I also reviewed the overall organization, filters, and search functions of both collections.
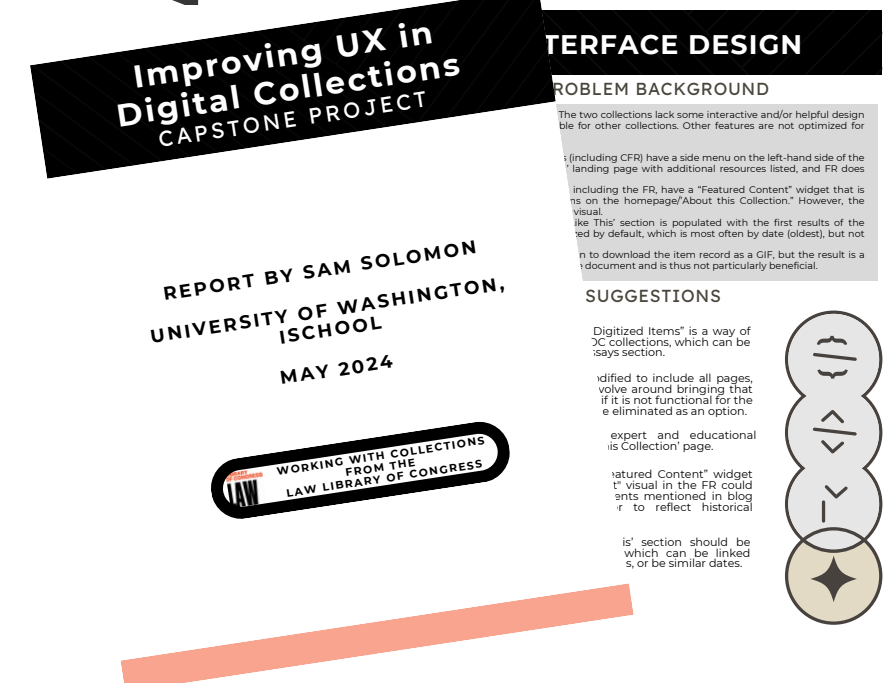
02 ANALYSIS

Data was collected in spreadsheets to record items reviewed and errors encountered, which made it easier to code and analyze findings.

03 ORGANIZING FINDINGS

I created a whitepaper report using UI design knowledge which described the problem areas and recommendations for updates to the two collections.

ANALYSIS OF THE CURRENT SYSTEM

KEY INSIGHTS

HIGHLIGHTS OF THIS ISSUE

This listing does not affect the legal status of any document published in this issue. Detailed table of contents appears inside.

PRESIDENTIAL PROCLAMATION—National Student Government Day, 1974 28605

MEDICARE—HEW expands coverage for aged and disabled; effective 8–9–74 28622

SOCIAL SECURITY—HEW publishes introduction to supplemental income program and establishes citizenship and residency requirements; effective 8–9–74 28625

VETERANS BENEFITS—
VA liberalizes eligibility requirements for tutorial training of disabled vets; effective 8–1–74 28630
VA proposal protecting its personnel from malpractice and negligence suits; comments by 9–9–74 28651

CARPOOLS—DOT authorizes use of Federal highway funds for demonstration projects; effective 8–1–74 28628

(Continued inside)

PART II:
MEDICAL SCHOLARSHIPS—HEW authorizes grants to students agreeing to practice in physician shortage areas; effective 8–9–74 28729

PART III:
WAGE DETERMINATIONS—Labor Department decisions for Federal and Federally assisted construction 28733

