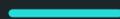LINCOLN POLICY

# Using Technology to Improve Constituents' Interactions with Congress

Recommendations for Improving Constituent Management Systems for the House of Representatives

By Reynold Schweickhardt

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# Executive Summary

In 2021, the political parties on Capitol Hill have found little common ground. Yet they do agree on at least one key point: Congress needs to work better. Since 2019, the U.S. House Select Committee on the Modernization of Congress has recommended a series of bipartisan reforms intended to make the "People's House" work better for members, staff, and the American people.

During the 116th Congress, the Select Committee held hearings and issued bipartisan recommendations that resulted in significant changes to improve Congress's operations.[1] Primary recommendations sought to improve transparency and streamline constituent engagement to make the House more accountable to the American public. A common theme in the Select Committee's work was modernizing and revitalizing the House's technology systems. In 2021, the Select Committee is continuing its important bipartisan work to improve how Congress can perform its Article I responsibilities during the 117th Congress.

Few congressional responsibilities are more vital than lawmakers' interactions with their constituents. Constituents provide significant input in shaping a member's oversight and legislative work. Members engage with state and local officials and other stakeholders to ensure legislation meets the needs of the district. Finally, members help constituents get the help they need from the federal government and resolve issues with agencies such as the Internal Revenue Service, Social Security Administration, and the Veterans Affairs Department.

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1   The Select Committee on the Modernization of the Congress, U.S. House of Representatives, *Final Report (2020),* https://modernizecongress.house.gov/imo/media/doc/ModernizationCommittee_10152020r1Compressed%20(newest%20gpo%20report).pdf

A 2011 study published by the Congressional Management Foundation (CMF) found that congressional offices anecdotally reported a 200%-1,000% increase in constituent communications since 2000.[2] CMF data show that House office constituent correspondence had increased by 158% since 2002.[3]

Since 2011, increasing volume has continued to overload congressional offices. This growth often results in offices tracking only the numbers of constituent communications without having the capacity to understand the policy implications of that input.

House technologies that support constituent interactions lag state-of-the-art technologies commonly used to manage customer service interactions by private sector organizations. While not every technique used in the commercial sector is appropriate for Congress, the House should determine where technology can appropriately improve interaction with constituents so their input and concerns can be addressed more effectively.

This policy brief presents recommendations for specific lines-of-effort to improve congressional office's systems for managing constituent interactions:

1.  The Office of the Chief Administrative Officer (CAO) should provide a standardized framework for integration of microservices.
2.  The CAO should take steps to improve cybersecurity risk management and reduce the risk of breaches of constituents' personally identifiable information.
3.  The CAO should standardize and evaluate the effectiveness of member outreach to constituents via email.
4.  The CAO should prepare for newer capabilities that require large pools of data.
5.  The CAO should work with stakeholders to issue data standards that allow CMS platforms to ingest member-constituent interactions to provide a unified view of all constituent interactions.
6.  The CAO should work with stakeholders for members to communicate more collaboratively with elected officials, constituents, and advocacy groups to define policy objectives and legislative language.
7.  The CAO should continue to improve the cyber security posture of the House.

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2    "Communicating with Congress: How Citizen Advocacy is Changing Mail Operations on Capitol Hill," Congressional Management Foundation (2011), p. 2, https://www.congressfoundation.org/storage/documents/CMF_Pubs/cwc-mail-operations.pdf.

3    Ibid.

Many of these recommendations can be implemented by the Office of the Chief Administrative Officer (CAO), which provides business solutions and other administrative support services to House offices. However, the Committee on House Administration and the Appropriations Subcommittee on the Legislative Branch should approve and fund strategies to make immediate changes where there is a clear understanding of the requirements of a needed technology approach. When the path forward is unclear, the committees should support studies or pilots to clarify the problem, crystallize member expectations, and implement significant improvements for member offices over time.

Together, these actions will leverage technology to improve constituents' interactions with Congress and ensure that representatives can more effectively carry out their Article I responsibilities under the U.S. Constitution.

