



FDLP Academy Webinar September 18, 2019

Aaron Collie, Jona Whipple, Matthew Krc

Disclaimer

The views expressed in this presentation do not necessarily reflect official positions of the Federal Reserve Bank of St. Louis or the Federal Reserve System.

FRASER 101

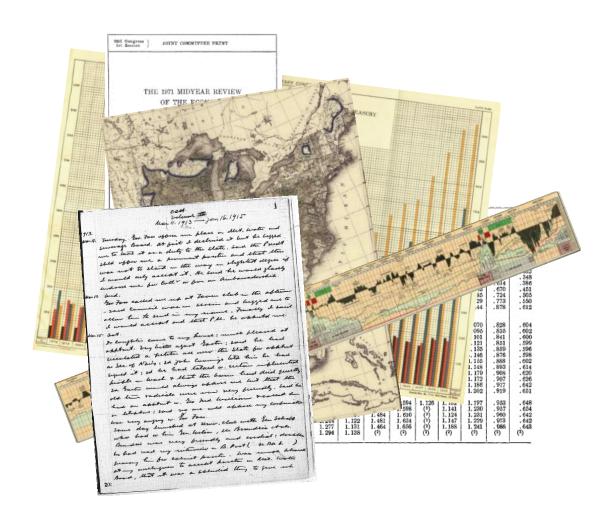
- <u>fraser.stlouisfed.org</u>
- Online for 15 years
- Originally developed as an adjunct to FRED
- In that time, we've amassed over half-amillion documents
- Now collects, curates, and promotes the history of the finance, banking and the U.S. economy.



Fed employees line up to clock in. Photograph by P.R. Papin. Part of the Federal Reserve Bank of St. Louis' Centennial Timeline: https://fraser.stlouisfed.org/timeline/st-louis-fed-centennial

Our Mission

- Collect materials related to banking, finance, and economic history.
- Curate materials so that they are easy to find and use online.
- Communicate and build relationships with our users and the public.



Collect

Partner to digitize materials

- Donations and N&O lists, such as the FDLP eXchange
- Federal Reserve access point





FRASER @FedFRASER · Apr 2

April 2, 1951: William McChesney **Martin** Jr. takes office as Chairman of the Board of Governors. He would serve until 1970, under five US presidents. Browse decades of documents from his personal papers digitized in partnership with @mohistorymuseum ow.ly/IFaQ30ofuOF



Curate

- Scanning Operations
- Curation & Metadata

Web application



Communicate

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What are you looking for?

Home > Inside FRASER > Staff Picks: Data and Charts in the Statistical Atlases of the United States

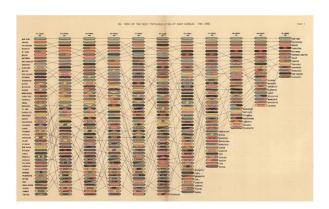
Staff Picks: Data and Charts in the Statistical Atlases of the United States

Posted on April 4, 2018

₩ TWEET

The Statistical Atlases of the United States are rich with information on the historical population of the United States. FRASER has the entire run of the Statistical Atlases, which cover data from the 1870, 1880, 1890, 1900, 1910, 1920, 1970, and 2000 censuses. As expected of an atlas, each publication displays data primarily through various maps.[1] However, you may not know that alongside these maps are charts and graphs that also show demographic data. The design of these charts varies across the publications. Some charts, such as common pie or bar charts, will look familiar, but others will require some critical thinking in order to interpret.

Take a look at this **chart** from the 1890 Atlas that shows the most populous cities in the United States from 1790 to 1890:



FRASER @FedFRASER · Jun 22

Check out this chart of business booms and depressions from 1775-1943, which touts itself as "an accurate charting of the past and present trend of price inflation, federal debt, business, national income, stocks and bond yields" ow.ly/sTsp30oRblk



Updates from the St. Louis Fed's digital library of

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As of July 2, 2019, FRASER has... 3,305 Titles | 573,226 Items | 5,448 Twitter Followers

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ew Titles

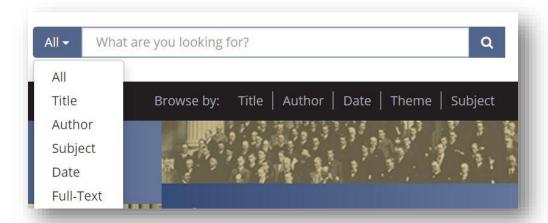
- Currency in U.S. History, a publication from the Federal Reserve Bank of Kansas
 City
- Additional publications from the Federal Reserve Bank of New York The Treasury and the Money Market, The Velocity of Money, and The Key To the Gold Vault

