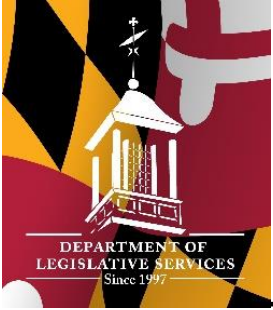

Electronic Ballot Return

**Presentation to the
Ways and Means Committee**

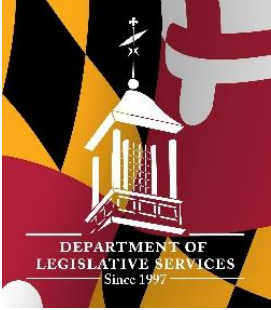


January 30, 2024



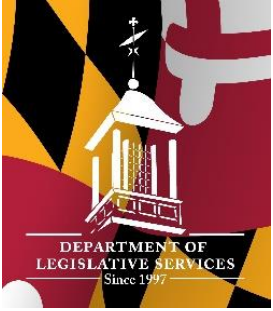
Outline of Presentation

- I. What is electronic ballot return?
- II. Military and overseas voters and voters with disabilities
- III. Electronic ballot return in other states
- IV. Litigation concerning electronic ballot return
- V. Potential advantages of electronic ballot return
- VI. Potential disadvantages of electronic ballot return
- VII. Alternatives to electronic ballot return



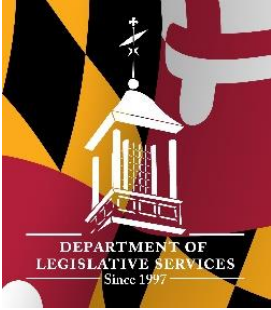
What Is Electronic Ballot Return?

- It is the return of voted ballots to election officials by electronic methods, usually through the Internet.
- Electronic ballot return is distinct from the use of electronic methods to deliver blank ballots to voters.
- Maryland allows all voters to receive and mark blank ballots electronically.
- Maryland does not allow any voters to return voted ballots electronically.
- In Maryland, ballots received or marked electronically must be printed out and mailed to election officials to be counted.



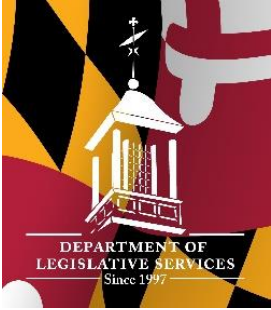
Military and Overseas Voters





Military and Overseas Voters

- The federal Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) helps military and overseas voters cast ballots in federal elections.
- UOCAVA applies to (1) members of the United States Uniformed Services and merchant marine while they are away from home on active duty and their spouses and dependents, and (2) United States citizens residing outside the United States.
- Among other things, UOCAVA requires that military and overseas voters have the option to receive blank absentee ballots electronically.
- UOCAVA does not require states to allow a military or overseas voter to return a voted ballot electronically.



Military and Overseas Voting in Maryland

2020

Total of 21,593 ballots
returned

6,879 military

14,714 civilian

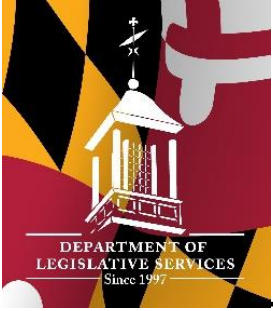
2022

Total of 4,763 ballots
returned

926 military

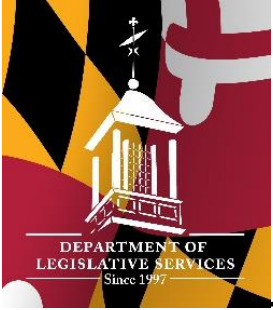
3,837 civilian

Source: U.S. Election Assistance Commission



Voters with Print Disabilities

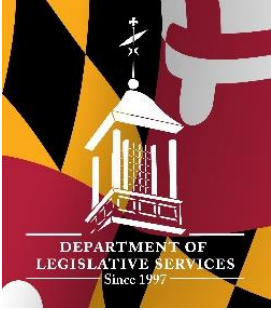




What Is a Print Disability?

- Individuals who are unable to read or use regular print materials as a result of temporary or permanent visual or physical limitations.
- This includes those who are blind or have another disability that prevents reading or handling print materials.





Individuals with Potential Print Disabilities in Maryland

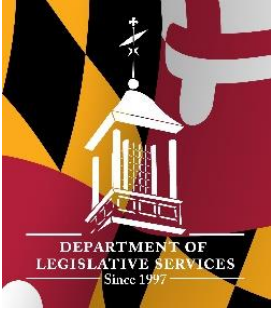
Vision Disability	118,299 (2.0%)
Self-care Disability	117,631 (1.9%)

(% = percentage of State population)

