

Report to Congress

Congress.gov Update

June 27, 2023

Library of Congress

Purpose

This report responds to directives in the <u>Joint Explanatory Statement accompanying the Consolidated Appropriations Act, 2023</u> and the <u>House Report 117-389</u>:

- Congress.gov Update Study: The Committees recognize that Congress.gov is an important tool for members, staff, and the public to follow and understand the congressional process; however, the Committees believe that Congress.gov could provide a more complete picture of the full legislative process. Therefore, the Library, in collaboration with the Legislative Branch Data Interchange Working Group, is directed to conduct a study to determine what changes are necessary to allow Congress.gov to better track the legislative process. The study should identify technical and procedural changes required to track legislation that is introduced and later included in a separate measure, legislation introduced that is also filed as an amendment, and a better tracking of the congressional committee process, including the notation of recorded votes in committee. The Library is encouraged to consult with congressional and public stakeholders in the development of the study and to submit a report to the Committees within 180 days of enactment of this Act on the findings of the study.
- Improving Features on Congress.gov: The Committee directs that no later than 180 days after enactment of this Act, the Library of Congress, in coordination with the Committee on Appropriations and Committee on Modernization, shall provide a report on resources necessary to add additional features to Congress.gov to improve its functionality for Congressional staff and the public, including providing a clearer accounting of Member contributions in legislation, such as indicating when a co-sponsor is from the committee of jurisdiction.

Executive Summary

Congress.gov serves as the sole authoritative website for U.S. federal legislative information for Congress and its constituents. The site provides access to accurate, timely, and complete legislative information for Members of Congress, legislative agencies, and the public. LOC strongly believes that Congress.gov carries this distinction, both in fact and in public perception, because that information comes directly from House, Senate, and GPO data partners. Therefore, any new or additional legislative information that is deemed necessary for Congress.gov to better track legislative information in the future must also come from those sources. LOC recognizes that the creation of these data requires changes in House and Senate workflows and resources.

Interoperability among several legislative branch systems that manage, distribute, and preserve authoritative digital representations of House and Senate work products required, and continues to require, multiple years of planning, coordination, and execution among the data partners. LOC is actively engaged with House, Senate, and GPO data partners in multiple initiatives to modernize data sources which is a foundational first step required to improve Congress.gov. The well-formed metadata resulting from modernized data sources will continue to be used to make user experience improvements and to improve data integrity.

LOC continues to support data partner analysis and development, and to match the pace of change required for Congress.gov as prioritized by Congressional data partners. LOC remains committed to working with data partners to make Congress.gov better. The body of this report steps through the technical and procedural changes required to move forward.

Some of the requirements covered in this report will likely lead to the need for changes in procedure to be executed within each chamber. The extent of these procedural changes will not be known in detail until LOC and our data partners collaborate on the requirements. A series of working group sessions will be necessary to elicit these changes.

¹ <u>2 USC 180</u>: Legislative information retrieval system, and <u>2 USC 181</u>: Program for exchange of information among Legislative Branch agencies.

Methodology

The <u>Joint Explanatory Statement accompanying the Consolidated Appropriations Act.</u>

2023 directs LOC to collaborate with the Legislative Branch Data Interchange Working

Group and to consult with congressional and public stakeholders in the development of
the study with the objective to identify technical and procedural changes required.

LOC informally refers to Clerk of the House, Secretary of the Senate, and GPO data partners as the Legislative Branch Data Interchange Working Group.² The institutional knowledge among Legislative Branch Data Interchange Working Group, Congressional Data Task Force, and Legislative Branch XML Working Group colleagues is critical to operational support and development of Congress.gov. Data partner colleagues in the Legislative Branch Data Interchange Working Group share commitments to:

- Support Congressional data owners
- Advocate for technologies to institutionalize legislative data standards
- Train and retain institutional staff to support Congressional data owners, legislative technologies to produce authoritative data sources, and legislative data standards

LOC routinely consults with Clerk of the House, Secretary of the Senate, and GPO colleagues regarding stakeholder feedback, authoritative data sources, legislative technology modernization projects, and the roadmap for changes necessary to allow Congress.gov to better track the legislative process. Feedback is collected from a variety of sources, including public and Congressional meetings, training sessions, help desk support for Congressional staff, and the Congress.gov site feedback survey. LOC must analyze the business requirements, the technical feasibility, and the prioritization of each request before a new feature or improvement can be delivered on Congress.gov. Feedback determined to be actionable is managed in the Congress.gov Feedback Repository. As reported previously, many ideas and suggestions received by Congress.gov require discussion among data partners to determine feasibility and with oversight committees to determine which ideas should be pursued.

² Appendix A - Data Partner Working Groups describes the relationships to other legislative working groups.

³ See The Congress.gov Strategic Objective Report, Fiscal 2023 (November 2022), The Congress.gov Public Forum Report to Congress (November 2021), and The Congress.gov Public Forum Report to Congress (November 2020).