Expanded Collections

- The Federal Reserve Bank of Dallas's <u>Economic and Financial Policy Review</u> (2002-2004), and its prior titles Economic and Financial Review (1999-2001), Economic Review (1982-1999), and Voice (1978-1981)
- The <u>Second Quarter 2019 issue of Economic Quarterly</u>, the academic journal of the Federal Reserve Bank of Richmond
- The <u>July 1920</u> and <u>January 1921</u> issues of the Rand McNally Bankers Directory
- The 2018 Annual Report of the Board of Governors
- Additional statements and speeches of G. William Miller
- <u>Publications</u> from the Federal Reserve Bank of New York regarding monetary policy for 1956, 1959, and 1982

Using FRASER

Search



Content areas



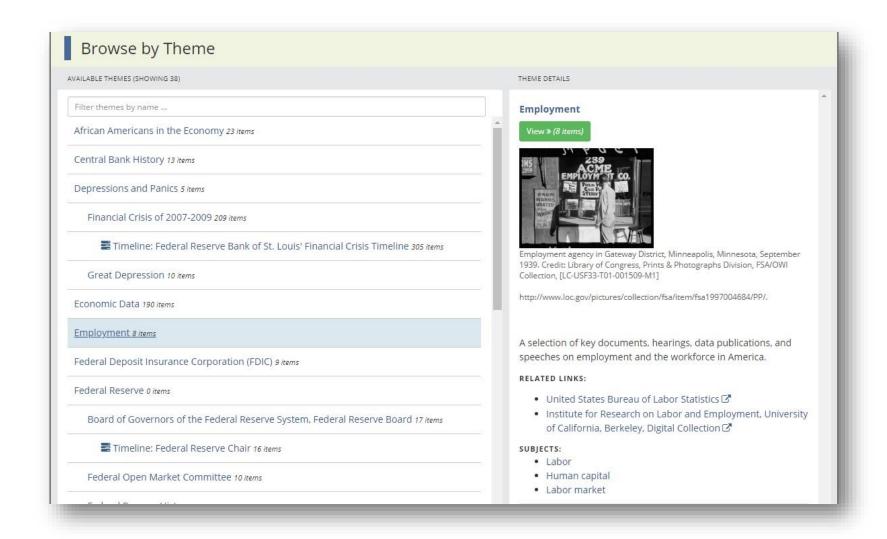
Browse



FRASER Timelines



FRASER Themes

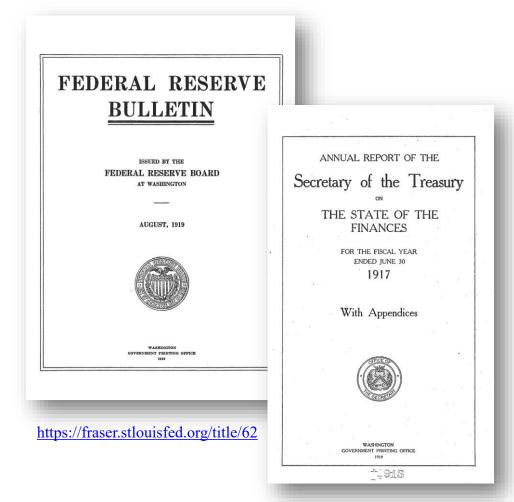


FRASER in the classroom

Filter items by title	Filter items by title	Filter items by title	Filter items by title
Teachers	School	Economics	Learning Toolkit: Historical Inquiry
Professors	Academic	Finance and Business	With Charts
Librarians These resources have been selected with various library reference and instruction uses in mind. Many of the classroom lessons cover information and data literacy topics, and lessons, newsletters, and handouts link to primary source or reliable secondary source materials. These materials may also provide ideas for student research projects.	Educational resources for academic librarians are appropriate for library instruction, and can be remixed for inclusion in library resource guides.	History and Economic History These newsletters, handouts, and classroom lesson can be used as-is or as reference materials for a variety of topics in history, particularly U.S. economic and banking history.	Booklet: Benjamin Franklin and the Birth of a Paper Money Economy Classroom Lesson: Benjamin Frank
	Public		and the Birth of a Paper Money Economy
		Government, Public Policy, and Political Science	Classroom Lesson: From Raw Materials to Riches: Mercantilism a the British North American Colonie
Students		The Federal Reserve	Booklet: The First Bank of the Unite
Anyone		Data	Classroom Lesson: The First Bank of the United States: A Chapter in the History of Central Banking
			Classroom Lesson: Hamilton's National Bank