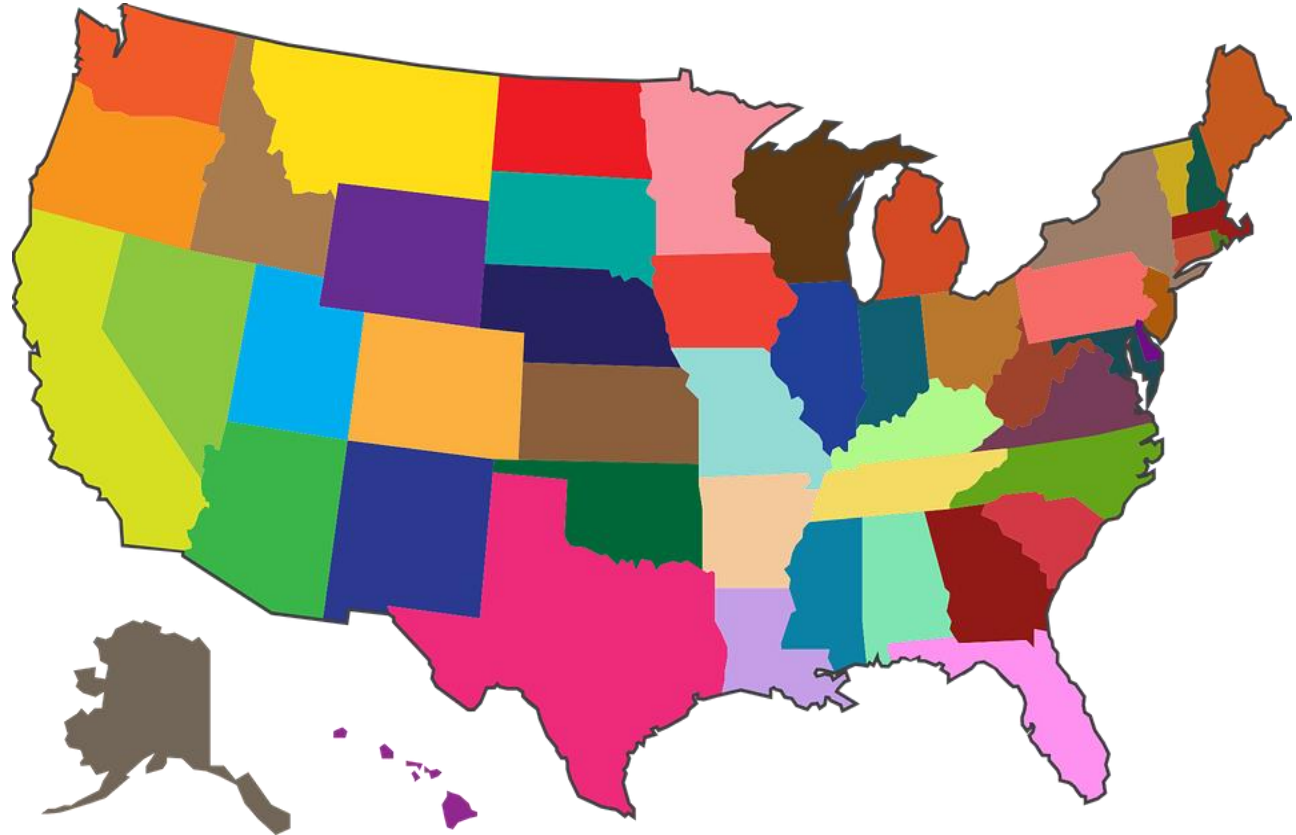
Vision Disability: Blind or serious difficulty seeing, even when wearing glasses.

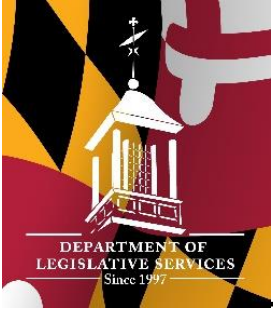
Self-care Disability: Difficulty bathing or dressing.