# Constituent Management Systems in the House of Representatives

## INTRODUCTION

Customer relationship management (CRM) tools are known in the House of Representatives as constituent management systems (CMS). These are widely used tools to manage communications, track deliverables, and provide consistent and repeatable processes for customers or constituents. These tools include performance analytics to help manage workloads to meet service level expectations.

This policy brief discusses short- to medium-term initiatives that should be considered by the House of Representatives to improve the value that member offices receive from the technology used to interact with constituents, of which the CMS is a major component.

## QUICK HISTORY OF CMS IN THE HOUSE AND CURRENT CHALLENGES

The House supported an internal CMS known as MICRO MIN in the 1980s, which was used by offices prior to vendors entering the field. As market share shifted to newer vendors, support for MICRO MIN dwindled and it was retired in the early 2000s. Over time, the Committee on House Administration (CHA) worked with the Chief Administrative Officer (CAO) and House Information Resources (HIR) to improve the governance of CMS systems, evolve minimum capabilities, refine acquisition strategies, improve mechanisms for vendors to be held accountable for failures to perform, and support data transportability between vendors.

Several challenges hinder the House of Representatives' ability to purchase CMS services that meet lawmakers' needs. These challenges include:

A relatively small marketplace of fewer than 500 offices in the House — notable for a comparatively high barrier to entry, at times unclear requirements, and a lack of technical sophistication in purchasing offices — creates a limited financial incentive for vendors to invest in CMS capabilities. This has hindered the pace of innovation.

The nature of two-year House terms creates limited times when member offices can switch from an underperforming vendor. Communication blackouts due to switching vendors during an election year are impractical. This leaves a small window of time when members office might even consider changing CMS vendors.

House offices' unique requirements force vendors to modify or adapt existing services, which further raises the barrier for providers to pursue the CMS market for Congress.

Other institutional challenges underscore the importance of upgrading effective constituent management systems on Capitol Hill. House Members are limited to 18 full-time and 4 part-time staff in both DC and their district offices.[4] Retaining staff expertise is an ongoing problem, especially in technology-focused positions. For example, jobs focusing on constituent communications are often seen as a steppingstone to more "desirable" policy-focused positions. This dynamic creates constant retraining and means that standalone or difficult-to-use capabilities are overlooked in the transition to the next staffer in that position.

House offices face other technology risks that must be anticipated and appropriately managed. Recent challenges such as a ransomware attack on one CMS vendor[5] underscore the continued need to manage the various risks (technical, financial, operational, and cybersecurity) that technology service providers face.

## HOUSE STRATEGY FOR ENTERPRISE CMS

The House has implemented several strategies to centralize the management of technology in the House, including providing web sites at no cost. During the current Congress, the CAO began providing CAO-owned, pre-configured laptops to member offices. The House conducted a study and is in the process of issuing a Request for Proposal to begin the process of defining and provisioning an enterprise CMS system.

As a general principle, shifts in technology governance in the House begin with volunteer offices and, when proven, become mandatory or default for each incoming freshman class. (At times, member offices will adopt technologies not formally approved by the House.) For example, the removal of individual servers from member office suites took over 15 years and was completed only with the retirement of long-serving members who declined to allow their servers to transition (first as a relocated physical server then evolving to virtual servers.)

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4    Congressional Research Service, R43947, *House of Representatives Staff Levels in Member, Committee, Leadership, and Other Offices, 1977-2016 (2016),* https://www.everycrsreport.com/files/20160913_R43947_da2c748f8678c287d55f1dc7ef1c843c6f25a93f.pdf.

5    Leigh Ann Caldwell and Rebecca Shabad, "House communications vendor compromised by ransomware attack," *NBC News, June 8, 2021.*

# Proposed lines of effort to improve CMS capabilities

To improve House offices' constituent management systems and interactions with constituents, the Chief Administrative Officer should pursue the following lines-of-effort and consider these recommended actions.

