



Report of the Dane County Election Security Review Committee

July 25, 2022

Attacks on election personnel are no longer unthinkable, so security partners must upgrade their ability to respond today. Once the threat finds a target, however unlikely or undeserved, it may be too late.¹

I. Introduction

The integrity of our election processes are under threat, from false claims that vote counts are manipulated, false charges that voter fraud is rampant, and efforts to intimidate election officials and poll workers. These risks became more explicit and more dangerous in 2020 because of Donald Trump's repeated (and false) insistence that he won the presidential election, and his efforts to pressure state election officials to change vote totals.² These efforts spilled into Wisconsin, with provably false claims of election fraud and continued efforts to undermine confidence in the election process.

The 2020 election in Wisconsin was repeatedly confirmed as free and fair, with dedicated election officials and poll workers doing their best work under difficult circumstances and unprecedented levels of scrutiny.³ Nevertheless, election officials were subjected to threats, including the Madison City Clerk, who was the target of death threats after an extremist website falsely accused her of counting fake ballots.⁴

Challenging the legitimacy of election results has become a political tactic, wielded as a way to undermine confidence in the electoral system. One consequence is increased physical threats to election

¹ The Elections Group. 2020. *Running Elections Without Fear: Ensuring Physical Safety for Election Personnel*, 6.

² David T. Canon and Owen Sherman. 2021. "Debunking the "Big Lie:" Election Administration in the 2020 Presidential Election," *Presidential Studies Quarterly* 51:546-581 (September).

³ The results were confirmed on a post-election audit, a recount, and no credible evidence of inaccuracies or fraud has ever been shown. An analysis by retired GOP lawmakers, Republican-appointed federal judges, and Republican lawyers concluded that "[there] was no widespread voter fraud in Wisconsin. Trump-requested recounts only increased Biden's margin of victory. Legal claims targeted not fraud but ordinary election-administration challenges related to absentee and mail-in ballots. All were rejected." John Danforth, Benjamin Ginsberg, Thomas B. Griffith, David Hoppe, J. Michael Luttig, Michael W. McConnell, Theodore B. Olson and Gordon Smith. 2022. *Lost, Not Stolen: The Conservative Case that Trump Lost and Biden Won the 2020 Presidential Election*. July, p. 67. A 2021 Legislative Audit Bureau made administrative recommendations and suggested legislation, but found no irregularities that could have possibly affected the outcome. See Wisconsin Legislative Audit Bureau. 2021. *Elections Administration*, Report 21-19, October.

⁴ Peter Eisler and Jason Szep. 2021. "Pro-Trump News Site Targets Election Workers, Inspiring Wave of Menace," Reuters, December 3. <https://www.reuters.com/investigates/special-report/usa-election-threats-gatewaypundit/>.

officials and poll workers, ranging from efforts to disrupt tabulation to making overt threats against election officials. A nationwide survey of election officials in 2021 found that “one in three election officials feel unsafe because of their job, and nearly one in five listed threats to their lives as a job-related concern.”⁵ An investigation by Reuters found over 100 violent threats against election workers in 2020 battleground states (including death threats made in Wisconsin).⁶

These threats are serious enough that in July 2021, the U.S. Department of Justice created a task force to address threats to election workers,⁷ although very few prosecutions have taken place.⁸

To consider these issues, the Dane County Board of Supervisors established an Election Security Review Committee in March 2021, asking the committee to:

- Review the physical locations of election materials and equipment and evaluate their safety
- Evaluate the security of County Servers and election equipment and efforts to prevent online interference, both foreign and domestic
- Review security procedures and protocols and compare to best practices for both County and municipal election partners
- Review the security of election staff and clerks countywide
- Evaluate potential future threats to election security and to our democracy

The Committee included the following members:

- Calvin Barrett, Dane County Sheriff
- Nick Bubb, Special Assistant to the Dane County Director of Administration
- Yogesh Chawla, Dane County Board of Supervisors, District 6
- Lindsey Johnson, Village of Marshall Clerk
- Kenneth Mayer, Professor of Political Science, UW Madison (Committee Chair)
- Scott McDonell, Dane County Clerk
- Sam Olson, Dane County Chief Information Officer
- Mary Price, Town of Perry Clerk
- Maribeth Witzel-Behl, City of Madison Clerk

The committee focused on the infrastructure of election administration, the safety of election officials, and the physical security of election offices in Dane County. Our efforts included a review of facilities in Dane County, discussions with municipal clerks, security reviews by the Department of Homeland

⁵ Bipartisan Policy Center and Brennan Center for Justice. 2021. *Election Officials Under Attack: How to Protect Administrators and Protect Democracy*. June 16, p. 4.