Source: Disability Compendium, 2021 American Community Survey

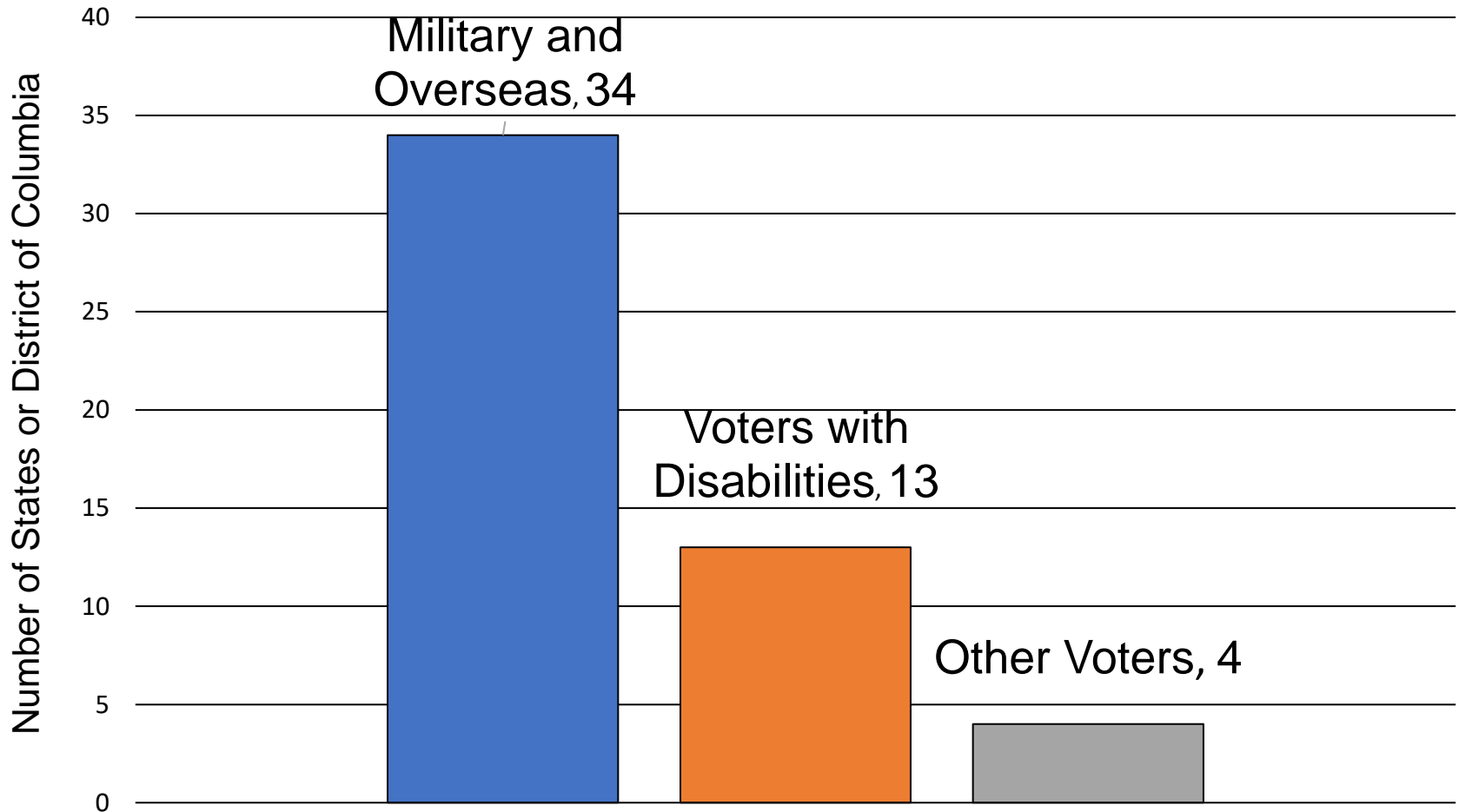


Electronic Ballot Return in Other States

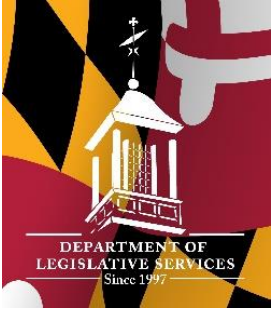




Eligibility for Electronic Return



Source: National Conference of State Legislatures, Department of Legislative Services



Methods of Electronic Ballot Return

I. Fax

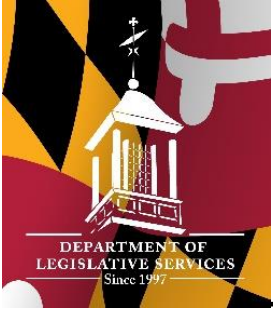
A fax may be sent through traditional telephone lines or through the Internet.

II. Email

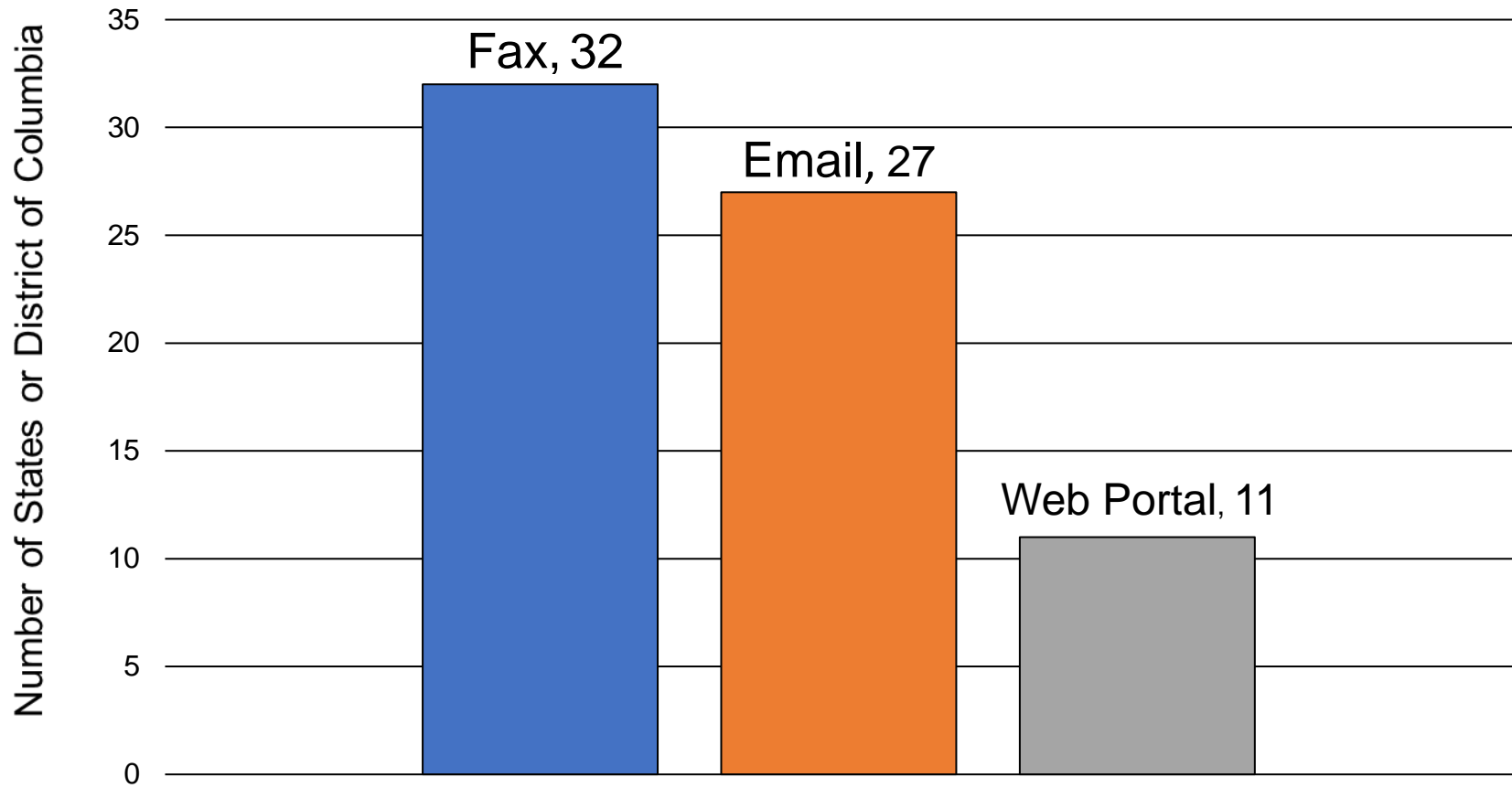
The voted ballot and any accompanying documents are returned as email attachments.