PART IV:
PETROLEUM ALLOCATION—
er relationships and allocation levels for aviation fuels; comments by 8–22–74 28863
FEA proposal amending reporting requirements and adjusting obligations and purchasing opportunities for crude oil refiners (2 documents); comments by 8–23–74 28862
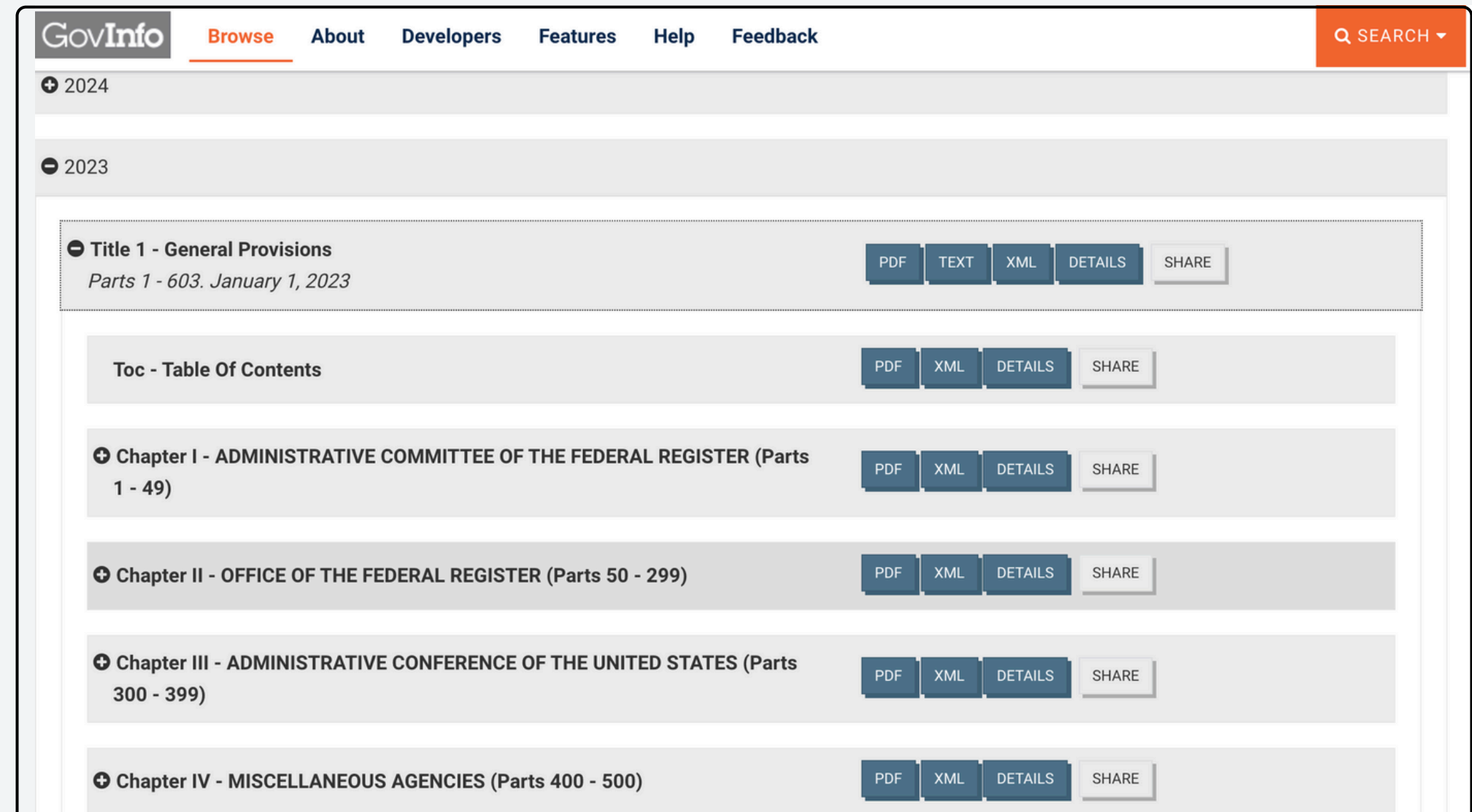FEA announces 8–19–74 as quarterly report filing date 28867
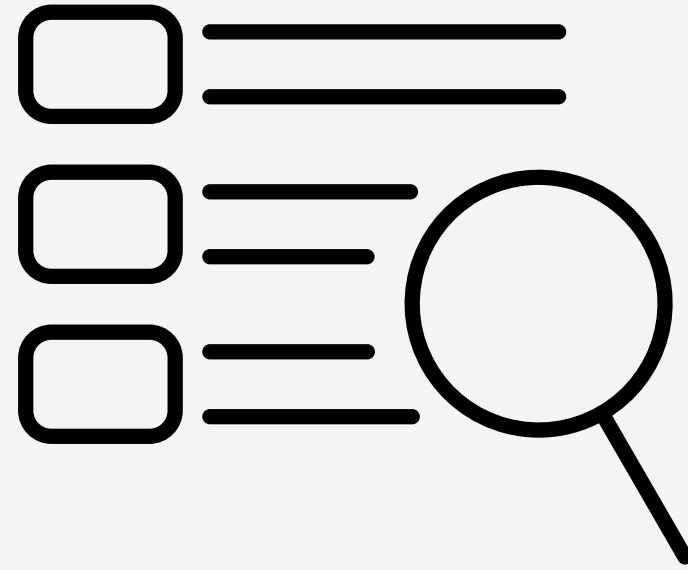
No. 155—Pt. I——1