⁶ Linda So and Jason Szep. 2021. “U.S. Election Workers Get Little Help from Law Enforcement as Terror Threats Mount,” *Reuters*, September 8. <https://www.reuters.com/investigates/special-report/usa-election-threats-law-enforcement/>.

⁷ U.S. Department of Justice, Deputy Attorney General, Memorandum for All Federal Prosecutors/Director, Federal Bureau of Investigation, *Guidance Regarding Threats Against Election Workers*, June 25, 2021. <https://www.justice.gov/dag/page/file/1406286/download>.

⁸ Michael Wines and Eliza Fawcett. 2022. “Violent Threats to Election Workers Are Common. Prosecutions Are Not.” *New York Times*, June 27.

Security, discussion with the local offices of the FBI, a survey of clerks around the county, and a review of the policy and academic literature on election security.

II. Summary of Conclusions and Recommendations

Our main conclusion is that the current physical infrastructure of election administration in Dane County and municipalities in Dane County are inadequate for a function identified as “critical infrastructure.” Resolving this will require attention and resources.

- Physical threats to clerks, their staff, and poll workers undermine election integrity and pose a danger to those individuals engaged in the vital task of running elections.
- Municipal clerks in Dane County are concerned about threats to their safety and the safety of their staff. The possibility of threats in future elections that could interfere with the election process must be taken seriously. We recommend that clerks be surveyed regularly to measure these concerns.
- The current physical offices of the Dane County and Madison City clerks, the facilities for storing election equipment between elections, and facilities for storing ballots for the required 22 months after federal elections, are not at standards appropriate for a such a critical function.
- Clerks need resources. Local government should allocate resources necessary to allow clerks to update their office physical structures with features that can prevent or mitigate the effects of direct threats to their safety, including access controls, barriers, and CCTV systems.
- Local governments and clerks should review the physical security of their election administration offices and the safety of their personnel; develop plans for responding to threats; establish ongoing relationships with law enforcement to anticipate and monitor potential threats; obtain training in threat de-escalation; and participate in the Dane County Sheriff Office’s Active Threat Response Training.
- Dane County and Madison Clerk functions related to election administration should be placed in a dedicated facility or office, with updated access control, fire and water detection and prevention systems, proper storage and safety measures, among other safety improvements. This should be initiated before the 2024 general election and should accommodate county growth over the next 20 years.

III. Discussion

A. Elections as Critical Infrastructure

The institutions and processes for conducting elections were designated as “critical infrastructure” by the Department of Homeland Security in 2017. While much of this focus has been on cybersecurity, an update to the Election Infrastructure Subsector-Specific Plan identified “Addressing Physical Security for Election Facilities and Personnel” as a priority.⁹ While the bulk of the recommendations involve documenting, reporting, and responding to threats, we believe that county officials should prioritize a risk management strategy of preventing physical threats as well mitigating the effects of these threats should they occur.

While many of the recommendations and analyses we found treated physical protection as a lower priority than cybersecurity, the guidelines and definitions make clear that the physical infrastructures are

⁹ https://www.cisa.gov/sites/default/files/publications/ei-ssp-2022-status-update_508.pdf

potentially vulnerable, from the organization of election administration offices to the standards for secure storage of election equipment between elections.

The Election Assistance Commission defines physical security as “standards, procedures, and actions taken to protect voting systems and related facilities and equipment from natural and environmental hazards, tampering, vandalism, and threats.”¹⁰ A key element is the degree of control election officials have over the facilities used to carry out their administrative functions, and the organization of those facilities in balancing public access and security. In particular, the EAC recommended a risk assessment that included

a physical security review to assess access and controls of all office and storage facilities used in the election administration process. Consider the relative security of other agencies sharing the facilities. Evaluate disaster recovery, terrorism, and weather-related considerations, and develop a plan to mitigate such risks.