Data Sources for Congress.gov

It is crucial to note that while data is the lifeblood of Congress.gov, the creation of that data is entirely determined by the House and Senate as individual legislative bodies. Congress.gov data sources are approved by the Clerk of the House or Secretary of the Senate. LOC provides legislative analysis and descriptive data to enhance legislative information, and presents Congress.gov using data from the Office of the Clerk of the U.S. House of Representatives, the Office of the Secretary of the Senate, the Government Publishing Office, Congressional Budget Office, and the LOC's Congressional Research Service.

As data partners modernize their technologies and adopt data standards (particularly USLM, United States Legislative Markup), House and Senate business requirements can be satisfied by the authoritative data sources used by Congress.gov. Interoperability among several legislative branch systems that manage, distribute, and preserve authoritative digital representations of House and Senate work products required, and continues to require, multiple years of planning, coordination, and execution among the data partners. Congress.gov provides public access to more than 3 million Congressional items⁴ aggregated from approximately 30 authoritative House, Senate, GPO, and LOC data feeds. More than 100,000 items are added to Congress.gov each fiscal year.⁵

Every 15 minutes, throughout the 24-hour data exchange cycle, LOC checks multiple authoritative data feeds for new and updated information. Using both automated and manual workflows, LOC checks new and updated information for accuracy. The LOC quality control team continuously works with House, Senate, and GPO data partners to resolve data discrepancies and inform the roadmap for future improvements.

⁴ 3,086,456 items, as of September 30, 2022 (end of fiscal year 2022).

⁵ 145,657 items added during fiscal year 2022. 430,567 items added during fiscal year 2021. 214,064 items added during fiscal year 2020. 272,335 items added during fiscal year 2019.

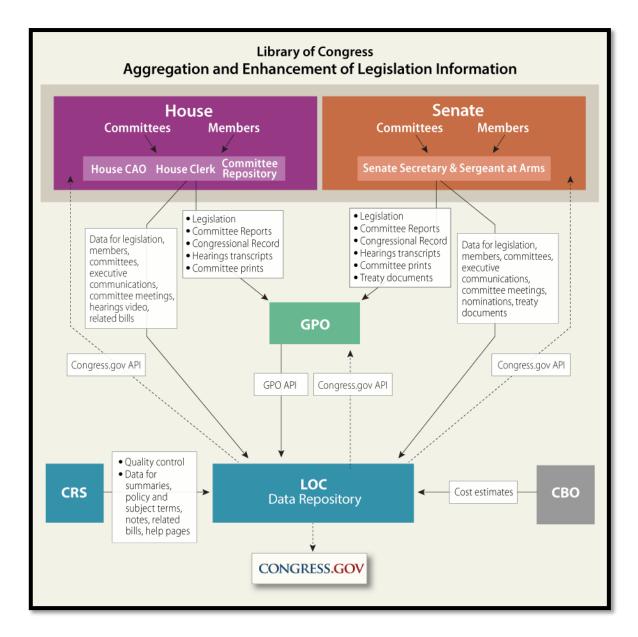


Figure 1 – Library of Congress Aggregation and Enhancement of Legislation Information

Figure 1 shows a high-level view of approximately 30 authoritative House, Senate, GPO, and LOC data feeds that are aggregated by Congress.gov.

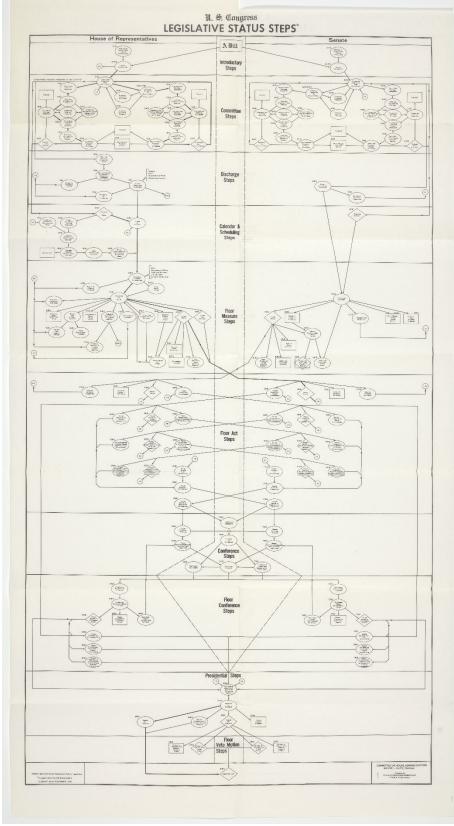


Figure 2: This chart shows a legislative data standard that is of critical importance to tracking legislation.

The chart shows the authority control list of number codes used by House and Senate systems.

The <u>U.S. Congress</u>
<u>legislative status</u>
<u>steps</u> chart was
published within
<u>The Bill Status</u>
<u>System for the</u>
<u>United States</u>
<u>House of</u>
<u>Representatives</u>
document,
produced in 1975
by the Committee
on House
Administration.

Figure 2 – U.S. Congress Legislative Status Steps chart

Improve Functionality for Congressional Staff and the Public

<u>House Report 117-389</u> directs LOC to "provide a report on resources necessary to add additional features to Congress.gov to improve its functionality for Congressional staff and the public."