III. Web Portal

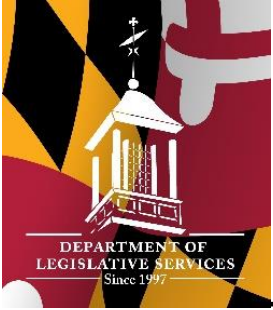
A publicly accessible web-based application for returning voted ballots.



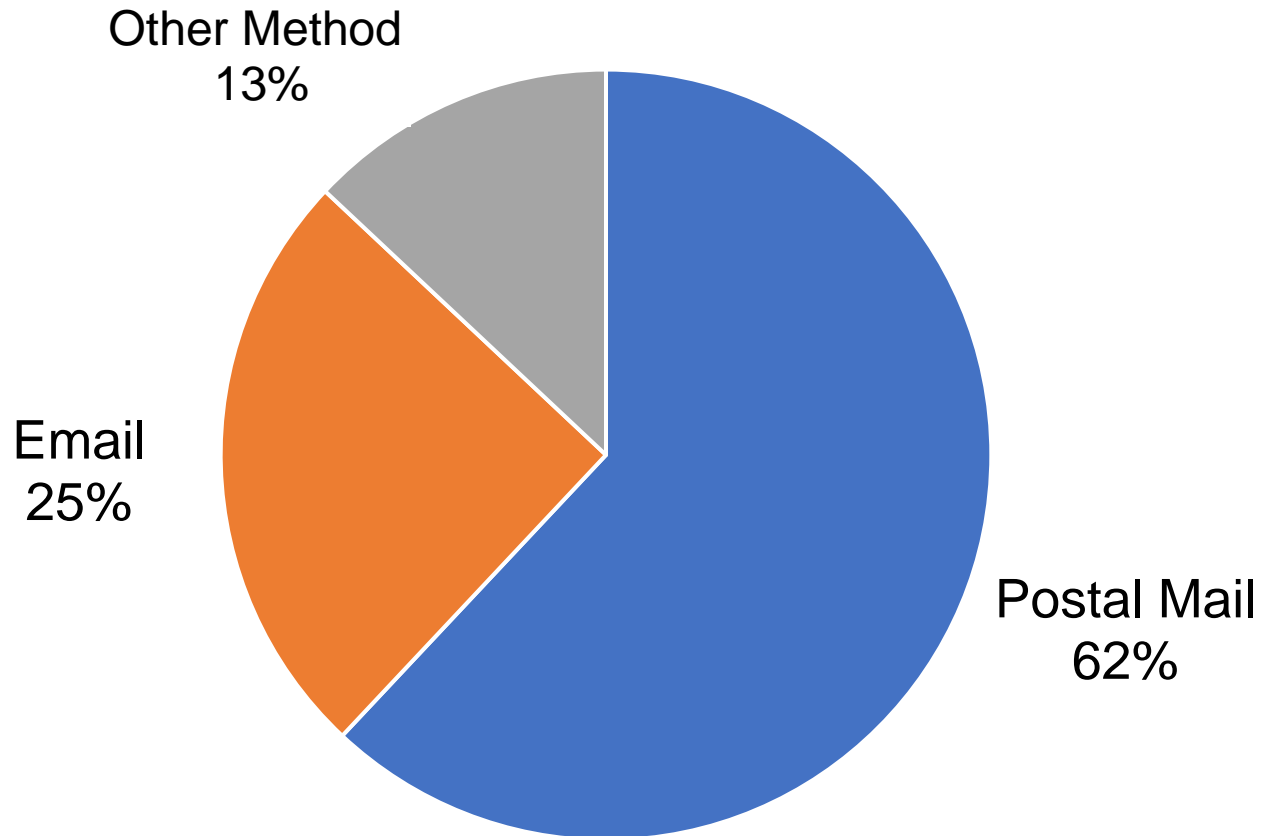
Methods of Electronic Return



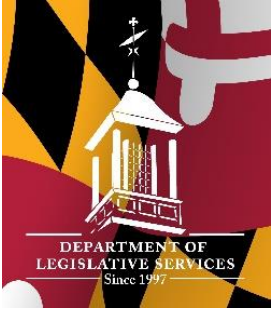
Source: National Conference of State Legislatures, Department of Legislative Services



Return Method for Military and Overseas Ballots Nationwide in 2022



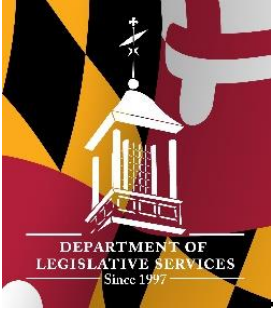
Source: U.S. Election Assistance Commission



Litigation Concerning Electronic Ballot Return

Overview

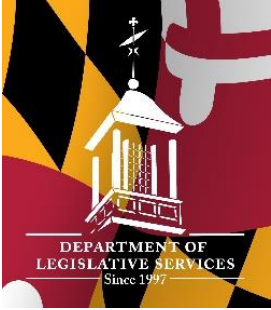
- Plaintiffs are typically those with print disabilities, like blindness or motor issues.
- Plaintiffs seek more accessible absentee voting programs, such as electronic ballot marking and electronic ballot return.



