

Date: July 13, 2020
To: John Arntz, Elections Department, Director
From: Linda Gerull, Department of Technology, Director
Subject: Open Source Voting Project Status – July 2020



**SAN FRANCISCO
DEPARTMENT OF
TECHNOLOGY**

I hope you and your family are well during the COVID emergency.

Per the request from the Chair of the Elections Commission, I am providing the following status for the Open Source Voting System project and funding. Given the COVID emergency and the severe impact to the City's budget the project plan for FY 20/21 has been adjusted to focus on low cost, high value OSV components for elections.

In summary, the OSV project completed the following in FY 19/20:

1. History and State of the Art on Open Source Voting Projects

Prepared a history and review of open source voting projects to provide perspective on past solutions and project outcomes.

2. Community Outreach

Contracted with OnStrategy to facilitate a public meeting and conversation around the community's needs, values, and concerns about Open Source Voting, as well as participants' visions for success and transparency. Focus groups will be formed to build strategies for the project and help research best practices. The City welcomes your comments and ideas as we work together on achieving the goals for the Open Source Voting System.

3. Project Partnership Strategy

Contracted with Gartner Consulting to investigate a partnership with the LA VSP. Gartner served as a consultant on the project to develop a voting system modernization strategy aimed at improving voter experience "for all people", including those with disabilities. Similar to San Francisco, the LA County vision includes an open source technology component. Gartner delivered:

- A report for City and County of San Francisco: Lost Angeles County Voting Solutions for All People (VSAP) Overview
- DRAFTED: Fit/Gap Analysis of CCSF Voting System Needs and the VSAP System
- DRAFTED: OSV Partnership Strategy Scenarios Analysis
- Cancelled: Risks, Obstacles and Uncertainties Analysis
- Cancelled: Partnership Strategy and Roadmap

4. Open Source Software: Risk-Limiting Audit Technology Proof of Concept

- Implemented current academic research on RCV-RLA in collaboration with 6 international contributors for Rank Choice Voting and developed an Auditor Tool.
- Successful completed the RLA pilot with a test of Vote by Mail ballots for 3 precincts and completed an independent verification of the Dominion's tabulation.
- This was the first open source rank choice voting, risk limiting audit pilot in the country.

5. Remote Vote by Mail for Residents with Disabilities

- Met with Mayor's office of Disabilities and was requested by the Mayor's Disability Council to research how the City can continue to improve election access for those with disabilities. The OSV community meeting received a majority of comments from participants regarding effectively integrating mandated accessibility guidelines into the voting system and process which included Remote Accessible Vote by Mail.
- Began preliminary engineering on securing identity and access for remote access.

6. TAC Recommendations

- Responded to TAC recommendations to the Commission for "next steps" for the open source voting project.

OSV Program in the FY 20/21 and 21/22 Budget Year

All City project funding has been re-evaluated and significantly reduced or unfunded. The Mayor's priorities are community health (during this pandemic), homelessness and equity. While some project funding is focused in these areas, the majority of technology projects are unfunded in FY 20/21 and FY 21/22. For the FY 20/21 budget year remaining program funds will be directed to two open source initiatives that deliver value for vote accuracy (Open Source Risk Limiting Audit) and remote vote by mail for residents with disabilities.

1. **Open Source Risk Limiting Audit** – Develop the user interface to allow Elections staff to operate the application after an election (without the help of a programmer). To lower cost on this work, the project plan would leverage the open source community to assist with the software development. DT staff will identify the level of efforts required to build the interfaces and specific features and will retain "commit rights". By partnering with Open Source community, the budget will be at the minimal viable level.
2. **Remote Vote by Mail Identity and Access Management** – Identify and pilot technologies and open source tools that would enable remote vote by mail.

Project approach: Explore solution and understand legislation and possible changes:

- Identity: signature/identity, transmitting the ballot
 - Is there a way to people to identify themselves (sign)?
- Security: Is there a way to securely vote without paper? Or create paper record afterward?
 - Does remote Accessible Vote Program – allow faxing?
 - Ballot - Ballot type, precinct number (fax ballot requires a form), replica of an envelope, form.
- Engineering:
 - Potential tech: Use of smart phone, accessibility built in, camera, blockchain, assistive technology, open source components, faxing features
 - Draft workflows for mail-in voting vs. remote vote process

Please let me know if you have any questions.

Mayor's Disability Council



Nicole Bohn
Director

Denise Senhaux
Co-Chairs

October 10, 2019

Dear Director Gerull:

Based on the public feedback that the Mayor's Disability Council (MDC) has received, we request that the City and County of San Francisco consider using available funding to research how the City can continue to improve election access for those with disabilities.

As you know, In July 2019, a community workshop was held to get public feedback about voting concerns, including open source voting. One of the primary concerns identified by participants in this forum was how to effectively integrate mandated accessibility guidelines for people with disabilities into our voting system development.

In addition to the open source voting accessibility concerns, the MDC has also heard about accessibility concerns pertaining to Remote Accessible Vote by Mail, which was implemented in San Francisco recently as part of mandated State legislation. Although the platform itself appears to meet current accessibility guidelines, there are still barriers to completing the voting process for people with disabilities using this method. Specifically, this process, while allowing some who have never had voting privacy to vote independently for the first time, still requires the voter to print, sign, and mail in a hard copy of their ballot. This can be especially difficult and often impractical for people with disabilities, especially those who are blind, low vision or who have certain physical or dexterity disabilities. The MDC recommends that the City research potential digital solutions to this problem.

For instance, incorporating a digital identity verification system with the current web based system could increase accessibility and voter participation among the 94,000 people with disabilities in San Francisco. Available funding can be used to research and report on methods, techniques, systems, and vendors that could provide a digital signature and identify verification maintain security, and improve accessibility.

We believe that this research will promote much needed full participation and inclusion for people with disabilities in San Francisco's voting process.

Thank you for your time and consideration in this matter, and please do not hesitate to reach out to us if you have questions about this request.

Respectfully,

A handwritten signature in blue ink that reads "Denise Senhau". The signature is written in a cursive, flowing style.

Denise Senhau, Co-chair Mayors Disability Council

Cc: Department of Elections Voting Accessibility Advisory Committee (VAAC)
John Arntz, Director, Department of Elections
Nicole Bohn, Director, Mayor's Office on Disability
Jennifer Johnston, Office of the City Administrator