Congressional Technical and Procedural Changes: LOC and our data partners are investigating opportunities to utilize AI (artificial intelligence; e.g., machine learning, large language models, natural language processing) with careful attention to accuracy for authoritative data sources. Opportunities to utilize AI increase as LOC, GPO, House, and Senate collaborations continue to institutionalize legislative data standards, including:

- XML, particularly USLM (United States Legislative Markup) and generation one bill schemas.
- MODS (metadata object description schema)
- Increased use of UTF-8, a character encoding standard that facilitates display and storage of English (Latin) and non-English characters, including those with diacritical marks
- Increased use of ISO-8601, a standard that facilitates exchange and communication of date and time-related data
- Unique identifiers for Members of Congress, commonly called the Bioguide IDs (Biographical Directory of the United States numbers)
- House and Senate Event IDs as unique identifiers for committee meetings
- Authority control numbers for committees and subcommittees
- More precise, predictable Congressional Record "granules"

Investment of resources for all Congressional data partners required to improve functionality for Congress.gov support:

- Data Sources: Improving the authoritative digital representations of House and Senate work products used by Congress.gov requires continued investment of technologies and continued institutionalization of legislative data standards are critical. Training and retaining institutional staff to support Congressional data owners and legislative technologies to produce authoritative data sources is equally important.
- User Experience: Improving user experience requires continuous engagement
 with users, and continuous collaboration among specialized staff across all
 Congressional data partners. Digital representation of the legislative process is
 challenging because the process by which a bill becomes law is rarely
 predictable.

LOC and our data partners have and continue to support data source and user experience improvements by providing use cases, data standards consultation, and consultation on policy and procedure. Ongoing initiatives include:

- Working with the Legislative Branch XML Working Group to continue to advance data standards, particularly USLM (United States Legislative Markup) and generation one bill schemas. These changes will improve search and will improve digital representation of the legislative process.
- Working with data partners to increase use of unique identifiers for Members of Congress and increased use of ISO-8601. These changes will improve search, quality of alerts, and digital representation of the legislative process.
- Working with data partners to increase use of UTF-8. This change will improve accuracy of displaying member names, bill titles, and other text with non-English characters, including those with diacritical marks.
- Working with data partners to identify opportunities for more precise, predictable Congressional Record "granules." These changes will improve search and digital representation of the legislative process.

Better Track the Legislative Process

The <u>Joint Explanatory Statement accompanying the Consolidated Appropriations Act,</u> <u>2023</u> directs LOC "to determine what changes are necessary to allow Congress.gov to better track the legislative process."

Congressional Technical and Procedural Changes: House and Senate will provide additional data sources to LOC and GPO for Congress.gov and GovInfo. LOC has and continues to support these efforts by providing use cases, data standard consultation, and policy and procedure.

The iterative nature of Congress.gov and the consistent collaboration of the data partners reflects LOC's dedication to better track the legislative process using available authoritative data. Authoritative data sources are needed for committee votes, member contributions to specific legislation, and other information stakeholders would like to see featured on Congress.gov.

Examples of current efforts to better track the legislative process with available data are as follows:

 Many of the same institutional staff working to modernize the authoritative data sources (described earlier in this report), manage work related to the digital formats for legislative text and legislative documents (USLM). This important

- work is the foundation for producing web-friendly digital formats of bill and law texts available on Congress.gov.
- Rooted in section 314 of Public Law 104-197 (<u>2 U.S.C. 181</u>) and supported by one of the first recommendations by the House Select Committee on the Modernization of Congress, the <u>Initial Report Adopting Standardized Formats for Legislative Documents</u> provides background, summary, and roadmaps for the standard-setting work done by the Legislative Branch XML Working Group, cochaired by staff in the offices of the Clerk of the House and Secretary of the Senate.
- Quarterly <u>Standardized Formats for Legislative Documents, USLM</u> reports track the progress of this long-term, forward-thinking investment.
- As the Clerk of the House stated in her testimony before the House Select Committee in January 2022, "It is important to note that there is a crossorganizational set of systems that utilize the USLM schema, requiring a great level of coordination. Each project builds upon the tools and successes of previous projects. The XML Working Group, in consultation with the Congressional Data Task Force, continues to analyze and recommend next steps that build on the work that has already been accomplished. As with any data standardization efforts, interoperability is a key goal, and project work must address any potential impacts on those documents and systems currently in production."
- Congress.gov is one of the cross-organizational set of systems that utilizes the schemas managed by the XML Working Group. Not only does Congress.gov provide bill and law texts in PDF format that represent the authoritative, printed document, Congress.gov also provides web-friendly bill and law texts generated from authoritative XML. Web-friendly bill and law texts are an extremely important improvement for Congress.gov clients to better track the legislative process.
- Providing access to new historical collections including: Statutes at Large; committee hearing transcripts; Congressional Globe, Register of Debates, and Annals of Congress; House and Senate journals will support continuous engagement with users and continuous collaboration among Congressional data partners.