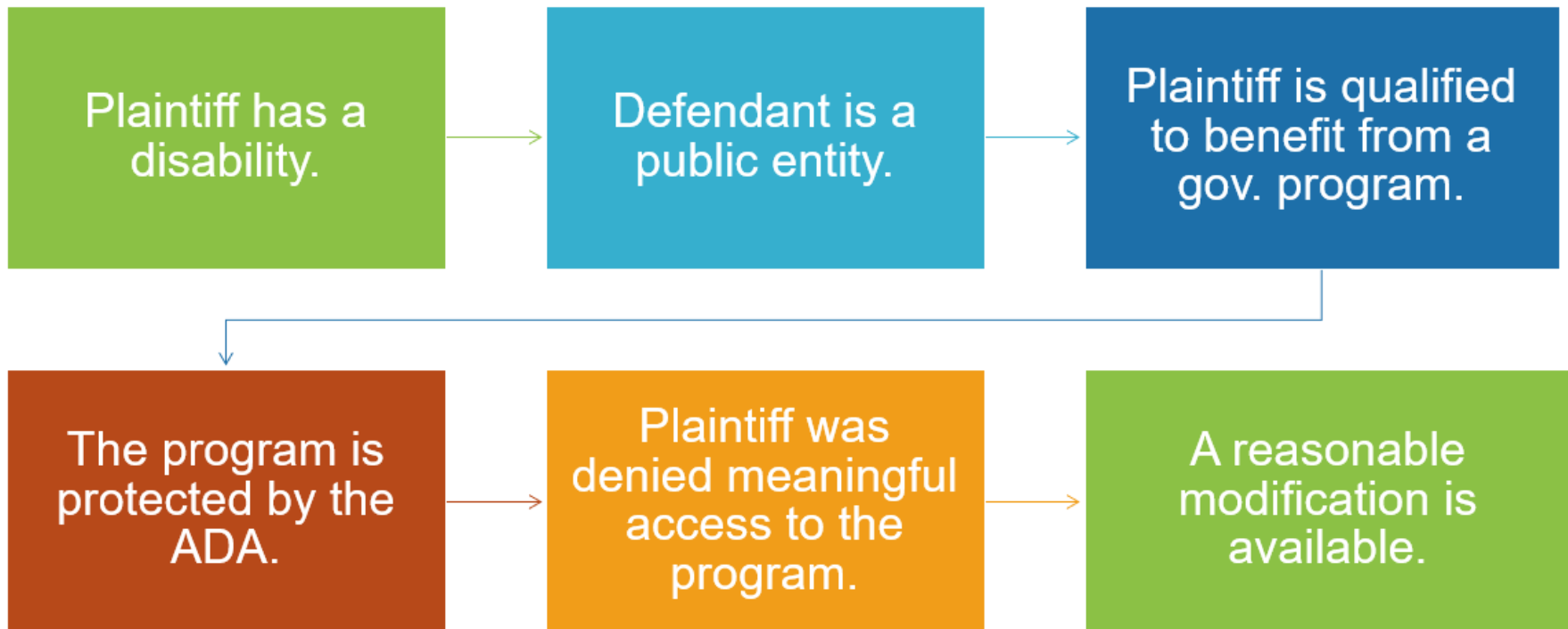


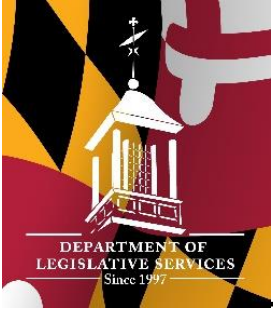
Overview

- Relief is most often sought under Title II of the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act.
- Plaintiffs allege that the failure to provide an accommodation for absentee voting requires disabled individuals to rely on assistance from others, which prevents voters from voting absentee privately and independently.



Establishing a Violation





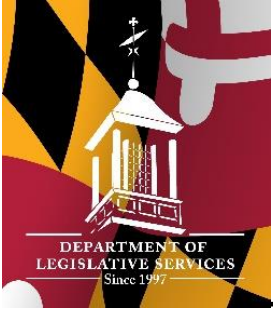
What Programs Are Protected?

- The ADA provides disability protections not just for broad public programs like voting, generally, but also for specific services, programs, or activities.
- This includes programs within voting, like absentee voting programs or early voting.



Meaningful Access

- Defendants have provided a benefit to nondisabled voters while denying that same benefit to plaintiffs on the basis of their disability.
- Plaintiffs allege that they were deprived of the opportunity to vote privately and independently without assistance, like their nondisabled counterparts – this denies them meaningful access.



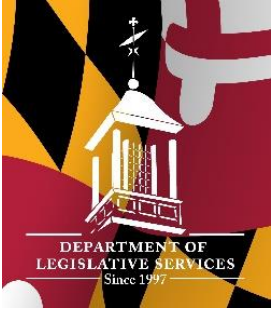
Reasonable Modification

- The court in *Lamone* then considered whether there is a reasonable modification that will provide meaningful access to the program.
- Defendant is not required to make modifications that fundamentally alter the program or impose undue hardship.



Typical Opposition

- There are other accessible ways to vote.
- If an injunction is sought, there is a high standard for relief.
- Accommodations would impose an undue hardship or fundamentally alter the nature of the service.
- Election security.



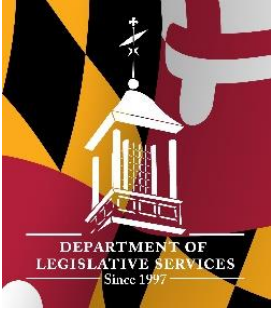
Uniformed and Overseas Citizens Absentee Voting Act

- When determining whether electronic ballot return is a reasonable modification to a state's absentee voting program, the court considers what type of absentee voting program is in place for UOCAVA voters in the state.
- The relief plaintiffs achieved usually tracks the state's policy for military and overseas voters.



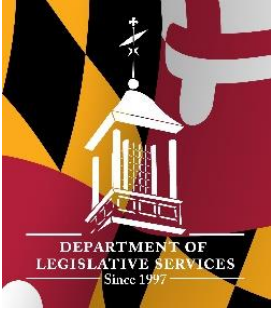
Outcomes

- Most legal actions brought by plaintiffs were successful in receiving some relief.
- Cases often ended in settlements.
- Other times, cases were decided by court rulings granting or denying an injunction.

