

# Exposing Local Sources: The (Non)Use of Secure Tip Communication Methods by Local US News Organizations

Christine Lam  
*Barnard College*

Murat Gulcelik  
*Columbia University*

Olga Rios  
*Barnard College*

Martin Shelton  
*Freedom of the Press Foundation*

Jennifer R. Henrichsen  
*Washington State University*

Susan E. McGregor  
*Columbia University*

## Abstract

Research shows that high-quality local journalism is essential to good governance, helping moderate party-line politics and corruption. Yet our analysis of more than 300 local, national and online news websites shows that local news outlets lack secure methods for the public to contact and communicate with them with newsworthy information. We discuss the implications of these findings and directions for future research.

## 1 Introduction

A growing body of evidence demonstrates digital security threats to journalism are pervasive, taking a variety of technical forms [6, 9, 16, 18]; ), as well as harassment that may escalate to physical threats (e.g., [14]). Alongside digital attacks, growing awareness and experiences of government surveillance promotes chilling effects for journalists and their sources, with dangerous implications for democracy (e.g., [12]). Against this backdrop, understanding the degree to which individuals can securely contact media organizations is essential.

Popular coverage of whistleblower communications with journalists, including Edward Snowden [2] and Reality Winner [17], has highlighted the security risks faced by individuals who provide information to news organizations. While research on secure communications among journalists has illustrated that a usability-utility tradeoff may be at play (e.g., [11]), the potential *utility* that members of the public find in providing information to journalists and news organizations is much less clear.

As a result, advocates have created tools like SecureDrop, which are designed to be both secure and usable. While some research indicates increasing adoption of SecureDrop and similar tools (e.g., [1, 6]), little is known about the frequency with which secure communication channels are offered to the public by the hundreds of local and community-focused news organizations throughout the United States. Local news organizations are important to study because they are tied to the health of a democratic society: local news organizations fill critical information needs in their communities [13] and a strong local news ecosystem correlates with rates of civic engagement [15] and attachment to one’s community (e.g., [8]).

Through an analysis of the communication channels that news organizations use to solicit information from the public through their websites, this study reveals the (in)security of an important part of newsroom infrastructure. To that end, we ask the following questions:

**RQ1:** What communication methods do news organizations use to solicit news information from the public?

**RQ2:** How do the provided methods vary depending on the nature or focus of the news organization (i.e., local, national, online-only)?

Our work reveals that only a small minority of local news organizations provide secure (e.g., encrypted and/or anonymous) methods for the public to contact and communicate with them, especially when compared to national or online-only publications.

## 2 Methodology

Drawing on the sample of US news organizations compiled in [10], the authors manually reviewed the websites of each news organization. Because many organizations provide public contact information for non-news purposes (e.g., subscription issues, advertisements etc.) we distinguish between generic “contact” pages and “tip” pages/channels. To be coded as the

Contact type	Large news organizations		Online news organizations		Local news organizations	
	# Orgs(N=50)	Percent	# Orgs (N=38)	Percent	# Orgs (N=303)	Percent
Tip page?	43	86%	23	59%	125	41%
Email	31	72%	20	87%	54	43%
Phone	27	63%	5	22%	44	35%
Postal Mail	21	49%	11	48%	16	13%
Embedded webform	18	42%	11	48%	74	59%
Signal	11	26%	5	22%	0	0%
GPG	7	16%	1	4%	0	0%
SecureDrop	5	12%	9	39%	0	0%
ProtonMail	4	9%	0	0%	1	0%
SMS	3	7%	0	0%	0	0%
WhatsApp	3	7%	2	9%	0	0%

Table 1: Presence of tip pages and the contact methods included on them across large, online and local news organizations in the United States.

latter, text on the page needed to mention “tips”, “story ideas” or similar language. We refer to these going forward as *tip pages*.

If a news organization’s website had a tip page, we then recorded all of the communication channels indicated in Table 1. Because the security properties of both tip pages in general and web forms in particular is related to its use of HTTPS, we also used ChatGPT [3] to generate a python script to load each tip page and confirm whether it was HTTPS; URLs that generated errors were manually validated by one of the researchers using a standard web browser.

### 3 Results

As shown in Table 1, our analysis reveals stark differences across types of news organizations with respect to the communication channels they make available for the public to contact them with news-related information.

The most commonly available contact method for large and online news organizations was email; for local news organizations it was web forms. Likewise, while both large and online news organizations offered multiple forms of encrypted communication channels, such as Signal, GPG, SecureDrop and WhatsApp, these channels were nonexistent at the local level.

One bright spot for local news outlets was that more than half (59%) offered an embedded web form on their tip page, though we note that at least two *large* news organizations hosted their tip page web forms on subdomains. This less-private configuration was not observed on any of the local news websites.