Legislative data partners continue the arduous task to transition Congress from primarily publishing paper legislative documents to publishing digital legislative documents. Figures 3 through 8 highlight additional improvements, rooted in data partner collaborations, for Congress.gov clients tracking the legislative process.

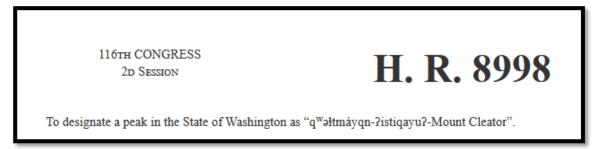


Figure 3 – UTF-8 character encoding standard

Figure 3: Congress.gov utilizes the UTF-8 standard. UTF-8 is a character encoding standard that facilitates display and storage of English (Latin) language and non-English characters, including those with diacritical marks. GPO's XPub system, which will replace its legacy composition engine and formats, is Unicode/UTF-8 compliant.

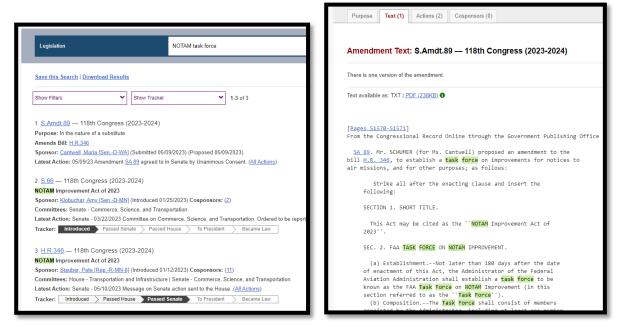


Figure 4 – Improved access to Senate amendment texts

Figure 4: Senate amendment texts are searchable within the Congress.gov Legislation collection and can be viewed as individual texts due to precise, predictable Congressional Record "granules."

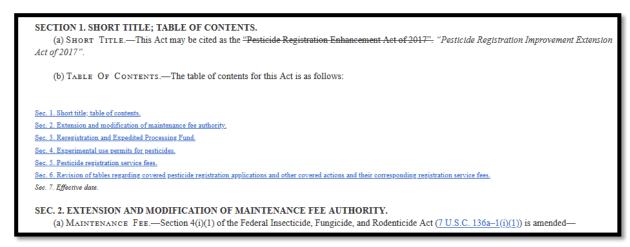


Figure 5 – Bill text XML and CSS enable display of amended (stricken) language, interactive tables of contents, and interactive U.S. Code links.

Figure 5: Congress.gov began using XML bill text files and a cascading style sheet (CSS) as the default view for bill text in March 2015. The CSS enables bill texts to link to specific United States Code or public law citations, show bill text strikeouts (significant to the legislative process), and interactive tables of contents. The CSS, shared.⁶ among House, Senate, GPO, and LOC systems, was first used on THOMAS in 2004. XML bill text files and a CSS were technically not feasible as the primary bill text display until the modern Congress.gov system replaced the legacy THOMAS system in 2015.

Fiscal Year	Appropriations Searches on Congress.gov	Appropriations Status Tables on CRSreports.Congress.gov
FY2023	Search FY2023	Table: FY2023
FY2022	Search FY2022	Table: FY2022
FY2021	Search FY2021	Table: FY2021
FY2020	Search FY2020	Table: FY2020
FY2019	Search FY2019	Table: FY2019
FY2018	Search FY2018	Table: FY2018
FY2017	Search FY2017	Table: FY2017

Figure 6: Congress.gov provides an Appropriations Measures Considered by Congress email alert service and appropriations searches for each fiscal year.

The ISO-8601 standard is of critical importance to further alert service improvements.

Appropriations Measures Considered by Congress

Email alerts when appropriations measures are considered by Congress. View Appropriations Resources | Get alerts

Figure 6 – Appropriations measures considered by Congress

⁶ GPO manages the CSS. House and Senate XML Working Group cochairs direct CSS change management.



Figure 7: GPO's anticipated release of a new, responsive HTML format is designed to resolve the issue of browser failure due to extremely large bill texts, on GovInfo and Congress.gov.

The new HTML format will replace the plain text file format that GPO currently provides. The new format is optimized for any device (mobile devices, tablets, desktops, and laptops), and uses modern, easy-to-read fonts for screen usage and search engines. It also contains metadata for reuse by data providers.

Figure 7 – Responsive HTML for bill texts

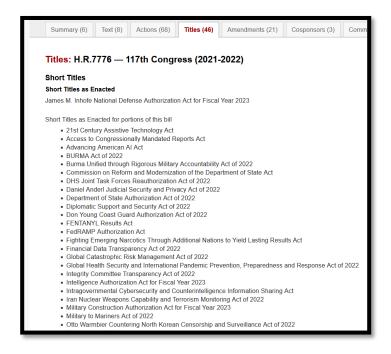


Figure 8: As the USLM standard matures and data partners modernize their technologies, opportunities become more prevalent to explore predictable, structured bill text XML to increase and improve bill relationship data.