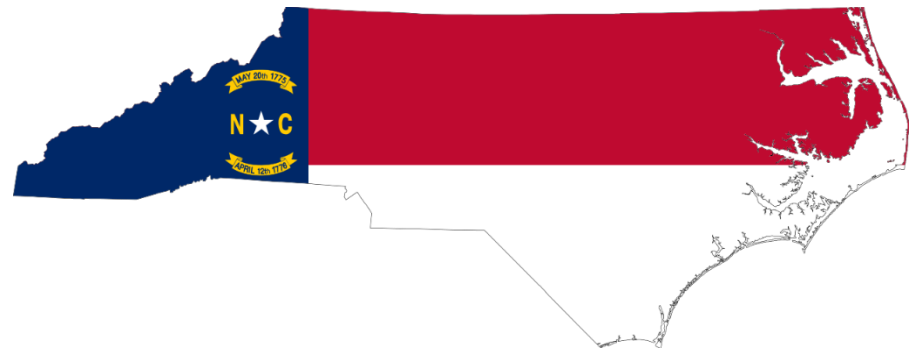


Case Studies





Taliaferro v. North Carolina State Board of Elections (2020)

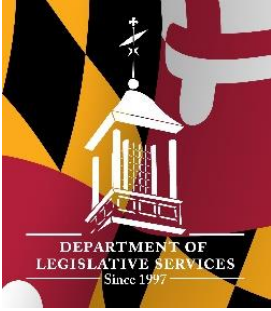


Outcome

The court found that plaintiffs are denied meaningful access to absentee voting and reasonable modifications are available because:

- Implementing an accessible system was feasible in five weeks;
- Electronic ballot return was already available for UOCAVA voters; and
- Security concerns did not outweigh private and independent voting because adding these voters to the existing electronic return system would not measurably increase any security risk.



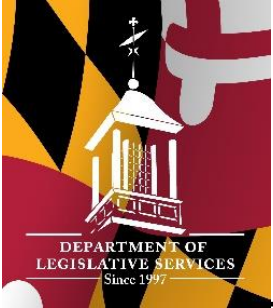


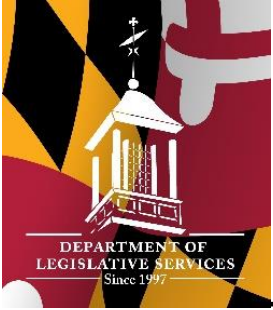
Hernandez v. NY State Board of Elections (2022)



Settlement

- The State Board of Elections must implement an absentee voting program that allows voters to electronically request, receive, and mark a ballot.
- No electronic ballot return.





Potential Advantages of Electronic Return

- I. Potential for increased voter turnout
- II. Improved access for military and overseas voters
- III. Improved access for voters with print disabilities



Increased Turnout

- **Estonia**

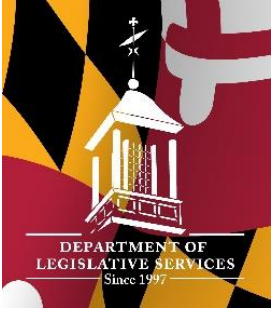
In 2002, Estonia passed legislation to enable Internet voting.

After the implementation of Internet voting in 2003, the voter turnout in parliamentary elections rose from 58.2% in 2003 to 61.9% in 2007.

In the European parliament elections, the turnout increased from 26.8% in 2004 to 43.9% in 2009.

In the 2009 local elections, voter turnout was 60.6%, which was about a 13% increase from the 2005 local elections, which had a turnout of 47.4%.

In addition to Internet voting, other factors may have contributed to increased voter turnout in Estonia.



Inconclusive Effect on Turnout

- **Petitpas, Electoral Studies (2021)**

Empirical records from case studies in various countries (Canada, Estonia, UK, Switzerland) are inconclusive.

Internet voting does not seem to have measurable effects on turnout.

Rather than attracting new voters, it mainly substitutes to existing voting means, such as postal voting.

- **Park, Journal of Cybersecurity (2021)**

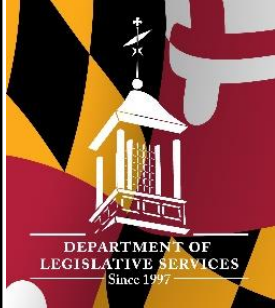
Internet voting may not increase turnout.

Studies on voter turnout have ranged from finding:

No impact on turnout (e.g., Switzerland);

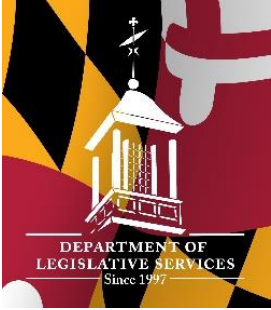
A slight decrease in turnout (e.g., Belgium); and

A slight increase that nonetheless does not solve the problem of low-voter turnout.



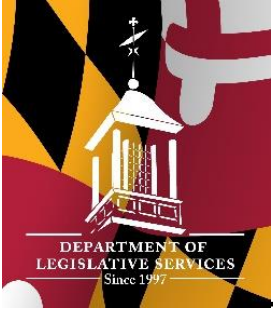
Improved Access for Military and Overseas Voters

- In 2018 and 2020, the states offering electronic ballot return experienced a more than 3% higher turnout among military and overseas voters compared to those without this option.
- A study conducted on West Virginia's trial of a mobile voting app during the 2018 U.S. midterm elections revealed that in participating counties, mobile voting resulted in a 3% to 5% increase in turnout among registered expatriate voters.