Making research possible

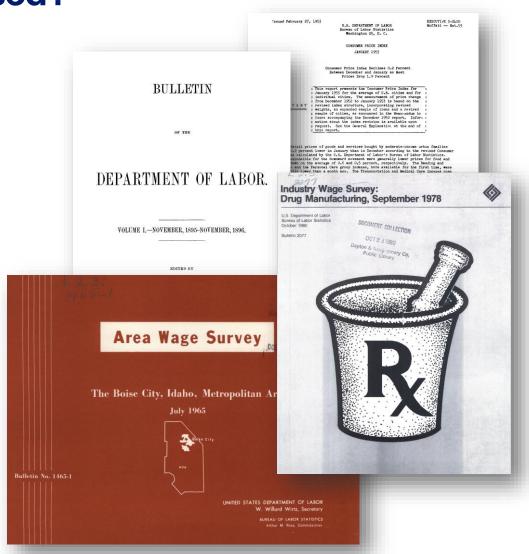
 What was the total number and amount of victory bonds in the first World War?



https://fraser.stlouisfed.org/title/194

How is FRASER used?

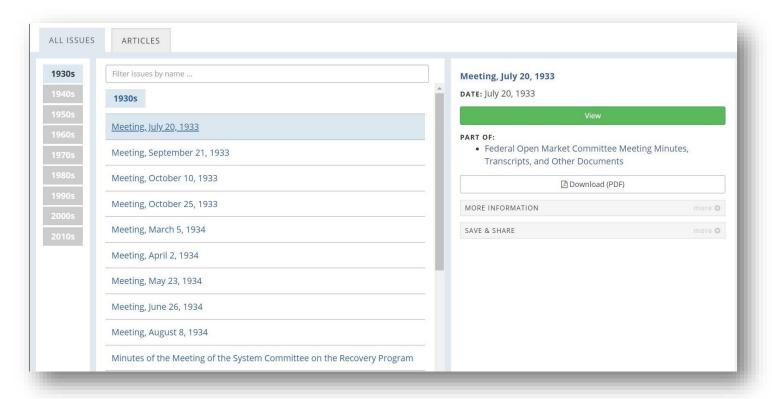
- Archival publications of many government agencies
- Bureau of Labor Statistics



https://fraser.stlouisfed.org/author/7

How is FRASER used?

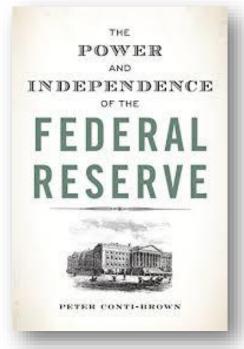
 Do you have a list of all historical FOMC meetings, the dates they occurred on, and a similar list of all minutes, and when they were released?

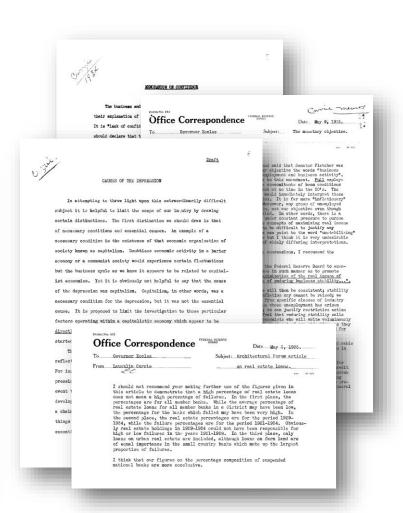


How is FRASER used?