Structured XML enables GPO to extract short titles from bill texts. GPO makes short titles available in MODS (metadata object description schema). LOC uses short titles from GPO MODS to automate bill titles for Congress.gov. LOC's bill title management is now 90% automated; prior to 2022 it was a 90% manual process.

Figure 8 – Predictable, structured XML allows for automated short title extraction

Related Bills

The <u>Joint Explanatory Statement accompanying the Consolidated Appropriations Act</u>, <u>2023</u> directs LOC to "identify technical and procedural changes required to track legislation that is introduced and later included in a separate measure, legislation introduced that is also filed as an amendment."

Congressional Technical and Procedural Changes: House and Senate will provide additional data sources to LOC for Congress.gov. Clerk of the House and Secretary of the Senate are the most accurate and complete data sources to provide Congress.gov with bill relationship data for measures: Filed as floor amendment or Filed as House Rules committee amendment. This would require significant additional resources and with policy changes in both the House and Senate.

LOC and our data partners are investigating opportunities to utilize technology to increase and improve bill relationship data as the USLM standard matures and data partners modernize their systems. Results of these AI and Related Bills initiatives will be shared with oversight committees to inform prioritization and the need for additional technology and staffing resources. **Table 1** lists related bill initiatives that LOC is exploring.

Table 1 – Related Bill Initiatives			
Initiative	Details and Status	Examples	
Reintroductions	LOC is investigating the feasibility to	118HR51	
	automatically identify measures with the same	reciprocal	
	official title and sponsor as reintroductions.	relationship to	
	Minimal human effort would be required to verify	117HR51	
	that such measures are, in fact, related; rather,		
	the official title and sponsor would be used as a		
	proxy to determine that a measure is a		
	reintroduction. The team is in the beginning		
	stages of analyzing this option.		
Cross-	LOC is developing technology for legislative	118HR1267	
Congress	analysts to identify cross-Congress relationships.	reciprocal	
relationships	LOC estimates that two additional research	relationship to	
	assistants (GS-7) are needed to verify accuracy	117HR1696	
	and support manual curation for cross-Congress		
	relationships.		
More	LOC is developing technology to improve	The text of	
prominent	identifying measures incorporated into larger	117HR241 has	
	measures that become law. LOC estimates that	been	

incorporations into law	one additional research assistant (GS-7) is needed to verify accuracy and support manual curation.	incorporated into 117HR7776, which has become law.
Richer metadata for incorporations	LOC is exploring the feasibility to use technology to identify incorporated related bills. This initiative will require technology development resources for both Congress.gov and the Admin Tools application used to manage related bills information.	117HR5746 is related to approximately 30 measures that were incorporated into the EAH text version
Bill text version level relationships	LOC continues to explore the use of technology to identify more refined, precise, and predictable bill metadata.	117HR4373 RH is related to 117S3075 IS, however 117HR4373 ENR is not related to 117S3075 IS

It must be noted that measures reintroduced in subsequent Congresses almost always have minor changes (e.g., updated short title, change of year, or other dates in the legislative proposal). Measures reintroduced may have significant text changes that require more human effort to analyze. For example, the *Access to Congressionally Mandated Reports Act* was introduced for the first time in 2009 (111th Congress). The *Access to Congressionally Mandated Reports Act* was finally enacted within the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 (117PL263). Between 2009 and 2023, 21 bill numbers include the phrase *Access to Congressionally Mandated Reports Act*. There is a total of 40 bill text versions associated with the 21 bill numbers. A significant commitment of staff and technology development resources would be necessary to track these types of relationships.

Due to commitment to high accuracy rates for Congress.gov, Congressional Research Service (CRS) legislative analyst workflows require following a strict editorial bill relationship policy; bills must have a high degree of textual similarity and meaning. Staffing resource constraints also prevent legislative analysts from identifying bill relationships based on amendments or identifying bill relationships across different Congresses.

Clerk of the House supports committees to report "Text similarities: Identified by House committee" relationships for Congress.gov (e.g., 117HR6865 relationship to 117HR6831). Table 2 shows that the workflow is underutilized.

Table 2 – "Text Similarities: Identified by House Committees" Metrics		
Congress (Years) Number of Bill Relationships Delivered to Congress.gov		
118 (2023-2024)	0 (as of June 27, 2023)	
117 (2021-2022)	2	
116 (2019-2020)	7	
115 (2017-2018)	6	
114 (2015-2016)	2	

Clearer Accounting of Member Contributions in Legislation

<u>House Report 117-389</u> directs LOC to report on resources necessary to provide "a clearer accounting of Member contributions in legislation, such as indicating when a cosponsor is from the committee of jurisdiction."

Congressional Technical and Procedural Changes: To provide data necessary for Congress.gov to show committee of jurisdiction data for House co-sponsors the House Clerk's office must rewrite the Member Information System (MIS), a key data source for Member and Committee information delivered to Congress.gov. This will provide necessary data source improvements (including unique identifiers for Members of Congress, unique identifiers for committees and subcommittees, and increased use of ISO-8601). CRS has and continues to support these efforts by providing use cases, data standard consultation, and policy and procedure, as needed.