ADVANTAGES

The overall organization of LLOC encourages users to navigate and browse more so than other FR / CFR collections.

This photo shows how GovInfo organizes its collection with drop-down menus. This method of interface organization is cumbersome for screen readers and other accessibility tools.

ADVANTAGES

LLOC provides increased access to Indexes, Preliminary Materials, etc, by adding them to navigable menus and compiling the materials in their own, searchable collections.

This photo illustrates how LLOC creates separate pages and searchable collections for supplementary materials, which are invaluable to legal researchers.
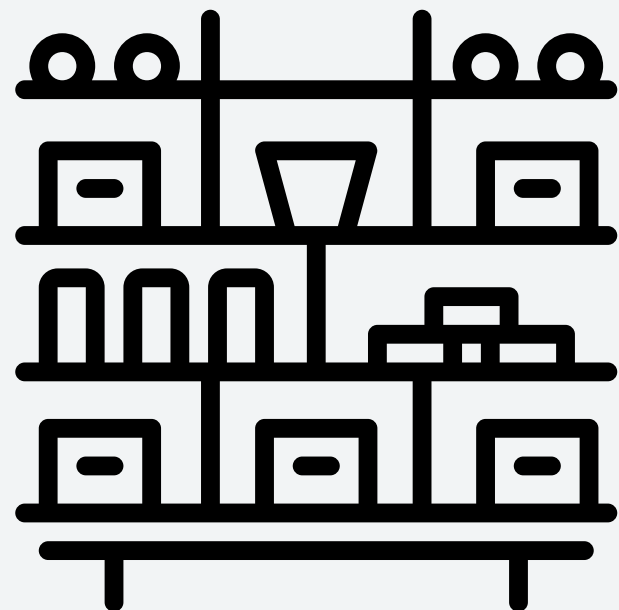
RECOMMENDATIONS

KEY INSIGHTS

- **Lists of Volumes and Titles can be organized more logically through manual curation.**

- **The Federal Register can be reorganized like other newspapers in LOC, streamlining how users filter and browse items.**

NEWSPAPER

Evening Star (Washington, D.C.) 1854-1972

Sunday issues for Mar. 26, 1905-July 9,1972 called: Sunday star / Star

About this Newspaper   Libraries that Have It   Browse Digitized Issues

Note: Additional issues of this title may be available in other formats at LC or at libraries around the country. Check the "Libraries that Have It" tab for details, or, if present, select the LCCN Permalink for more LC holdings.

Select a year [1854] [Go] Years [<] [>]   View All Front Pages »

This photo illustrates how FR periodicals may be organized with an interactive calendar view. This would be particularly helpful for users looking or particular dates.

STRENGTHENING METADATA

Import and Export [2,777]

Imports and Export [1]

Imports and Exports [81]

Alcoholic Beverages [1,296]

Alcoholic Bevergaes [8]

Native Americans [5,066]

Indigenous Peoples [4,949]

American Indians [4,938]

Adult Indians [4]

REDUNDANT, INCONSISTENT, AND OUTDATED METADATA IS HARMFUL TO THE ACCURACY OF THE COLLECTION AND THE GROUPS REPRESENTED.

- Subject metadata can be strengthened in different ways per collection.

- FR doesn't have differential subjects, rather "global" metadata to connect items to the greater LOC collections.

- Some subjects in CFR are redundant, or spelled incorrectly.

- There is subject metadata that is outdated and even offensive.

