

Date: November 18, 2019

To: John Arntz

From: Linda Gerull

**Subject: Open Source Voting Project Status – November 2019**

The following are actions and plans for the Open Source Voting project:

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

A DRAFT report has been completed that reviews the status of open source voting system projects since early 2000s. The purpose of the report is to inform CCSF on the current state-of-the-art with OSV systems and identify best practices and opportunities. This DRAFT report is for the Elections Commission review and comment before it becomes final. Distribution by email by 12/1/2019.

**2. Risk Limiting Audit Technology**

The department of Elections feels comfortable it will be able to run a **non RCV** risk-limiting audit using the Colorado RLA tool. The Colorado RLA tool will be used to audit a measure. In parallel, work is underway to construct an open-source RCV risk-limiting audit in partnership with academic thought leaders from Berkeley and Melbourne (Australia).

The open-source RCV audit pilot was completed on time. Due to the focus on auditing only Vote By Mail ballots, the pilot can't be considered a full RLA. It is a ballot comparison audit of the VBM ballots for a single contest. We are slated to run the pilot on 11/21. As part of the early testing, we did ingest the Cast Vote Records, and tabulated independently a contest using all ballots casted. The testing confirmed, vote for vote, the RCV tabulation of Dominion from report 6 through report 12. (We did not test report 1 through 5).

CCSF would like to acknowledge the gargantuan efforts of the team:

- Dr. Michelle Blom: Research Fellow, School of Computing and Information Systems, The University of Melbourne, Australia
- Dr. Andrew Conway, CEO, Silicon Econometrics Pty. Ltd., Australia
- Dan King: CCSF Dept of Technology, CEO VP Tech, San Diego
- Kellie Ottoboni: Ph.D Data Scientist, Pinterest
- Philip B. Stark: Professor of Statistics
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