Peter Conti-Brown,
 The Power and
 Independence of

the Federal Reserve (2016)





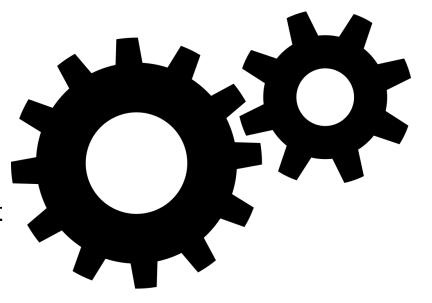
https://fraser.stlouisfed.org/archival/1343

Using the FRASER API for Metadata Harvesting and in the Digital Humanities

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An Introduction to APIs

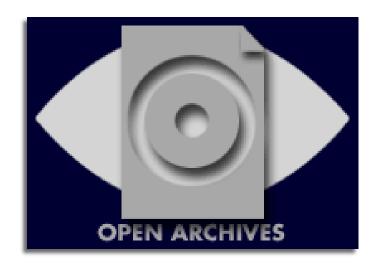
- API Application
 Programming Interface
- Allows access to specific server data via a series of public-facing "endpoints" that allow for programmatic access to data.
- Gives access to information about FRASER documents at a scale that wouldn't be feasible using the website.
- GET, POST, PUT, DELETE
 - FRASER API only uses GET





OAI-PMH

- Open Archives Initiative Protocol for Metadata Harvesting
- https://www.openarchives.org/OA l/openarchivesprotocol.html
- "[…] provides an applicationindependent interoperability framework based on metadata harvesting"



Request GET endpoints

- https://research.stlouisfed.org/docs/api/fraser/
- Identify
 - Returns information about the FRASER repository
- ListMetadataFormats
 - Returns information about metadata formats used by FRASER (FRASER currently only returns MODS metadata)
- ListRecords
 - Returns metadata for all or specific set of records from FRASER
- ListIdentifiers
 - Returns unique identifiers for all or specific set of FRASER records
- ListSets
 - Returns all setSpec identifiers for use in FRASER API set parameters
- GetRecord
 - Returns a single record's metadata based on unique identifier

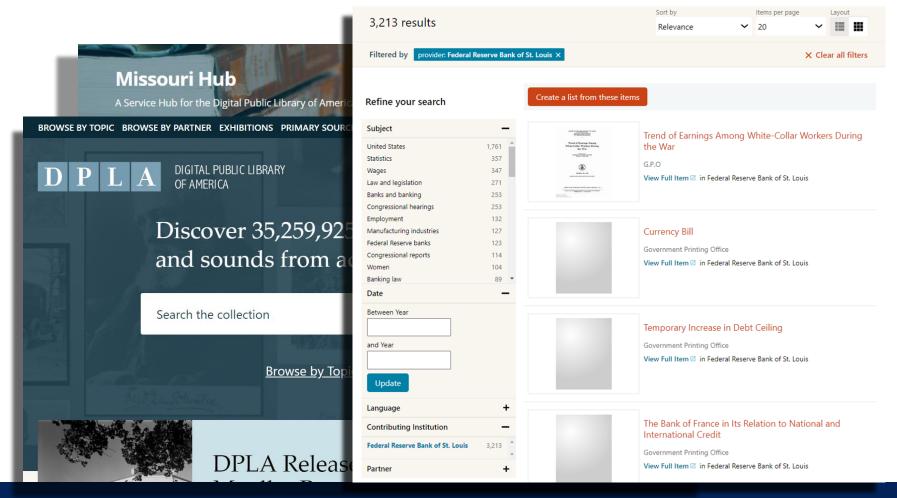
Harvesting Metadata

- Allows other digital repositories to link back to FRASER content
- https://fraser.stlouisfed.org/oai/?verb=ListRecords&metadataPrefix= mods

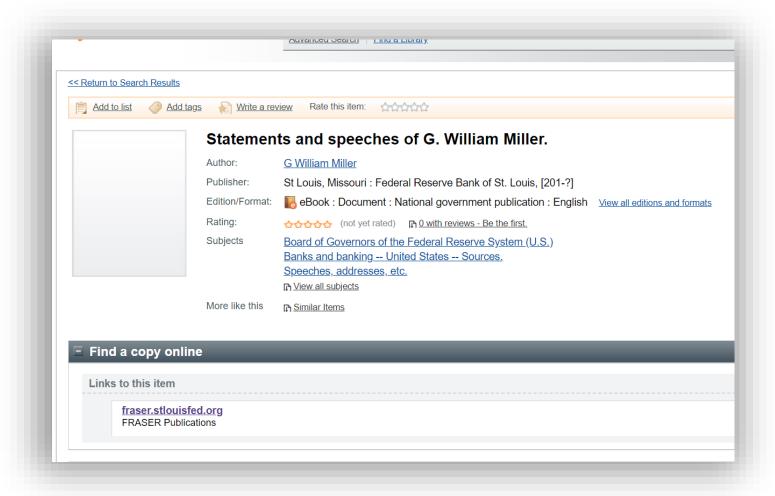
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Digital Public Library of America