[and] a physical security review to assess access and controls of the facility in which the voting systems equipment is stored and maintained.¹¹

The Brennan Center for Justice went further, suggesting several steps to physically protect election officials: installing bullet proof barriers in election offices; installation of panic alarms, key card access systems, camera surveillance; and steps to protect the personal information of election officials from online dissemination.¹²

Potential vulnerabilities include unauthorized access to facilities with stored election equipment; threats to personnel at clerks’ office; environmental damage to equipment; disruption of election preparation operations; and interference with early voting, absentee ballot processing, or election day operations.

B. Cybersecurity

During the 2016 Presidential election cycle Homeland Security alerted election officials nationally of attempts by US based and foreign actors to interfere with the election using online tactics. For example, Russian hackers successfully infiltrated¹³ the Illinois voter database. There have also been reports of Iran and China targeting election infrastructure and candidates.¹⁴

In response to these threats Dane County spent ample resources to better harden and monitor the County IT and the County election infrastructure against cyber-attacks. Some examples include:

¹⁰ U.S. Election Assistance Commission, *Election Management Guidelines*, chapter 3 (Physical Security), 21. https://www.eac.gov/sites/default/files/eac_assets/1/6/260.pdf.

¹¹ Ibid, 22.

¹² Derek Tisler and Lawrence Norden. 2022. “Estimated Costs for Protecting Election Workers from Threats of Physical Violence,” Brennan Center for Justice, May 3. <https://www.brennancenter.org/our-work/research-reports/estimated-costs-protecting-election-workers-threats-physical-violence>.

¹³ Tom Burt. 2020. “New cyberattacks targeting U.S. elections” Vice President Customer Security and Trust Microsoft. September 10. <https://blogs.microsoft.com/on-the-issues/2020/09/10/cyberattacks-us-elections-trump-biden/>.

¹⁴ Rick Pearson. 2019. “3 Years after Russian Hackers Tapped Illinois Voter Database, Officials Spending Millions to Safeguard 2020 Election.” *Chicago Tribune*, August 10. <https://www.chicagotribune.com/politics/ct-illinois-election-security-russian-hackers-20190805-qtoku33szjdrhknwc7pxbu6pvq-story.html>.

- Increasing FTE staff to include two full time dedicated cyber security staff.
- In 2019, DCIM hired an outside consultant company to provide a full review of the County IT security posture and recommend improvements. Implementation of the recommendations has substantially improved the County's security.
- Joining multiple partner agency groups to share information on the local, state and federal levels.
- Employing online tools to greatly reduce the likelihood of DDOS attacks of the County election results.
- Upgrading election equipment to the latest standards including a higher level of encryption.
- Conversion from older communications technology to a privatized network for elections equipment.
- Installation of a network sensor provided by the Center for Internet Security that identifies threats and suspicious behavior in real time providing 24/7 monitoring by a fully staffed NOC team.
- Regular penetration testing from Homeland Security.
- The continued implementation of secondary datacenter for active-active redundancy.
- A comprehensive change in data backup procedures including fully offline backups.
- Weekly cyber hygiene scans of perimeter systems by CISA - any issues identified get categorized in one of four levels based on severity – DCIM addresses the highest priority items immediately.
- Expanded use of Multifactor Authentication.
- Privileged Account hardening and segmentation for core critical systems.
- Expanded threat analytics and response as well as DNS Threat Protection for all end points.

As a result of these improvements the County now has a strong defense against online attacks. Additionally DCIM has assisted other municipalities within Dane County during cyber related events – providing staff time and equipment where needed. DCIM continues to keep on hand additional equipment that be activated and provided to other municipalities to provide rapid support as needed.