Created / Published

July 7, 1942 (Tuesday)

Headings

- Law
- Law Library
- United States
- Government Documents
- Government
- Executive Agencies
- Federal Register
- Administrative Law and Regulatory Procedures
- Executive Orders
- Federal Regulations
- Proclamations
- Agency Notices
- Periodical

THIS SET OF SUBJECT HEADINGS APPEARS FOR EVERY ITEM RECORD IN THE FR, WITHOUT OTHER, SPECIFIC SUBJECTS. THESE SUBJECTS CONNECT TO THE OVERALL LOC COLLECTION BUT FAIL TO HELP USERS DIFFERENTIATE BETWEEN ITEMS.

STRENGTHENING METADATA

Checking individual records revealed that the OCR that captures the dates for items in the Federal Register had occasionally read the date wrong.

This affected the metadata for the date, title, citation, and more.

I found and recorded these errors in addition to my research on the collections, compiling the data and links to the item records in a spreadsheet for my sponsor to review upon presentation of my deliverable.

OCR

PERIODICAL
Federal Register: 19 Fed. Reg. 2843 (May 78, 7954).

View Enlarged Image

Download: PDF (4.9 MB) Go

About this Item

Title
Federal Register: 19 Fed. Reg. 2843 (May 78, 7954).

Names
National Archives and Records Administration (Author)

Created / Published
May 18, 1954 (Tuesday)

Part of
Federal Register: Volume 019 (253)
Federal Register (14,589)
Law Library of Congress (413,323)

Format

THE NATIONAL ARCHIVES
LITTERA SCRIPTA MANET
FEDERAL REGISTER
1934
OF THE UNITED STATES

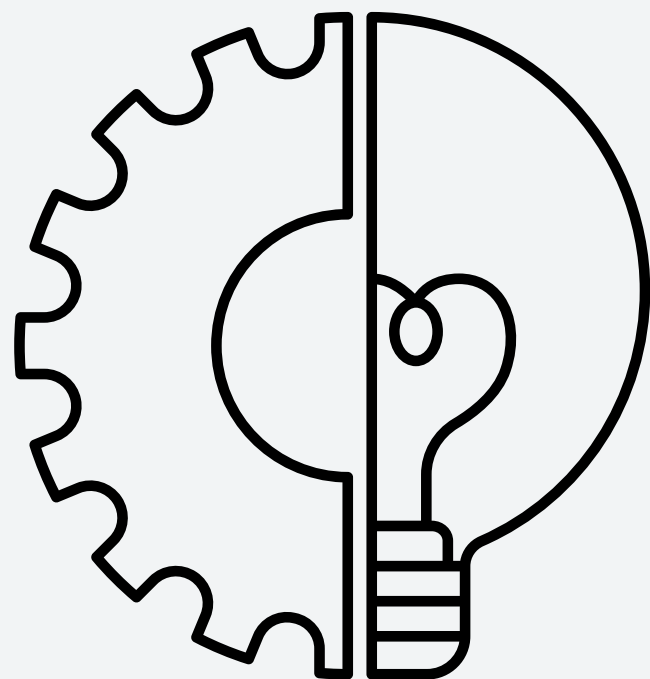VOLUME 19   NUMBER 96

Washington, Tuesday, May 18, 1954

TITLE 6—AGRICULTURAL CREDIT
Chapter IV—Commodity Stabilization Service and Commodity Credit Corporation. Department of Agricul-