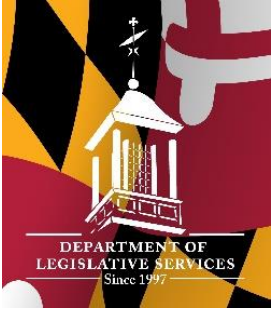
Improved Access for Voters with Disabilities

- Voters with print disabilities may not be able to mail a paper absentee ballot without assistance.
- Electronic ballot return would allow some voters with print disabilities to return a voted absentee ballot to election officials independently, without requiring the assistance of another individual. Election officials would still have to remake the ballot on standard ballot paper before it could be scanned and counted.
- Electronic ballot return would eliminate the risk that the voter's selections would be revealed to an individual assisting a voter with mailing the ballot. But the secrecy of the voter's ballot would still be at high risk of being violated during the electronic return process.



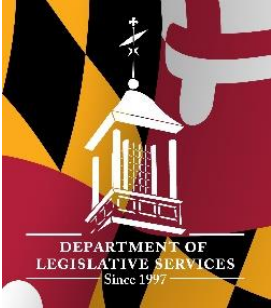
Potential Disadvantages of Electronic Return

- I. Insecurity
- II. Loss of Voter Privacy
- III. Loss of Public Confidence in Elections



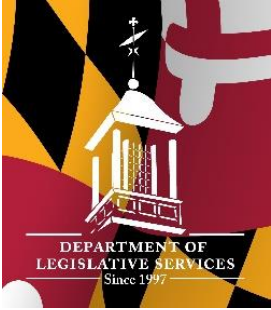
Voting Is Different from All Other Online Transactions

- **Ballot Secrecy** – How an individual votes must remain secret. This makes it much more difficult to verify that votes were counted accurately. Secrecy is not needed for online commercial transactions.
- **High Stakes** – Elections have enormous consequences that profoundly affect the lives of millions. No other online transactions are comparable.
- **Low Tolerance for Error** – The significant incidence of error and fraud that is typical in online commerce is unacceptable in elections. All legitimate votes must be counted, and any illegitimate votes rejected.
- **No Opportunity for Correction** – For practical and legal reasons, it is very difficult or impossible to rerun an election if it is tainted by online ballot fraud. Most online transactions can easily be corrected if fraud or error occurs.



Security Risks of Electronic Ballot Return

- **Malware on Voters' Devices** – Malware is prevalent on many voters' smartphones and computers that would be used to cast ballots electronically. The malware may be undetectable. A sophisticated attacker could easily compromise many voters' devices.
- **Denial-of-service Attacks** – These attacks could target a particular area or demographic group, altering the outcome of an election. An election that is disrupted by a denial-of-service attack is very difficult or impossible to rerun.
- **Voter Impersonation** – There is no widely available method for reliably verifying voters' identities over the Internet. Without effective identification, widespread fraud is possible.
- **Ballot Interception** – Ballots transmitted over the Internet could be intercepted by an attacker and altered or deleted. This interference may be undetectable and likely uncorrectable if detected.



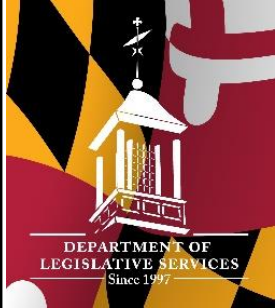
Security Risks of Electronic Ballot Return Are Greater Than Other Voting Methods

Internet Voting

- Attack altering thousands or millions of votes is feasible.
- Large-scale attack may be carried out by a small number of individuals or a single individual.
- Attack may be undetectable.
- Attackers may be located anywhere in the world, including in a country where they will not be punished for the crime.

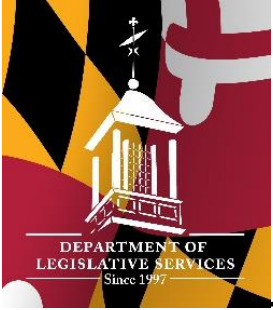
Traditional Voting (*i.e.*, in person or mail-in)

- Large-scale attack very difficult.
- Large-scale attack requires cooperation of many individuals to carry out.
- Large-scale attack is likely to be detected and thwarted.
- Attackers must be located in the United States, where they risk punishment for the crime.



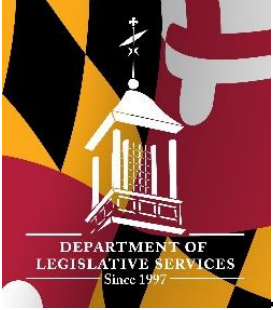
Expert Statements on Internet Voting

- **National Academy of Sciences**, Securing the Vote: Protecting American Democracy. “At the present time, the Internet...should not be used for the return of marked ballots. Further, Internet voting should not be used in the future until and unless very robust guarantees of security and verifiability are developed and in place, as no known technology guarantees the secrecy, security, and verifiability of a marked ballot transmitted over the Internet.” (2018) (consensus report)
- **United States Senate Intelligence Committee**, Report on Russian Active Measures Campaigns and Interference in the 2016 U.S. Election, Volume I: Russian Efforts Against Election Infrastructure. “States should resist pushes for online voting.” (2019) (bipartisan recommendation)



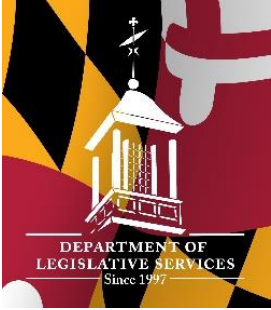
Expert Statements on Internet Voting

- **Cybersecurity and Infrastructure Security Agency, U.S. Election Assistance Commission, Federal Bureau of Investigation, and National Institute of Standards and Technology, Risk Management for Electronic Ballot Delivery, Marking, and Return.** “We recommend paper ballot return as electronic ballot return technologies are high risk even with controls in place...Electronic ballot return faces significant security risks to the confidentiality, integrity, and availability of voted ballots. These risks can ultimately affect the tabulation and results and can occur at scale.” (2020)