C. The Effect of Changing Voter Practices

The COVID-19 pandemic dramatically changed the ways that voters engage with the election process. The primary change has been an enormous shift to mail absentee voting in place of in person early voting and Election Day voting. In the 2020 general election, 192,671 Dane County voters used a mail absentee ballot, a more than 10-fold increase over 2016. It is likely that many of these voters will continue to rely on mail voting, as mail votes as a percentage of total votes remained high in the 2022 Spring election (29%) – more voters cast a mail ballot in this low turnout election than in the 2016 general election.

A permanent shift to high levels of mail absentee voting imposes different administrative burdens on election administrators: processing absentee ballot applications, preparing and sending ballots, and handling and storing returned ballots takes time, staff, and secure space, which can be in short supply (in the 2022 primary, Madison clerk's office staff performed some non-sensitive administrative tasks in hallways of the City County building because of a lack of space).¹⁵

¹⁵ The workload of Election Day and in person early voting is distributed across all polling places or early voting locations. Mail absentee voting, by contrast, is typically managed at a single location prior to Election Day.

Under current Wisconsin law, local clerks are prohibited from opening and counting absentee ballots until Election Day.¹⁶

D. Department of Homeland Security SAFE Review

The Department of Homeland Security conducted a Security Assessment at First Entry (SAFE) review of the Madison city clerk and the Dane County clerk offices. SAFE reviews are “designed to assess the current security posture and identify options for facility owners and operations,” and identify gaps in planning and structures.¹⁷

The review noted a lack of entry controls to the building, a lack of camera surveillance in the building and clerk’s office, unsecured entry passages that can be accessed from other offices, an absence of written emergency procedures for office intrusion, and some sensitive equipment secured by a single locked door.

To give an example, on the day of a SAFE review site visit a person wearing camouflage and a facemask had entered the City Clerk’s office with a camera, created a disturbance, and moved around the City-County building attempting to open locked doors. By the time law enforcement arrived, the man had left the building, and was never identified.

E. Physical Office Arrangements

Clerks operate in a wide range of circumstances, from clerks with multi-person staff located in municipal buildings to those operating mostly out of their homes.

The DHS SAFE reports noted that both the Madison and Dane County clerks are located in a building with minimal access control or security. The Dane County Clerk is in an office with a locked door and barrier between the public lobby and the work area, but the office shares common areas with offices lacking access controls.

Clerk facilities, which must balance security needs with public access and transparency requirements, often lack basic protections: office work areas open to the public; absence of physical barriers to protect against unauthorized intrusion during business hours; unsecured entry points even when the main entrance has barriers; a lack of security planning; storage areas secured behind a single locked door; inadequate storage space.

City of Madison election equipment – ballot boxes and tabulators - is stored in a leased office facility with an alarm, but it is vulnerable to water damage (some election equipment is covered by tarps to protect against a leaking ceiling). All municipalities use paper ballots, and those that must be retained for 22 months pursuant to federal law¹⁸ are kept in a locked room without other access control or storage infrastructure (such as shelves or cabinets).

It is, of course, obvious that election equipment and stored ballots must be reliably secured – so obvious, in fact, that most recent work on election security takes the existence of such protections as a given.

¹⁶ Wisconsin Statutes 6.88(3)(a).

¹⁷ The Committee reviewed the reports in closed session pursuant to Wisconsin Statutes 19.85(1)(d).

¹⁸ 52 US §20701.

Recommended practices include storing election equipment in “locked facilities with 24-hour video surveillance and controlled access.”¹⁹

Around the county, much of the office space available to clerks is based on requirements and structures that (like the City County Building) are decades old (if not older), and which have not been updated to reflect current clerk responsibilities and threats to election administration. We strongly encourage local governments to plan for upgrading these physical spaces to reflect the requirements of a critical infrastructure function.

Local governments should also ensure that clerk’s offices have sufficient staff to perform election-related duties. In the City of Madison, for example, staffing in the Clerk’s office has remained flat since 2019 (at 10 FTE).

F. Transparency and Public Education

Election officials play a key role in public perceptions of the integrity of the election process, and there are steps they can take to enhance public confidence. Public outreach can reduce the impact of disinformation and may reduce the likelihood of a misunderstanding becoming the basis of a threat.

