November 16, 2021

President Shamann Walton
Supervisor Connie Chan
Supervisor Matt Haney
Supervisor Rafael Mandelman
Supervisor Gordon Mar
Supervisor Myrna Melgar
Supervisor Aaron Peskin
Supervisor Dean Preston
Supervisor Hillary Ronen
Supervisor Ahsha Safai
Supervisor Catherine Stephani
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689
via email

Dear President Walton and members of the Board of Supervisors,

As experts in election system security, and organizations that represent citizen stakeholders in the election process, we are writing to you today with grave concerns regarding an initiative of the San Francisco Department of Technology to develop and pilot, for voters with access and functional needs (AFN), an electronic ballot return system, which is not permitted under California law. Major project decisions and developments took place without transparency or public oversight or engagement, and without informing the San Francisco Elections Commission. As such, we urge you to pause the City’s contracting process for the project, to hold a public hearing on the project, and to consider initiating an investigation into the project.

The referenced project aims to address obstacles that AFN voters have, and we strongly support that intention and objective. We have long supported responsible uses of technology to facilitate voting for all voters, and we believe in the promise that technology can improve access and remove obstacles for voters with AFN. We would like to work together to explore opportunities to improve accessibility for all segments of the voting process, including voter registration, ballot access, ballot marking, and casting/returning a ballot so that barriers can be removed. But we strongly oppose policies that promote or expand the electronic return of voted ballots because of the serious and unsolved security vulnerabilities. At a time when election security and public confidence in our elections are under attack, increased electronic return of voted ballots, known as internet voting, is not safe or secure, and will undermine confidence and trust in elections.

At a recent meeting of the Election Commission, it came to light that the San Francisco Department of Technology, in partnership with the Department of Elections, had secured funding for an online voting project for voters with AFN. According to Director of Elections John Arntz, the Department of Technology is using $120,000 to develop tools to assist voters with disabilities...
to return a voted ballot via the internet. Furthermore, according to Director Arntz, $70,000 of that money came from a grant from the Urban Areas Security Initiative. The Urban Areas Security Initiative (UASI) Program is a federal grant program of the Department of Homeland Security (DHS) and FEMA that is administered in California by the California Governor's Office of Emergency Services (Cal OES).

Further investigation revealed that, in fact, $1.5 million is committed to this project. According to an RFP (Event ID 0000005209) issued by San Francisco and obtained via a Public Records Request, the Department of Technology is co-leading the project with a consortium of twelve counties in the Bay Area to develop a system for voters with disabilities to cast a ballot over the internet, with funding from a FY 2020 UASI grant awarded to the Bay Area. The grant amount is $1,550,625. The project is entitled "Enhanced Election Security – AFN Remote Ballots" and is planned to be piloted in the counties of Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma. The RFP describes it as an "internet-based solution" that will, among other things, "eliminate the need for AFN voters to print and fax ballots" and let voters "electronically submit the ballot to a county Election Department."

**California State law bans online voting.**

The San Francisco Department of Technology's pursuit and investment in a project to develop an online voting system is especially troubling, given that California state law disallows casting and/or returning a voted ballot over the internet:

**SEC. 21. Section 19295 of the Elections Code states:**

_A remote accessible vote by mail system or part of a remote accessible vote by mail system shall not do any of the following:_

(a) Have the capability, including an optional capability, to use a remote server to mark a voter’s selections transmitted to the server from the voter’s computer via the Internet.

(b) Have the capability, including an optional capability, to store any voter identifiable selections on any remote server.

(c) Have the capability, including the optional capability, to tabulate votes.¹

Any system that is purchased or developed to return ballots electronically cannot legally be deployed for use in any public governmental election in San Francisco or any other county in California. In other words, this $1.5 million system cannot be lawfully used, potentially resulting in a substantial waste of taxpayer resources.

Furthermore, the San Francisco Elections Commission has already contemplated the prospect of online voting and unanimously passed a “Resolution on Internet Voting” on April 19, 2017

¹ Available at: [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2252](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2252)
stating, in part, “that it be the policy of the Elections Commission to oppose allowing votes in United States local, state, and federal elections to be cast over the internet, including by email.”

**Failure to engage the Elections Commission and public.**

As the Department of Technology initiated and advanced a $1.5 million online voting project, it has exhibited a disquieting tendency to keep its activities under wraps. It has failed to consult the San Francisco Elections Commission, or to hold public hearings, seek public comment, or generally make the public aware of the project’s details or developments.

Indeed, had the San Francisco Elections Commission been consulted before the grant was first proposed or the RFP issued, it certainly would have raised the fact that the Commission has resolved not to pursue online voting, and that California law proscribes the use of any online voting system. Similarly, failure to engage the public has deprived San Francisco’s citizens of the opportunity to share their concerns and preferences, or to propose alternative, legal ways to improve voting for AFN voters.