Requests for improvements from congressional stakeholders, ⁷ can be satisfied more easily as authoritative data sources are improved and modern data standards continue to be adopted by GPO, the House, the Senate and LOC. LOC is reviewing a set of requests with Clerk of the House and Secretary of the Senate data partners regarding:

- Identifying House cosponsors who are members of the committee of jurisdiction to which a measure was referred
- Making roll call vote data searchable from Congress.gov
- Investigating opportunities to increase and improve bill relationship data for: Reintroductions, cross-Congress relationships, and richer metadata for incorporations into law (see the discussion in the Related Bills section above)

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⁷ See Appendix C - Congressional Stakeholder Feedback Related to Member Contributions in Legislation

Figures 9 and 10 highlight member contribution improvements rooted in modernized technologies and adoption of data standards.



Figure 9 – UTF-8 character encoding

Figure 9: UTF-8 is a character encoding standard that facilitates display and storage of English (Latin) language and non-English characters, including those with diacritical marks. UTF-8 encoding could finally be used for member names in 2020 when a modern member name data source was established for Congress.gov.







Figure 10 – Bioguide IDs as unique identifiers for members of Congress

Figure 10 Congress.gov uses the Bioguide ID as a unique identifier for Members of Congress, past and present. This allows LOC to deliver "member alerts" and allows Congress.gov "member profile" pages to feature historical, cross-Congress access to sponsored and cosponsored legislation and floor amendments, and remarks in the Congressional Record.

Better Tracking of the Congressional Committee Process

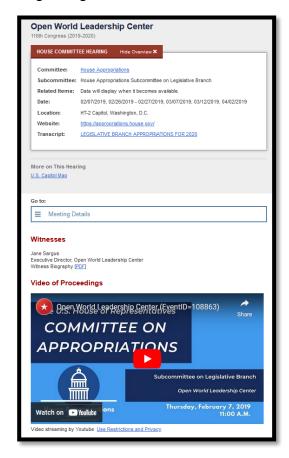
The <u>Joint Explanatory Statement accompanying the Consolidated Appropriations Act</u>, <u>2023</u> directs LOC to report on improvements that could be made for "better tracking of the congressional committee process, including the notation of recorded votes in committee."

Congressional Technical and Procedural Changes: LOC is aware of efforts by the House to manage committee vote data. Quarterly Committee Votes and Tools reports, issued by the Clerk of the House, document progress on the House effort to establish and maintain a database of votes taken in House committees. Committee vote data is needed by Congress.gov to make improvements "to better track the legislative process." After committee vote data becomes available, LOC will work with the House to make this data available on Congress.gov. LOC would require similar data to be provided by the Senate to support committee vote data on Congress.gov.

LOC is aware of the recent recommendation from the Select Committee on the Modernization of Congress that GPO create and offer a standardized process to enable committees to compile hearing transcript documents and reports. GPO is working on this compatibility and is developing its XPub system to modernize the publishing process. The proposed workflow would allow committees to simultaneously publish both print and web-friendly renditions of hearing transcripts and committee reports in print-ready PDF, HTML5, and USLM formats. The LOC quality control team anticipates that the proposed workflow will produce higher quality metadata resulting in improved accuracy and the reduced need for manual curation of metadata by LOC and GPO staff. LOC anticipates that the user experience of tracking the congressional committee process on Congress.gov will be significantly improved after the proposed workflow provides higher quality metadata and web-friendly USLM renditions of hearing transcripts and reports for these important House and Senate work products.

The House Committee Repository introduced an important, and much needed data standard in 2012: House Event IDs. The Secretary of the Senate has also implemented a Senate Event ID data standard. House and Senate Event IDs are unique identifiers for committee meetings. House and Senate Event IDs are very important to the Committee Schedule on Congress.gov. Event IDs are also very important to associate committee

meeting videos and hearing transcripts with committee meeting records on Congress.gov.



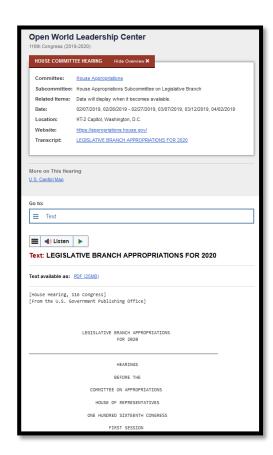


Figure 11 – House Event IDs improve information about the congressional committee process.

Figure 11: Event IDs are used to associate committee meeting videos with committee meeting records on Congress.gov. Event IDs are also used to associate hearing transcripts with committee meeting videos.

Article V Memorials

In response to requests from congressional stakeholders, LOC is analyzing the business requirements, the technical feasibility, and policy requirements with legislative branch data partners regarding Article V Memorials.

