

WEST VIRGINIA

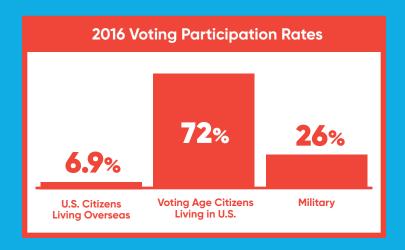
Providing a Convenient and Secure Voting Option for Uniformed Service Members

The Problem: West Virginians serving overseas can find it difficult to vote

West Virginia's Secretary of State Mac Warner understands firsthand how difficult it can be for soldiers living abroad to cast their votes. During his 23 years of military service, he saw how our current election system under serves thousands upon thousands of military personnel and ultimately leads to their disenfranchisement.

Under our traditional voting system, a military member can request either a paper or electronic ballot. If they select the paper option, a ballot is sent by mail, marked by hand, and returned by mail. Postal system delays make this method of ballot delivery and return problematic. For example, the unreliability of the postal service in the Middle East meant many West Virginians serving in that area, including Secretary Warner, were not able to vote in the 2012 and 2014 primary elections.¹

The electronic ballot process is similarly fraught. The electronic option requires voters to have access to a printer and scanner or fax machine in order to print, mark, and sign the ballot before scanning or faxing it back. This presents significant barriers to active duty military members, so much so that in 2016 the estimated voting participation rate for U.S. citizens living overseas was 6.9% compared to the 72% for voting age citizens living in the U.S., while military participation was 26%.²³





Our nation's military put their lives on the line to protect our way of life. Protecting their right to vote dictates that we move away from the traditional and antiquated processes of mail, email and fax machines for ballot delivery that have proven to be ineffective and less secure."

Secretary of State Mac Warner

^{1.} Secretary of State Mac Warner. WV's Secure Mobile Voting Application, https://sos.wv.gov/elections/Pages/MobileVote.aspx#:~:text=West%20Virginia%20has%20implemented%20a,and%20 return%20their%20ballots%20electronically,&text=In%20short%2C%20the%20nation%27s%20first,test%20pilot%20was%20a%20success.

^{2.} Federal Voting Assistance Program. 2016 Overseas Citizen Population Analysis Report (September 2018), https://www.fvap.gov/uploads/FVAP/Reports/FVAP-2016-OCPA-FINAL-Report.pdf
3. https://www.fvap.gov/info/reports-surveys/StateoffhaMilitan/Aster



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The Solution: A mobile voting process that is convenient and secure

After careful research into potential solutions, Secretary Warner and his team partnered with the Mobile Voting Project to implement a mobile voting pilot. Mobile voting offers several advantages over the traditional system:

First, it's more convenient:

Here's how it worked in 2018: A West Virginia military voter downloads the voting app and verifies their identity in order to access and mark their ballot. After reviewing that their ballot was marked correctly, they return it through the secure electronic portal to the county election official. Everything is done in one place and requires nothing more than a smartphone.



It's also more secure:

Mobile voting is more secure than other electronic balloting systems such as email. With email, voters are required to provide only cursory identifying information like a signature to access and mark their ballot. In West Virginia's 2018 mobile voting pilot, voters were required to complete an identity verification process that included comparing a live selfie to a photo ID and biometrics such as their fingerprint, adding safeguards to prevent fraud or voter impersonation.

Similarly, mobile voting offers a more secure method of electronically returning a voted ballot than traditional systems that rely on fax or email. In West Virginia's pilot, mobile votes were encrypted, transmitted, and stored on an immutable blockchain. As an extra measure of security, the voter received a copy of their ballot which could be verified against the anonymous ballots counted by the county elections office.



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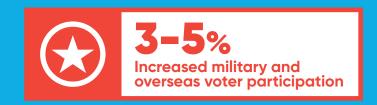
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The Pilot: Mobile voting increased turnout among eligible military and overseas voters

After a successful test run in two counties in May 2018, Secretary Warner offered mobile voting as an option for all West Virginia counties in November 2018. Ultimately, 24 of the 55 counties decided to allow mobile voting for eligible military and overseas civilians.

A volunteer in a remote West Africa village, a professor on an overseas sabbatical, and a deployed paratrooper are just a few of the examples of voters that leveraged the security and privacy features of mobile voting to vote from over 30 countries around the world.

A study from the University of Chicago suggests mobile voting increased turnout in the November 2018 election among military and overseas voters by 3–5 percentage points.⁴



Expanding electronic voting options to citizens with physical disabilities

West Virginia continues to explore how electronic ballot delivery and return can help citizens overcome barriers to democratic participation. In 2020, for example, Secretary Warner worked with the state's legislature to enact laws expanding electronic ballot return to people with qualifying physical disabilities. This law now allows eligible citizens who are unable to vote inperson and independently by mail-in absentee to instead cast their absentee ballot privately from their home using accessible electronic ballot delivery technology. West Virginia also continues to monitor the results of offering electronic ballot returns in its state and federal elections. 217 citizens living with physical disabilities took advantage of electronic ballot return in the November 2020 general election, and a third-party audit found no evidence of any internal or external tampering.⁵



It is often said that every vote counts. In West Virginia, every voter counts too. Online voting allows West Virginia to eliminate barriers and allow more of our citizens to participate in our democracy."

Secretary of State Mac Warner

^{4.} Fowler, Anthony. The Promises and Perils of Mobile Voting (September 2020), https://www.liebertpub.com/doi/10.1089/elj.2019.058

^{5.} National Cybersecurity Center. West Virginia Primary 2020 Post-Election Review, https://cyber-center.org/wp-content/uploads/2020/07/West-Virginia_DL_Review_Primary2020.pdf