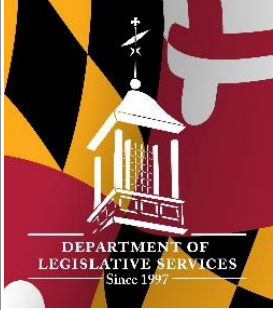
Expert Statements on Internet Voting

- **Working Group Hosted by the Center for Security in Politics at the University of California, Berkeley, Statement on Developing Standards for Internet Ballot Return.** “The Working Group concludes that the current cybersecurity environment and state of technology make it infeasible for the Working Group to draft responsible standards to support the use of Internet ballot return in U.S. public elections at this time...Implementing widespread adoption of secure and accessible Internet ballot return requires technologies that do not currently exist and others that have not been fully tested...The Working Group assesses that the risks associated with nation-states attacking end-user devices to impact U.S. public elections are problematically high and show no signs of declining.” (2022)



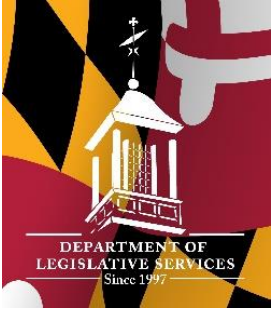
Loss of Voter Privacy

- An attacker could gain access to a ballot when it is in transit over the Internet and view and disclose the voter's selections.
- Ballots returned electronically are often linked with the voter's identity. For example, faxes and email attachments will include both the voter's personal information and the voter's marked ballot. For this reason, there is a high probability that the voter's selections will be known at least to the election official who receives the ballot.
- At least 22 states require a voter returning a ballot electronically to sign a statement waiving their right to a secret ballot. The Federal Voting Assistance Program requires military and overseas voters using its services to return a ballot electronically to sign a waiver of their right to a secret ballot.



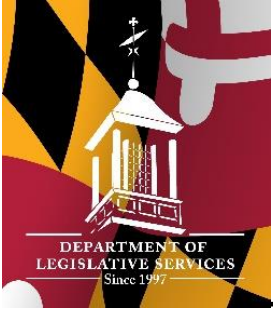
Loss of Public Confidence in Elections

- At a time when public distrust of election processes and results is already widespread, electronic ballot return introduces significant new risks that may further undermine public confidence in elections.
- The lack of a voter-verified paper record for ballots returned electronically makes it impossible for election officials to conduct effective audits to verify that election results are correct.
- In the absence of effective audits, it would be impossible to disprove false claims of fraud that are intended to undermine public confidence in elections.



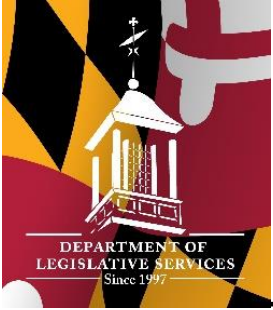
Potential Disadvantages of Electronic Ballot Return - Case Studies

- **New South Wales, Australia.** The online voting system crashed in local elections in 2021, preventing voters from casting ballots. The results in several contests were voided and the elections were rerun, without using Internet voting. The failure caused the state government to abandon Internet voting. A report issued in 2023 recommended that for security reasons, “paper-based voting should continue as the primary voting channel for the foreseeable future.” The report recommended an Internet voting option limited to blind or low-vision voters.
- **United States Postal Service.** The Postal Service secretly built and tested a blockchain-based mobile phone voting system. The system was never used in a real election and was abandoned in 2019 after researchers testing the system during a mock election found that it could be hacked in numerous ways.



Potential Disadvantages of Electronic Ballot Return – Case Studies

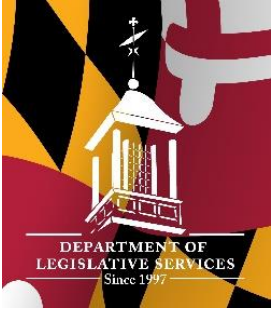
- **Ecuador.** Voters living abroad used a website to vote over the Internet in national elections in 2023. The website was targeted by denial-of-service attacks that flooded the system with millions of illegitimate requests. Many legitimate voters were prevented from casting ballots. The attacks originated from several nations, including Russia and China. The government voided the votes cast over the Internet and ordered that a new election be held among voters abroad for members of parliament. The revote was conducted through in person voting at sites located around the world rather than through Internet voting.



Alternatives to Electronic Ballot Return

- I. Curbside Voting

- II. Bringing Accessible Equipment to Voters' Homes

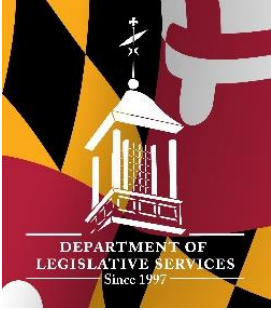


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Curbside Voting

- Curbside voting allows voters to cast ballots while in their vehicle outside a polling place.
- 27 states and the District of Columbia currently offer some form of curbside voting. Eligibility may be limited to the elderly, voters with disabilities, or those with health conditions. Maryland does not offer curbside voting.
- To make curbside voting accessible to voters with disabilities, accessible voting equipment must be made available at curbside. The Department of Justice recommends that accessible equipment be provided at curbside.
- In Dallas County, Texas (1.4 million registered voters) and Travis County, Texas (886,000 registered voters), a ballot marking device is taken to the voter's vehicle if needed. Those counties use the same Express Vote ballot marking device that Maryland uses.



Bringing Accessible Equipment to Voters' Homes

- To allow voters with print disabilities to vote from home privately and independently, Multnomah County, Oregon (Portland) and the City and County of San Francisco deploy teams of election officials to voters' homes with accessible voting equipment, such as a tablet or ballot marking device, and a printer. These teams also bring the voted paper ballot back to the election office while preserving the secrecy of the voter's ballot.
- A similar program in Maryland would provide another option for voters with disabilities who do not have access to a computer or printer at home and would allow those voters to return their voted ballots confidentially.