Commodity Credit Corporation, through the Commodity Stabilization Service. Prices of mohair will be supported at a level which will yield an average return to growers equal to 83 percent of parity
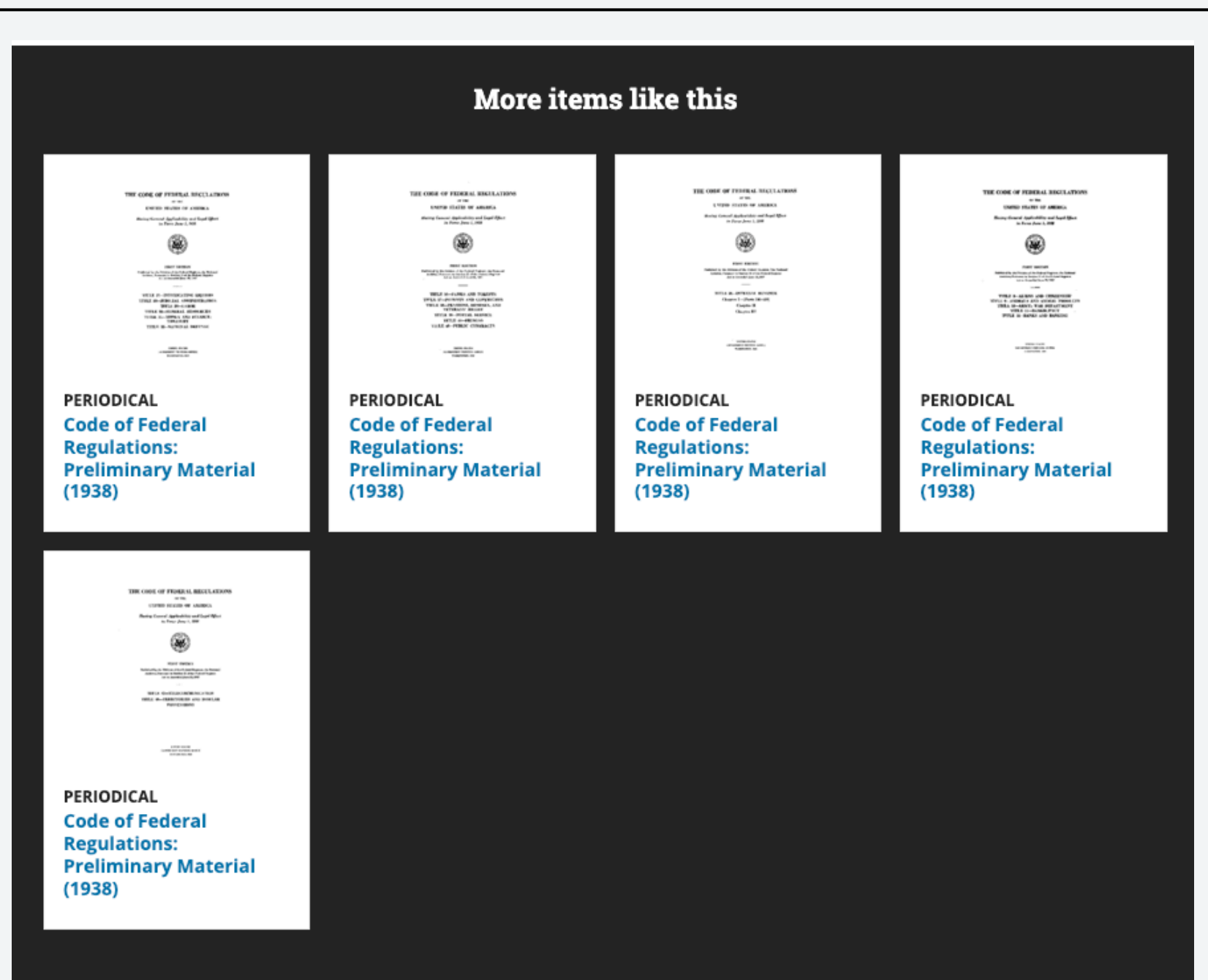
CONTENTS
Agricultural Marketing Service   Page
Proposed rule making:
Handling requirements:
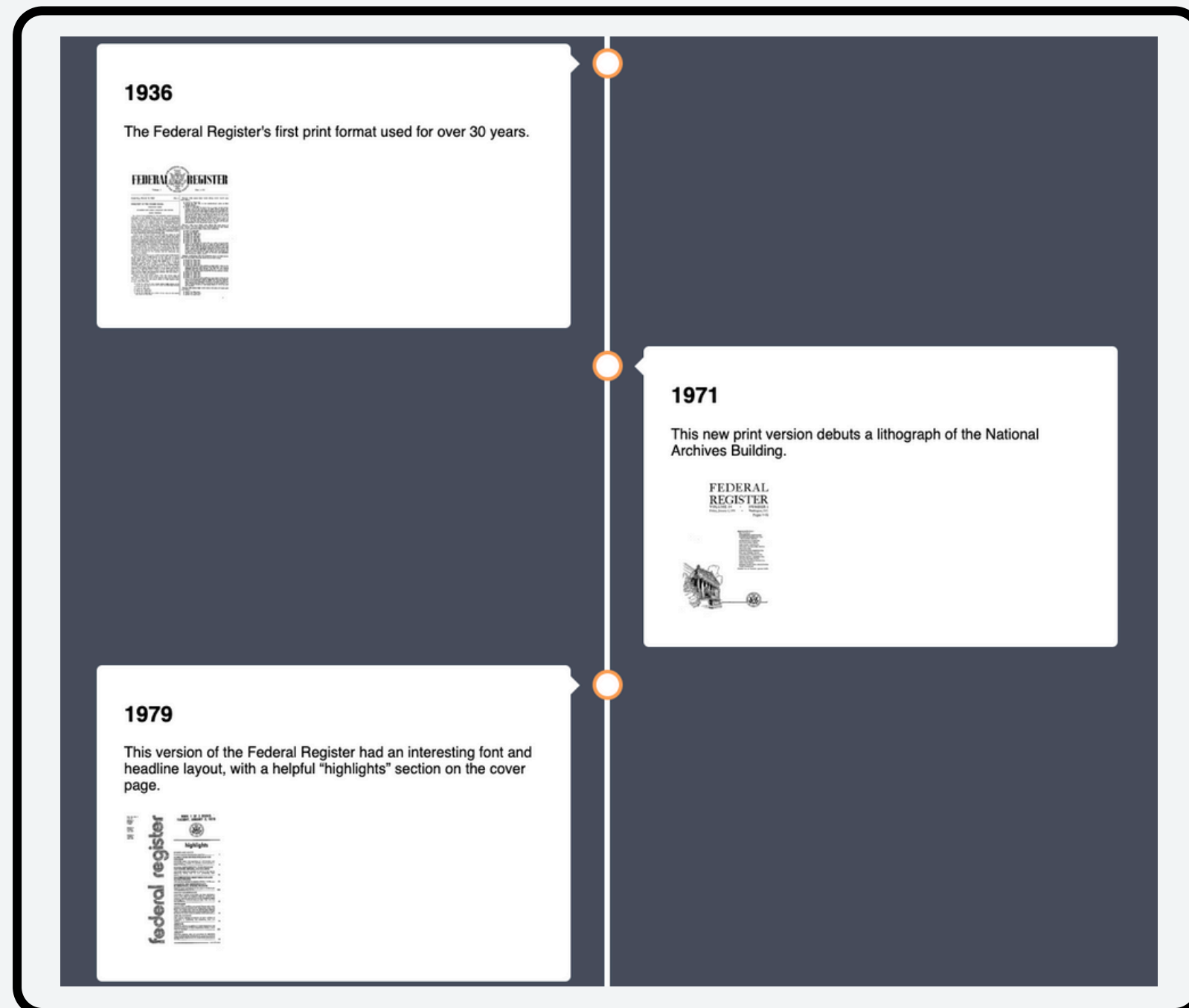
INNOVATING WITH VISUALS