**Online voting has been rejected as unacceptably insecure by DHS, FBI, NIST, the Senate Select Committee on Intelligence and the National Academies of Science, Engineering and Medicine.**

Among computer scientists and national security experts there is no debate: online voting cannot be adequately secured for governmental elections. Last year, the Department of Homeland Security (DHS), the U.S. Election Assistance Commission, the Federal Bureau of Investigation, and the National Institute of Standards and Technology specifically advised “we recommend paper ballot return as electronic ballot return technologies are high-risk even with [risk-management] controls in place.” In other words, the security tools currently available such as end-to-end verifiability, encryption, cloud-based services, and distributed ledger technology (blockchain), are unable to adequately secure online voting systems. The risk assessment went on to warn that electronic ballot return “creates significant security risks to the confidentiality of ballot and voter data (e.g., voter privacy and ballot secrecy), integrity of the voted ballot, and availability of the system. We view electronic ballot return as high risk. Securing the return of voted ballots via the internet while ensuring ballot integrity and maintaining voter privacy is difficult, if not impossible, at this time.”

In 2018, the National Academies of Sciences, Engineering and Medicine (NASEM) released a report stating that the technology to return marked ballots securely and anonymously over the internet does not exist. Many studies have reviewed specific internet voting systems and

---

2 Available at: https://sfgov.org/electionscommission/sites/default/files/Documents/resolutions/Elections_Comm_Internet_Voting_Res.pdf


4 Ibid.

consistently, all have found that despite their claims of innovation, these systems have fundamental vulnerabilities.⁶

The contracting process should be paused and an investigation initiated.

At present, a winning bidder has been selected for the $1.5 million RFP, but the contract has not yet been finalized and signed. The Board of Supervisors has a very short window of time to address this problem, prevent a possible boondoggle, and keep the Department of Technology from using taxpayer funds for a system that cannot be lawfully deployed. We, therefore, urge the Board of Supervisors to urgently act to place a pause on the contracting process.

Further, given the troubling lack of transparency under which the funding, RFP, and resulting contract negotiations transpired, we also ask that the Board consider initiating an investigation into the development of this project by the Department of Technology. A recent report cited issues with contracting practices under the City Administrator, which oversees the Department of Technology, claiming that the culture allows corruption,⁷ adding further basis for pursuing an investigation.

California counties should explore and pursue other, secure options to improve accessibility for voters with AFN. Many Bay Area counties already offer services to assist voters who are homebound or have limited mobility, and these policies can be built on and expanded. These services, including ballot delivery and curbside voting where election staff bring voting materials directly to a voter’s home, should be expanded and integrated into counties’ voter outreach messaging and marketing, especially when informing voters about the availability of Remote Accessible Vote by Mail balloting. Additionally, we understand there is some discussion in San Francisco of bringing Ballot Marking Devices (BMD) to voters at their homes so they can vote a private ballot without assistance and have it printed and cast on the spot. Bringing election staff to voters’ homes to facilitate voting could also enable voters with limited dexterity to create their official personal mark for signing their ballot, a process that is already provided for in California law. The twelve counties that are involved in this pilot could also collaborate to provide one or more Mobile Voting Units to homebound voters or voters with limited mobility to enable secure and private in-person voting. All of these options are feasible, secure, legal, and far less risky or expensive than attempting to set up an online ballot return process.

We recommend a broader, more deliberative approach to identifying and overcoming obstacles to secure and reliable accessible voting. We thank you very much for your consideration and would welcome the opportunity to work together toward our shared goal of more accessible and secure voting for all.

---

⁶ Michael A. Specter, James Koppel, and Daniel Weitzner, MIT. The Ballot is Busted Before the Blockchain: A Security Analysis of Voatz, the First Internet Voting Application Used in U.S. Federal Elections. [https://www.usenix.org/conference/usenixsecurity20/presentation/specter](https://www.usenix.org/conference/usenixsecurity20/presentation/specter)

Sincerely,

California Voter Foundation  
https://www.calvoter.org/

Free Speech for People  
https://freespeechforpeople.org/

National Voting Rights Task Force  
https://nvrtf.org

Verified Voting  
https://verifiedvoting.org/

Larry Diamond, Ph.D.*  
Senior Fellow, Hoover Institution and Freeman Spogli Institute  
Stanford University

David L. Dill, Ph.D.*  
Donald E. Knuth Professor Emeritus, in the School of Engineering  
Stanford University

Lowell Finley*  
Former Deputy Secretary of State  
State of California

Martin Hellman, Ph.D.*  
Member, U.S. National Academy of Engineering  
Professor Emeritus of Electrical Engineering  
Stanford University

David Jefferson, Ph.D.*  
Lawrence Livermore National Laboratory (retired)

John McCarthy, Ph.D.*  
Computer Scientist (retired)  
Lawrence Berkeley National Laboratory
Barbara Simons, Ph.D.*
Member, Board of Advisors, U.S. Election Assistance Commission
IBM Research (retired)

Jim Soper
Author: www.CountedAsCast.org
Senior Software Consultant

*Affiliations listed for identification purposes only and do not imply institutional endorsement.

Cc:
Mayor London Breed
San Francisco Elections Commission