**1** | **The CAO should provide a standardized framework for integration of microservices.**

The House CAO should provide a framework or infrastructure to simplify and standardize vendor integration with House capabilities and external best-of-breed product capabilities. Benefits of the House facilitating a standard integration process through application programming interfaces or other automated information sharing mechanisms will include:

1. Reducing the time and effort to customize a future enterprise CMS offering to support House requirements.
2. Reducing engineering costs for current CMS providers.
3. Lowering the barriers to entry for new competitors.
4. Simplifying the process of switching a microservice to a new market leader.
5. Allowing for competing services accomplishing the same objective.

The following are specific services that should be standardized:

- **Geolocation services** (e.g., leverage Library of Congress site license for geographic information system software from Environmental Systems Research Institute, Inc), which can provide capabilities such as directions to member offices, mapping of constituent issues to regions within the district, providing district-specific analysis of proposed impact of legislation, identifying hot spots or underserved areas, and so on. Action: The CAO should develop a standard geolocation Application Programing Interface (API) that standardizes access to centrally funded GIS capabilities. The CAO should work with CMS vendors to develop implementation guides for these capabilities in CMS platforms.

- **Standard telephony API.** Creating one interface that supports telephony capabilities from Avaya (DC) and ATT (district offices), which will isolate changes due to product updates or new telephony vendors. CMS platforms should integrate with House telephone systems to improve productivity and add value to constituent phone calls. This is a standard capability in call centers to provide context to the conversation. Action: The CAO should create an API to provide a standard interface for CMS providers to create computer telephony integration (CTI). The CMS could provide recent interactions or pending action items upon answering a call to improve offices' constituent services.

- **Social media abstraction.** Two benefits should be considered during design. First, abstract individual product implementations (Google, Facebook, Twitter, etc) so that product changes can be managed in one layer. Typically, social media vendors release product updates several times a year that change how CMS products interface. Second, provide for integration of new social media platforms without corresponding changes in CMS products. Action: The CAO should develop a standard API and connect to current social media providers. Identify strategies to support new entrants without changes to CMS systems.

- **Communicating with Congress** (CWC). CWC is an existing capability to manage bulk constituent comments (i.e., campaign emails from advocacy groups). CWC defines standards for entities that funnel communications to members. These communications use an API, and each campaign is identified so the sending entity can take credit for the number of member contacts it generates. Offices can determine their own appropriate responses – such as to ignore, provide a standard response, or craft individual responses in an efficient manner. Challenges include entities that send communications without timely constituent opt-in, which could result in the member communication being treated as spam. If a constituent opted in years ago to communicate to Congress on their behalf, the advocacy group will send periodic emails in their name. After time, they may not realize an email from Congress was consented to. Action: Incorporate existing CWC interface into the standard framework.

- **House Bulk Mail.** This is an existing capability that supports CMS providers' access to House infrastructure for outgoing bulk mail. (See the discussion below under recommendation 3 regarding member email.) Action: The CAO should incorporate the existing bulk mail interface into the standard framework.

**2**   **The CAO should take steps to improve cybersecurity risk management and reduce the risk of breaches of constituents' personally identifiable information.**

Member offices routinely receive constituents' personally identifiable information (PII) through casework and supporting their visits to Washington, DC. Offices obtain a

range of sensitive PII such as Social Security numbers for White House tours, medical information for Veterans Affairs constituent services, or reports of military sexual trauma. Constituents provide this information after signing privacy release forms. This sensitive information is mainly transmitted or stored in electronic form, including email. Member offices generally do not have strong protocols to manage and dispose of this information when it is no longer needed.

The House has previously implemented PAY.GOV, a service from the U.S. Treasury, on member web sites to allow constituents to pay for flags flown over the U.S. Capitol. The constituent pays Treasury directly, which means credit card information is not disclosed or held by the member's office. In this manner, leveraging an existing federal agency solution reduces offices' management of PII and, therefore, the risk of a potential breach.