Communications with Congressional and Public Stakeholders

LOC publicizes the latest Congress.gov enhancements through the Law Library's *In Custodia Legis* blog, as well as Facebook and Twitter. From <u>Get Email Alerts and Updates</u>, users are encouraged to subscribe to Congress.gov Notifications for timely information about new functionality, expanded coverage, and other items of interest to

the Congress.gov community. In FY22, Congress.gov received 102,052,057 page views, illustrating how many Americans engage with vital civic information provided by Congress.gov.

The **Support** link at the top right corner of every Congress.gov page features a <u>Contact</u> link. Congress.gov users are encouraged to send all Congress.gov-related feedback, issues, and questions for search assistance. The Law Library of Congress provides support for public inquiries about Congress.gov through its reference services, which are available by phone, in-person, and through its Ask A Librarian Service. Congressional staff can expect prompt, real-time support on weekdays, between 7:00 a.m. and 8:00 p.m., Saturdays between 8:30 a.m. and 5:00 p.m., and anytime either chamber is in session.

New and advanced Congress.gov users have many opportunities for in-person, webinar, and self-guided instruction on how to use Congress.gov. The Congress.gov. Training page provides training registration information. The Law Library provides a well-attended, bimonthly Congress.gov webinar for the public. CRS, the Senate Library, and the House Library routinely offer introductory and advanced training to Congressional staff. Besides the obvious benefit to users, Congress.gov training sessions are an excellent opportunity for engagement with users to gather real-world use cases to support development and testing of new features. Users often come to express specific issues with using Congress.gov but just as often have solid ideas for enhancements to make Congress.gov more usable and suited to their legislative research and tracking needs.

LOC maintains the Congress.gov Feedback Repository of enhancement ideas elicited while assisting users with Congress.gov. Enhancement requests are also gathered from a biweekly report of survey results submitted by public and congressional users. The ongoing survey, which can be accessed from most pages on Congress.gov via the Site Feedback link, consists of general questions about the user's experience finding information on Congress.gov. The Feedback Repository is regularly reviewed as LOC analyzes the business requirements, the technical feasibility, and the prioritization of each request.

Public Meetings

Looking ahead: LOC is planning a September 2023 Congress.gov public forum.

Reflecting on past events: Congress.gov Public Forums have been held in September since 2020. More than 300 people attended in 2020. Approximately 150 people attended each year in 2021 and 2022. Attendees come from academic institutions, state

and federal government agencies, the media, government transparency and other advocacy groups. The virtual event allows for wider geographic participation; attendees joined from at least 39 states and territories.

The most notable initiative inspired by Congress.gov Public Forums is making the Congress.gov API (application programming interface) available to the public. The Congress.gov API was released in beta during the September 2022 public forum. LOC anticipates production release of the Congress.gov API in September 2023.

Videos and presentation materials can be accessed from the <u>Congress.gov Public</u> <u>Forums</u> page.

Conclusion

LOC is dedicated to delivering a modern, extensible, and sustainable platform for legislative data. Congress.gov serves as the sole authoritative website for U.S. federal legislative information for Congress and its constituents.⁸ LOC collaborates closely with House, Senate, and GPO colleagues to provide access to accurate, timely, and complete legislative information for Members of Congress, legislative agencies, and the public. At the direction of Congress.⁹, LOC continues the development of Congress.gov and submits an annual, prospective report outlining the strategic objectives for the legislative information system.¹⁰

Interoperability among several legislative branch systems that manage, distribute, and preserve authoritative digital representations of House and Senate work products required, and continues to require, multiple years of planning, coordination, and execution among the data partners. LOC is actively engaged with House, Senate, and GPO data partners in multiple initiatives to modernize data sources. The well-formed metadata resulting from these projects will continue to improve the integrity of Congressional data and establish the foundation for future enhancements. The roadmap for current and future initiatives.¹¹ also includes:

- Experimenting with machine learning to generate Geographic Entity and Organization Name Legislative Subject term assignments
 - This will inform next steps related to Al and legislative subject data.

⁸ <u>2 USC 180</u>: Legislative information retrieval system, and <u>2 USC 181</u>: Program for exchange of information among Legislative Branch agencies.

⁹ Senate Report 105-204, to the Legislative Branch Appropriations Act, FY1999, P.L.105-275

¹⁰ LOC seeks committee approval to make *The Congress.gov Strategic Objective Report, Fiscal 2023* (November 2022), *The Congress.gov Public Forum Report to Congress* (November 2021), *The Congress.gov Public Forum Report to Congress* (November 2020), and future reports, publicly available from Congress.gov.

¹¹ Appendix B - Data Partner System Inventory describes many of the systems that provide data for Congress.gov

- Working with the Congressional Video Preservation and Access Technical Working Group
 - This is anticipated to inform initiatives in support of better tracking of the congressional committee process.
- Increase outreach and awareness opportunities for Congressional and public stakeholders to be informed about the Congressional data ecosystem.
 - LOC seeks committee approval to make The Congress.gov Strategic Objective Report, Fiscal 2023 (November 2022), The Congress.gov Public Forum Report to Congress (November 2021), The Congress.gov Public Forum Report to Congress (November 2020), and future reports, publicly available from Congress.gov.
- Ensuring continuation of data partner working groups and collaboration opportunities in support of continued staff training and tool development to further advance adoption of Congressional data standards.
 - Continued implementation of these procedural changes require ongoing consultation with oversight committees and Congress.gov stakeholders.

