



# ELECTION RESULTS REPORTING RISK AND MITIGATIONS

*Results reporting systems have inherent risks, both static (risks to systems from cyber actors) and dynamic (risks to information over time). These risks can be managed through mitigating measures<sup>1</sup>.*

	RISK	MITIGATING MEASURES
<b>STATIC (SYSTEM)</b>	Like all technical systems, the technology used to report unofficial vote counts could be vulnerable to malicious attacks and errors.	Security measures such as physical transport of official data, and auditing measures help manage risk and ensure integrity of election results.
	Unofficial election reporting often occurs on public-facing websites, presenting an attack surface for malicious actors. A successful attack would not change official results but can endanger public confidence.	Ensure tabulation and reporting systems have controls in place, including strong passwords, multi-factor authentication, and firewalls. Maintain an air-gap from the official tabulation systems. Use duplicate systems and media sources for redundancy.
	Some jurisdictions electronically transmit, such as by modeming or email, unofficial results from polling locations, creating cyber risks such as person-in-the-middle attacks.	Jurisdiction should only use electronically transmitted results for unofficial reporting. Manually transmitted results should be used in the official tabulation system. Create duplicate copies and validate their consistency.
	Reporting results may have temporary data errors that will be corrected over time. Errors can occur through hand entry of data, miscommunication of results, and data transmission.	Every state has a canvass process to detect and mitigate these errors. Audits, such as risk-limiting audits, and validation against duplicate sources will allow for the detection and correction of these errors.
	Results reporting systems can be taken offline through availability attacks such as DDoS.	Security measures such as Intrusion Protection Systems, DDoS protection services, as well as duplicate sites and media sources ensure data availability.
<b>DYNAMIC (INFORMATION)</b>	Dynamic risk exists because results change over time, which may confuse voters. Since the public may be unaware of this process, deviation from expected results may create suspicion and mistrust and enable misinformation and disinformation about election results.	Election officials should make every effort to provide transparency in the process, including reporting the number and types (e.g. absentee, provisional) of ballots yet to be counted. This helps educate voters on the variability of information.
	<b>Natural Evolution:</b> Tabulating election results may mean leads in electoral races change over time. Typically, this change occurs most dramatically on election night and into the canvass as election officials process and tabulate ballots.	Results evolve naturally as votes are counted through the canvass process to determine final, conclusive results. Educate voters and the media about the dynamic nature of results reporting through public messaging and engagement.
	<b>Errors and Corrections:</b> As in any system, accidental errors can occur within the dynamic environment of the unofficial election reporting system. When errors are caught and addressed, reporting numbers may change drastically over a short period of time.	The post-election canvass and audits, such as risk-limiting audits, are used to detect errors, make corrections, and determine final, conclusive results. Election officials may consider publicly logging the changes in unofficial results after election night.
	<b>Exit Polls:</b> While news organizations rarely use exit polls alone to call election results, leaked results of exit polling on election day can create public confusion about accuracy of final results.	Diverse methods of verifying quality of election data provides a measure of detection against compromises. Detecting anomalies that may maliciously or accidentally impact election results reporting allows election officials the opportunity to respond and resolve the issues.

<sup>1</sup>Some information on this chart was derived from Stephen Pettigrew and Charles Stewart's recent analysis: "Protecting the Perilous Path of Election Returns" (2020)