The following are some of the key features of Dane County elections:

1. All municipalities in Dane County use paper ballots
2. Election returns and vote totals are checked against poll book records.
3. Audits occur after every regularly scheduled election, with ballots in a sample of reporting units hand counted and compared against election night tabulations, with confirmation of chain of custody, and ballot security. These audits occur in a noticed and open public meeting, with members of the public able to observe. Audit reports are public.²⁰
4. All ballot images are uploaded to a website maintained by the Dane County Clerk, organized by reporting unit; this allows members of the public to examine every ballot cast. Ballots cannot be linked to voters, preserving the privacy of the voting booth.

G. Survey of Clerks

To gather information about the experience of municipal clerks and their views about election administration, the committee distributed a survey to municipal clerks in Dane County. The survey items

¹⁹ Knodel, Mallory, William T. Adler, and Hannah Quay-de la Vallee. 2020. *Election Cybersecurity 101 Field Guide: Physical Security*. Center for Democracy & Technology. <https://cdt.org/insights/election-cybersecurity-101-field-guide-physical-security/>.

²⁰ <https://elections.countyofdane.com/Auditing>.

were similar to those in a 2022 Brennan Center for Justice study.²¹ Fifty clerks responded.²² The topline results show that threats to Dane County clerks are a serious problem:

- 84% of Dane County clerks (42 of 50) say that threats against election officials have increased in recent years. 14% say threats have remained the same, and 2% say threats have decreased.
- Nearly 1/5 of clerks (9 of 50, or 18%) reported receiving a threat related to their election work. Almost all of the threats (89%) occurred during or since the 2020 election.
- Among clerks who were threatened, almost all (88%) received multiple threats. More than half of the threatened clerks regarded the threats as serious enough to report them to municipal police or the FBI. Clerks who reported threats to law enforcement were generally satisfied with the response.

This experience has led to significant worry about staff safety in the next few years, with 70% of clerks expressing moderate to extremely high levels of concern.

The survey asked clerks about their levels of concern on a range of issues.

Level of concern	As an election official, How concerned are you in future elections about:				
	Your own safety or the safety of your staff?	Being harrassed over the phone?	Being verbally harrassed on the job?	Your family or loved ones being threatened or harassed?	Being assaulted on the job?
Not at all concerned	6%	6%	6%	44%	24%
A little concerned	24%	16%	16%	32%	46%
Somewhat concerned	52%	44%	42%	18%	26%
Very concerned	18%	28%	34%	6%	4%
Extremely concerned	0%	6%	2%	0%	0%
Somewhat or higher concern	70%	78%	78%	24%	30%

²¹ Brennan Center for Justice. 2022. *Local Election Officials Survey*. Benenson Strategy Group. March. <https://www.brennancenter.org/our-work/research-reports/local-election-officials-survey-march-2022>.

²² The survey was not designed as a sample from which we derive estimates from a large population. As such, we are not making statistical claims about the entire population of Dane County clerks, but report the responses of clerks (or staff) from 50 of Dane County’s 62 municipalities. We note that because election administration in Wisconsin is decentralized, with each municipality having its own clerk responsible for running elections, the settings can be very different. Clerks in the cities of Madison (population 269,840) and Sun Prairie (population 35,967) will have office structures and administrative needs that differ from clerks in the Town of Perry (population 730) or the Village of Belleville (population 2,491 of which 1,909 live in Dane County). We weight each clerk’s response equally irrespective of municipality population. To preserve anonymity, we did not ask demographic questions or solicit information about municipality characteristics. We do not have any reason to believe that the results would have been different if all 62 clerks responded.

If “not at all” and “a little” concerned are combined as expression of low level concerns, these results are alarming: 70% of clerks are concerned about the safety of their staff; 78% are concerned about harassment over the phone or on the job; 24% are concerned about family or loved ones being harassed; and 30% are concerned about being assaulted on the job.

The concerns reflected in these results are consistent with national polls of election officials,²³ and pose a significant challenge: in the face of such threats, an exodus of election officials and difficulty in recruiting or retaining high quality staff could affect the efficiency of election administration.

To monitor these concerns, we recommend continuing surveying of clerk views at least once each year.

²³ Brennan Center for Justice. 2022. *Local Election Officials Survey*. Benenson Strategy Group. March.

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