Interactive embeds, dynamic widgets, digital visuals, and AI encourage users to interact with the collections and can improve overall user experience.

The "More Items Like This" section is manually curated by LLOC librarians, but it can be automatically populated using AI.

I designed a timeline and video embed option using HTML code.

Below is an example of a timeline that librarians can create for the FR / CFR. This one is based on the different formats of the print FR.

Researchers can alternatively access the Law Library's webinar, Orientation to Legal Research: Tracing Federal Regulations, for more information.

Orientation to Legal Research: Tracing Federal Regulations

Tracing Federal Regulations

LAW LIBRARY
LIBRARY OF CONGRESS

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Share

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<!DOCTYPE html>

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 <p>Researchers can alternatively access the Law Library's webinar, <a
href="https://www.loc.gov/item/webcast-9751/?&embed=resources"> Orientation to Legal
Research: Tracing Federal Regulations, </a> for more information. </p>

<iframe src="https://www.loc.gov/item/webcast-9751/?&embed=resources" width="697"
height="600" frameborder="0" scrolling="no" allowfullscreen></iframe>

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1936

The Federal Register's first print format used for over 30 years.

FEDERAL REGISTER

1971

This new print version debuts a lithograph of the National Archives Building.

FEDERAL REGISTER

1979

This version of the Federal Register had an interesting font and headline layout, with a helpful "highlights" section on the cover page.

federal register
highlights

ARTIFICIAL INTELLIGENCE

Scan PDF records for Titles, subjects, themes, and relationships within the documents/collections.

Make suggestions for dynamic featured content and the "More Items Like This" and "You Might Also Like" sections of item records based on the current page's content.

Analyze anonymous user feedback when LLOC librarians receive complaints or questions from users, and generate a list of highlighted problem areas, solutions, and a plan of action.

The 'Ask A Librarian' feature is rule-based, as opposed to AI-powered, and is available to LLOC as part of LibAnswers, but AI may be used to narrow user inquiries or answer FAQ questions during long wait times.

Detect patterns in the metadata or in scanned PDF files.
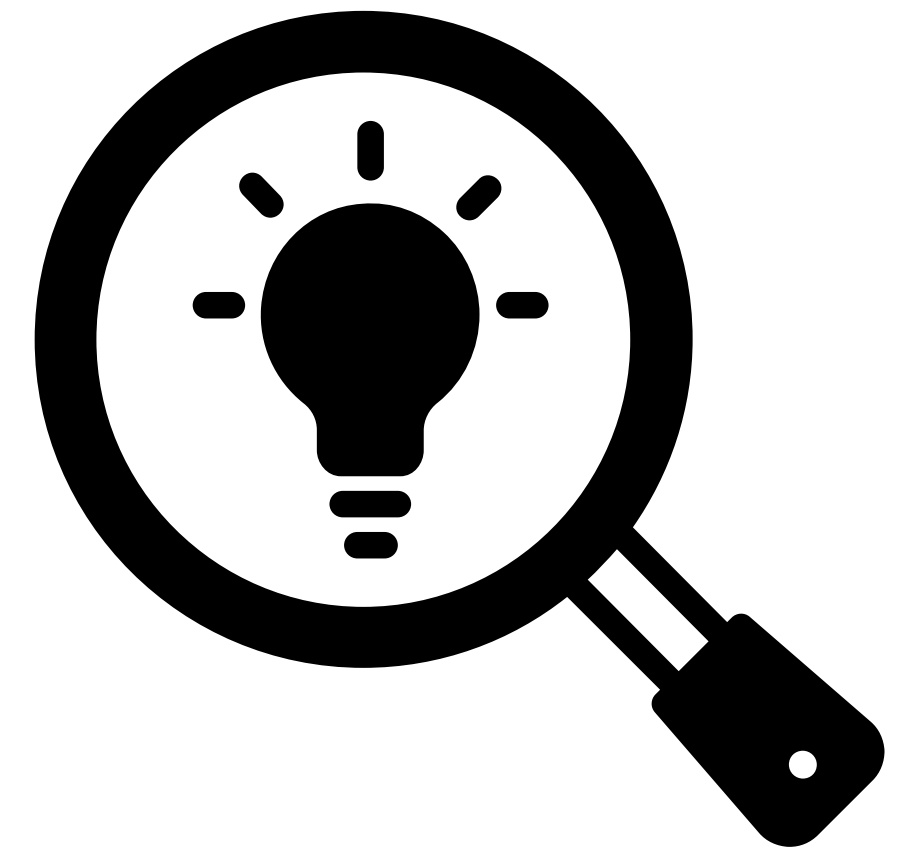
PROJECT BENEFITS