### 4 Discussion and Future Work

Despite the crucial role that local news plays in promoting civic engagement and reducing government corruption, both

tip pages and secure methods for receiving news-related information remain underutilized by local media organizations.

The challenges facing local news organizations over the past 20 years have been well-documented, with the industry losing approximately 43,000 employees and 2,900 newspapers since 2005 [4]. While robust local news coverage has been correlated with reduced polarization [5] as well as reduced government spending [7], it is likely that many local news organizations lack the resources—including expertise—to effectively evaluate, implement or maintain secure communication methods. Looking ahead, we will complement this quantitative review by interviewing staff at these organizations to understand what drives their decisions to offer certain contact methods.

As noted in Section 3, one area that shows apparent promise for enhancing the security of the public’s communications with local news outlets is the use of embedded web forms at HTTPS urls that share a top domain with the main publication. In addition to the security of encryption, such forms leave few metadata traces, at least during initial contact. At the same time, we note that the use of web forms by local news organizations was also closely tied to the content management system in use, making these potentially less accessible to independent news sites. In future work, we plan to investigate the factors that may contribute to the use of webforms on local news websites, as well as the security of follow and verification methods used by news organizations that receive tips this way.

### 5 Acknowledgments

This material is based upon work supported by the National Science Foundation under Grant No. 1940670. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

## References

- [1] Charles Berret. Guide to SecureDrop. *Columbia Journalism Review*, 2016.
- [2] Michael Calderone. How Glenn Greenwald Began Communicating With NSA Whistleblower Edward Snowden. *Huffington Post*, 2013.
- [3] ChatGPT. Text prompt: "Please write me a Python script that, given a file with a list of URLs (that may be missing the http:// protocol), checks to see if the website automatically redirects HTTP to HTTPS, and outputs a CSV with that information", May 22 2024.
- [4] Al Cross. Rural mirages: Shattered papers and ‘ghosts’ without local news. *Local News Initiative*, 2023.
- [5] Joshua P Darr, Matthew P Hitt, and Johanna L Dunaway. *Home style opinion: How local newspapers can slow polarization*. Cambridge University Press, 2021.
- [6] Philip Di Salvo. Securing whistleblowing in the digital age: Securedrop and the changing journalistic practices for source protection. *Digital Journalism*, 9(4):443–460, 2021.
- [7] Pengjie Gao, Chang Lee, and Dermot Murphy. Financing dies in darkness? the impact of newspaper closures on public finance. *Journal of Financial Economics*, 135(2):445–467, 2020.
- [8] Danny Hayes and Jennifer L Lawless. As local news goes, so goes citizen engagement: Media, knowledge, and participation in us house elections. *The Journal of Politics*, 77(2):447–462, 2015.
- [9] Jennifer R Henrichsen, Michelle Betz, and Joanne M Lisosky. *Building digital safety for journalism: A survey of selected issues*. UNESCO Publishing, 2015.
- [10] Bernat Ivancsics, Eve Washington, Helen Yang, Emily Sidnam-Mauch, Ayana Monroe, Errol Francis, Joseph Bonneau, Kelly Caine, and Susan E McGregor. The Invisible Infrastructures of Online Visibility: An Analysis of the Platform-Facing Markup Used by US-Based Digital News Organizations. *Digital Journalism*, 11(8):1432–1455, 2023.
- [11] Susan E McGregor, Elizabeth Anne Watkins, Mahdi Nasrullah Al-Ameen, Kelly Caine, and Franziska Roesner. When the weakest link is strong: Secure collaboration in the case of the panama papers. In *26th USENIX Security Symposium (USENIX Security 17)*, pages 505–522, 2017.
- [12] Anthony Mills. Now you see me—now you don’t: Journalists’ experiences with surveillance. *Journalism Practice*, 13(6):690–707, 2019.
- [13] Erik Peterson. Paper cuts: How reporting resources affect political news coverage. *American Journal of Political Science*, 65(2):443–459, 2021.
- [14] Julie Posetti, Nabeelah Shabbir, Omega Douglas, and Becky Gardiner. The chilling: A global study of online violence against women journalists. 2022.
- [15] Lee Shaker. Dead newspapers and citizens’ civic engagement. *Political Communication*, 31(1):131–148, 2014.
- [16] Martin L Shelton. *The Role of Corporate and Government Surveillance in Shifting Journalistic Information Security Practices*. University of California, Irvine, 2015.
- [17] Ben Smith. The Intercept Promised to Reveal Everything. Then Its Own Scandal Hit. *The New York Times*, 2020.
- [18] Lokman Tsui. The importance of digital security to securing press freedom. *Journalism*, 20(1):80–82, 2019.