- http://missourihub.org/
- https://dp.la



Worldcat



Analyzing Sentiment in Economic Reports

Economic Report of the President https://fraser.stlouisfed.org/title/45 **PUBLICATION:** Economic Report of the Pres Filter issues by na 1947-2019 1980s Search within this title... 1980 **AUTHORS:** United States, President 1981 1980s • Council of Economic Advisers (U.S.) Transmitted to the Congress ABSTRACT: The Economic Report of the President is a 1982 January 1980 Economic Advisers. It overviews the nation's econom 1983 ALTERNATE TITLES: TOGETHER WITH Midyear Economic Report of the President to the second control of the President to the presiden 1984 THE ANNUAL REPORT • Economic Report of the President Economic Report of the President Transmitted OF THE 1985 COUNCIL OF ECONOMIC ADVISERS **ALL ISSUES** STATISTICAL DATA 1986 UNITED STATES GOVERNMENT PRINTING OFFICE WASHINGTON: 1980 1940s Filter issues by name ... 1987 1988

1989

GetRecord endpoint

- Documentation: https://research.stlouisfed.org/docs/api/fraser/getRecord.html
- https://fraser.stlouisfed.org/oai/?verb=GetRecord&identifier=oai:fr aser.stlouisfed.org:title:45

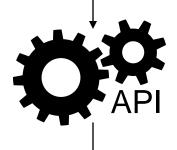
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Request

GET

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XML Response

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"1974"
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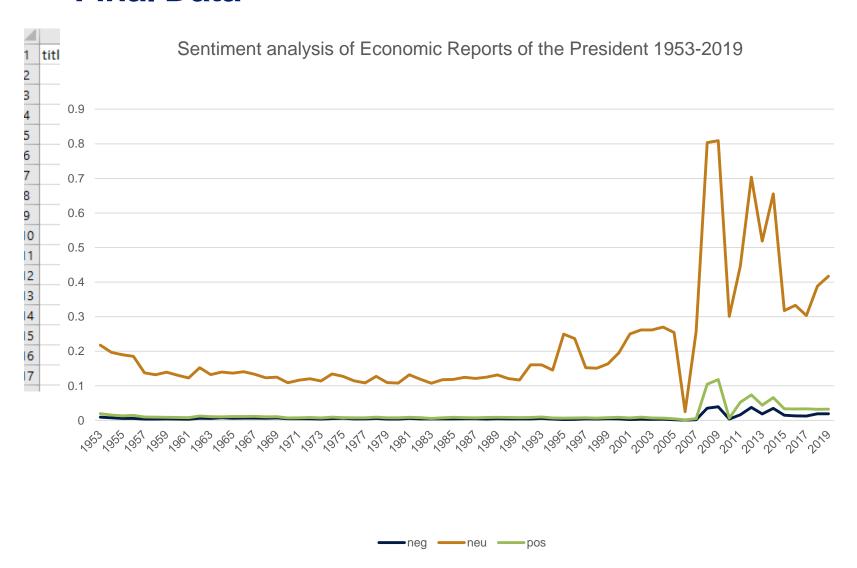
XML Parser of your choice



Text Analysis

```
for pdf_url in pdf_urls:
     url = pdf_url[1]
        Anaconda Powershell Prompt
       (base) PS C:\users\h1mxk04\desktop> python api_test.py
     do
     pa
     CC
     a١
     a١
     ro
     do
     05
```

Final Data



Questions and Suggestions?

Get in contact:

Aaron.Collie@stls.frb.org
Jona.Whipple@stls.frb.org
Matthew.Krc@stls.frb.org

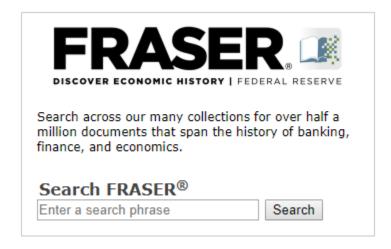
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