Congress.gov has critical dependencies on the work products of House, Senate, and GPO data partners. The partnerships and institutional knowledge among Legislative Branch Data Interchange Working Group, Congressional Data Task Force, and Legislative Branch XML Working Group colleagues are critical to operational support and development of Congress.gov. Data partner colleagues in the Legislative Branch Data Interchange Working Group share a commitment to supporting Congressional data owners and advocacy for legislative data standards.

Appendices

Appendix A - Data Partner Working GroupsGroupDescriptionCongressional
Data Task
Force (CDTF)Partnership of representatives from Legislative branch organizations
such as GPO, House of Representatives, Senate, and LOC working
in a cooperative manner to coordinate and accomplish openness and
transparency goals. Civil society organizations frequently meet with
and provide feedback to the CDTF.Group was established in 2012 (as Bulk Data Task Force).12 to
examine the increased dissemination of Congressional information
via bulk data download by nongovernmental groups for the purpose
of supporting openness and transparency in the legislative process.

¹² House Report 112-511, to the Legislative Branch Appropriations Act, FY2013, P.L.113-6

Congressional Video Preservation and Access Technical Working Group	Partnership of representatives from National Archives and Records Administration, GPO, House of Representatives, Senate, and LOC created on October 27, 2021 to develop technical requirements to modernize congressional video preservation.
Legislative Branch XML Working Group	Partnership of representatives from legislative branch organizations such as GPO, House of Representatives, Senate, and LOC working in a cooperative manner to publish more documents in USLM.
	Group was established in 1996 when the Senate Rules Committee and the House Administration Committee approved the establishment of a data standards program using the Standard Generalized Markup Language. The Working Group officially has House and Senate cochair representatives.
Legislative Branch Data Interchange Working Group	Partnership of representatives from legislative branch organizations such as GPO, House of Representatives, Senate, and LOC working in a cooperative manner to exchange data. This informal working group supports the CDTF, Congressional Video Preservation and Access Technical Working Group, Legislative Branch XML Working Group, and many related initiatives.
	The longstanding partnerships date from mid-1970 when The Bill Status System for the United States House of Representatives "was implemented to fulfill a need for a centralized source of legislative status information."

Appendix B – Data Partner System Inventory			
Data Partner	System Name	Congress.gov Dependency	System Status
House	Legislative	Several data sources that are	Modern system
	Information	delivered to Congress.gov	targeted for
	Management	related to legislative actions	release within
	System (LIMS)		2025
House	Biographical	Member photos, birth and	System is
	Directory	death dates	operational
House	Committee	Committee meetings	System is
	Repository		operational

House	Committee Action Reporting System (CARS)	Several data sources that are delivered to Congress.gov related to committee actions	Modern system targeted for release within 2025
House	Comparative Print Suite	A set of applications that enables House and CRS staff to produce comparative prints showing how proposed legislation may amend law, and how a bill, resolution, or amendment changes from one version to another	-
House	Member Information System (MIS)	A key data source for Membe and Committee information delivered to Congress.gov	rClerk's office is in the initial stages of the project
Senate	Legislative Information System (LIS)	Several data sources that are delivered to Congress.gov related to legislative, committee, nominations, treaty document, and executive communications actions	Modern system targeted for release within 3 to 5 years
GPO	GovInfo	Full text and metadata for legislation and documents	Production system
GPO	XPub	System will modernize the publishing process	System targeted for initial release within 2024
LOC	Admin Tools	CRS manages data from all data partners, including necessary value-add metadata curation	System is operational, as of 2022
LOC	Bill Summary Workflow	CRS publishes Bill Summaries	System targeted for release within 2023
LOC	Text Analysis Tool (TAP)	CRS tool required to identify Related Bills and inform Bill Summary authoring	System targeted for release within 2023

	Appendix C – Congressional Stakeholder Feedback Related to Member Contributions in Legislation		
No.	Feedback		
1	Make votes searchable by member		
2	Requestor would like a "scorecard" of all roll call votes in the House in the 116th Congress including the 8 members making up the state's congressional delegation. His objective is to see how many times the delegation members		
	voted in unison (and, if available, times at least one member of each party in the delegation voted the same).		
3	Functionality to export a Member's voting record in full for this Congress into an Excel document. I was able to do so with all cosponsored legislation, but can't figure out how to do it with roll call votes. I'm hoping the raw data is available somewhere, because it's got to auto populate a widget on our website.		
4	Make it easier to search for floor vote amendments and vote counts (I often need this for previous NDAAs or appropriations bills but it takes a lot of clicks and searches to find the information I'm trying to get to)		
5	Incorporate roll call voting data into Congress.gov		
6	"Members want to document their contributions" and "prove ownership" of legislative accomplishments		