The House should identify all situations where PII is transmitted to member offices and develop a plan to transition to constituents directly communicating that information to the appropriate agency. The specific PII or sensitive information will depend on the agency and the nature of the casework.

Examples include:
- White House visitor requests.
- Privacy release for casework with agencies such as VA, IRS, and Social Security.
- Passport or visa issues with the State Department.

  *Action: For these constituent needs, the CAO should work with external entities to develop and implement direct provisioning of sensitive data to executive branch agencies.*

- Whistleblowers providing confidential information to members or committees. Two-way confidentially is required.

  *Action: To protect whistleblowers, the House CAO should determine requirements and propose a standardized solution to improve PII protection and maintain confidentiality.*

**3** | **The CAO should standardize and evaluate the effectiveness of member outreach to constituents via email.**

Commercial email providers treat member-to-constituent communications as commercial messages and tend to reduce deliverability when messages are reported as spam. Like other government-to-citizen communications, these messages are not

commercial. Should CDC or FEMA deliverability be impacted if their messages are reported as spam? Most would probably agree that messages from these agencies should not be treated as such since they may provide information about pressing public health or emergency management issues. But a constituent who disagrees with a member of Congress's positions may report messages as spam, which may result in increased filtering of other communications with constituents.

Internet service providers (ISP) score email senders for spam complaints and for sending emails to spam traps -- known bad email addresses to which no legitimate email should be addressed. The ISP's scoring system reduces the deliverability of messages sent from that infrastructure (i.e., email address, IP address and other technical factors). ISPs apply this same logic to the House's infrastructure used to send messages.

Because commercial providers limit members' ability to communicate directly with constituents, the House has implemented internal capability for bulk email. This capability includes providing multiple IP addresses for CMS vendors, which allows them to segment use of the IP addresses depending on the maturity of the list being used. Email traffic should be segmented by risk. Direct responses to individual inquiries go down one path and newsletters using established lists goes down another. Newly acquired lists such as newly registered voters are tested on a unique path prior to being used on a path with established deliverability scores.

The House needs to continue implementing additional solutions to improve deliverability of lawmakers' emails to their constituents. For example, the House CAO could:

- Offer individual IP address (one per member) to allow members to send as they wish without impacting other members' deliverability. Because IP addresses are a shared resource with their own reputation over time, one member's deliverability could be impacted by other members reducing the reputation of the same infrastructure.

- Vendors could continue to offer test IP addresses for use with mailing lists of unknown quality to validate a list prior to using it on higher-reputation IP address lists.

   *Action: The House CAO should require CMS vendors to offer the use of House bulk email capabilities to maximize deliverability of member communications to constituents. Moreover, the House CAO should examine the effectiveness of its current infrastructure and propose improvements as needed.*

**4** | **The CAO should prepare for newer capabilities that require large pools of data.**

The CAO should study the implications of natural language processing (NLP), artificial intelligence (AI) and machine learning (ML), which require larger data pools to increase accuracy. House office or vendor co-mingling of a significant amount of a member's data would create a desirable target for hackers and foreign intelligence services. Member privileges around ownership of information need to be considered. How can the broad reach of House-collected data be used while maintaining appropriate separation between members?

Offices have been historically reluctant to send substantive automated responses without human review. Advances in AI, ML, and NLP have improved the accuracy and relevance of these responses. Prior to Communicating with Congress, CMS systems would use basic tools to group similar messages for a single response. In addition, alternative methods could be explored to allow members to respond to and batch topically related comments through mechanisms other than a 1-to-1 reply.

*Action: The CAO should conduct an evaluation of these capabilities and provide recommendations for next steps.* With member opt-in, CMS vendors could aggregate the database of inquiry-response pairs and use ML to create and maintain rules to increase automation in the creation and sending of responses. Furthermore, the vendors could use the technology to predict the accuracy of the response such that offices could limit use based on their individual risk tolerance.