ACCESS

While large subscription services like Westlaw and Lexis offer great tools for law researchers, all organizations—especially smaller institutions and non-profits—can benefit from increased access to free resources.
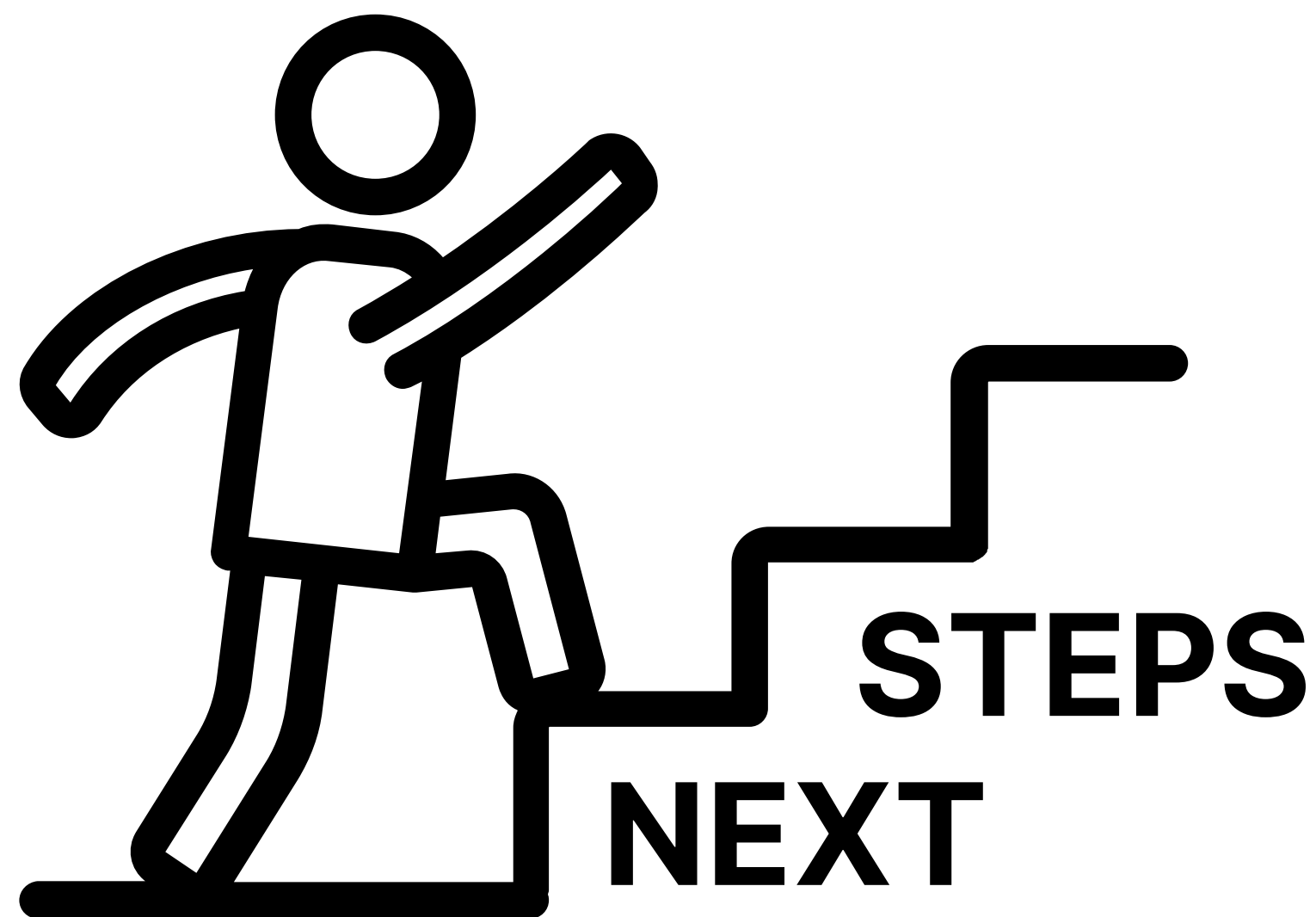
ACCURACY

Finding and correcting errors with dates, titles, and citations ensures the validity of the records, in addition to providing better access to them.

DISCOVERY

More people can find and explore the collection, even organically. Timelines, visuals, etc., help increase general interest in the collections and LOC.

FUTURE PROJECTS

FUTURE INTERNSHIPS WITH JENNIFER GONZÁLEZ AND LLOC CAN FOCUS ON SUGGESTED PROJECTS AND DEVELOPING METADATA.

AMENDING ERRORS

TECHNICAL ISSUES WILL BE ADDRESSED FOR THE AFFECTED DATES, TITLES, CITATIONS, AND OTHER METADATA FOR 100+ ITEM RECORDS IN THE FR.

UPDATING ORGANIZATION

LONG-TERM PROJECTS, SUCH AS THE REORGANIZATION SOLUTION FOR THE FR, WOULD REQUIRE STRATEGIC PLANNING AND PROJECT MANAGEMENT FROM LLOC.

NEXT STEPS

THANK YOU

● FOR YOUR TIME