**5** | **The CAO should work with stakeholders to issue data standards that allow CMS platforms to ingest member-constituent interactions to provide a unified view of all constituent interactions.**

The CAO should propose strategies for CMS tools to incorporate constituent interactions created in third party tools. Future CMS tools should integrate with tools that interact with constituents to compile a 360-degree view of constituent interactions in CMS products.

CMS platforms should also be able to integrate data from tools including tele-townhalls, voice mail, and social media. This provides a complete history of how the member's office interacted with constituents.

*Action: The CAO should work with stakeholders to continue to create data standards and workflows to support simplified input and merging of interactions from external platforms to House CMS platforms, such as using caller-ID lookup to associate voice mail or phone calls.*

**6** | **The CAO should work with stakeholders for members to communicate more collaboratively with constituents.**

Tools such as CWC help manage so-called bulk communications, the electronic equivalent of old-age postcard campaigns. This supports broad messaging campaigns from advocacy organizations who wish to efficiently deliver constituent input to member offices. Similarly, work has been done to create open-forum bill drafting tools that allow policy experts to contribute specific language or markup draft legislation. Further work is needed to increase subject-matter expert involvement while preventing non-experts from drowning out the conversation.

Moreover, a CMS tool should be designed to appropriately capture constituent feedback in a manner that accurately reflects the public's views. For example, a strategy that provides two responses for a given issue – agreement or disagreement– does not capture intensity nor does it maximize constituent engagement on multi-faceted issues. This is more likely to occur with a message that says, "I can't support HR xx in its current form and would be interested in your input on improving x, y, and z aspects."

In addition, it may be useful to identify how strongly a constituent holds a particular belief, the number of people who hold a particular belief, and how constituents respond to various arguments. This could enable member offices to develop specific responses that better address the full range of constituent concerns.

*Action: Propose strategies for CMS tools to incorporate a communication process to engage with constituents on areas of agreement within a larger issue or legislative context.* This might be a survey or workflow interface to expose fact finding and language development in those areas where a member can engage.

**7** | **The CAO should continue to improve the cyber security posture of the House.**

The CAO should review protections against current threats such as ransomware and strengthen requirements for all House or member data held or managed by third parties. Growing cyber threats warrant House offices improving their cybersecurity risk management practices. For example, the CAO could provide guidance for offices to further segment access to information to minimize the effects of a breach. Recent supply chain attacks impacted centrally controlled infrastructure such as the Solar Winds breach. For CMS systems, compromise of the central infrastructure would likely also comprise the integrity of the CMS systems.

*Action: The CAO should also improve member, committee and leadership offices' view and control of permissions and accesses that affect their sensitive information.* The Committee on Appropriations should fund, and the CAO should implement additional controls for more sensitive stores of information.

# Conclusion

The CAO's initiative to create uniform technology capabilities for member-constituent interaction should be supported. These recommendations are intended to support that goal while also identifying near term actions that will benefit members and their constituents consistent with CAO strategy. While the CAO can act on many of these recommendations without committee action, the Committee on Appropriations and the Committee on House Administration could further direct these actions through appropriations or authorizing language.

Improving constituent interactions using technology requires not only technological improvements but educating members and staff on how to properly use technological tools along with defined processes to create consistent outcomes. The CAO is well positioned to improve this critical access of House members' work.

The recent work of the Modernization Committee demonstrates strong bipartisan interest in making the House work better on behalf of members and the American public. Improving constituent interactions and constituent management systems should be a priority for the 117th Congress.

# About the Author

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Reynold Schweickhardt is a senior advisor at Lincoln Network. He served in the U.S. House and Government Publishing Office from October 1995 to May 2019. As the technology policy lead for the Committee on House Administration and the CIO, CTO, and Acting Chief of Staff at the Government Publishing Office, he led efforts to improve the technology available to members including focusing on how to narrow the gap between the CMS used in the House and the technology used in private and state/local sectors. Schweickhardt received a lifetime achievement award in 2019 from the Congressional Management Foundation for his contributions to improving the operations of Congress.

He served in the General Services Administration from May 2019 to January 2021 as the senior advisor for technology to the GSA Administrator.