



# Technology Considerations

Board of Supervisors  
May, 2018

## City Project Roles

Role	Team
Project Funding 2017-2019	COIT
Election Subject Matter Experts	Department of Elections
Technology and Project Management	Department of Technology
Project Strategy	Partnership – Elections/Technology
Work Plan Development	Partnership – Elections/Technology
Budget Management	Partnership – Elections/Technology

## Goals for Election System

Accuracy of the Participation and Vote

Privacy

Transparency of the Process

Security in the Process

Equity and Accessibility

Tax Dollars Spent Effectively

## Open Questions

Certification

Cost, State Matching Funds

Schedule

Status of Election OS Projects

Technology and Innovation

## Answer the Open Questions with Discovery

### Contact Peers

1. TrustTheVote – OSET – 39 repositories, GitHub: <https://github.com/TrustTheVote-Project>
2. Helios – Open Source, most activity 2 years ago, Git Hub: <https://github.com/benadida/helios-server>
3. VotoSocial – Open Source, block chain, last activity 3 years ago, Git Hub: <https://github.com/votosocial/votosocial.github.io>
4. FollowMyVote Open Source, GitHub, uses BlockChain, In late 2014, Follow My Vote joined the California Association of Voting Officials (CAVO), an organization which has been a proponent of the open-source voting movement. Follow My Vote also completed a proof of concept, which has been successfully demonstrated at several events.
5. VoteWatcher, built by BlockChain, working with State of Main legislation on use of blockchain for voting
6. Clear Ballot – certified in WA and Oregon, vote counting, raised 18 million, uses ballot scanning, being certified at the national level, elections management: <https://www.forbes.com/sites/rebeccaheilweil/2017/12/02/eight-companies-that-want-to-revolutionize-voting-technology/#3b4e1c0c12c1>
7. Sovereign – by Democracy Earth Foundation, open source, blockchain, liquid democracy not just binary votes, allows for delegate voting
8. Intelivote – Canadian Municipal Elections, voter list mgt, elections in UK and US as well
9. Votem – Mobile voting solutions, block chain, voter registration, ballot marking, mobile voting, , partner with block chain, and National Assoc of Secretaries of State, used in 2 million vote taken
10. Votebox – founded 1/2017, customize for language needs, votes are anonymous
11. Boule – blockchain, looking to commercialize, ready by 2020
12. Scyll – Barcelona company, \$126 million raised, new voting cryptographic protocols, auditability
13. Free&Fair won Colorado's Open Source RFP

## Technology Considerations

- Security
- Transparency
- Accessibility
- Encryption
- Auditability
- Compliance
- Optimization
- Data Location
- Disaster Recovery
- Agile Process
- Modular Development
- Ease of Maintenance
- Ease of Deployment
- Update & Upgrade Cycles
- Stability
- Reliability
- Maturity
- Integration
- Standards Compliant
- Common Skilled Workforce
- Flexible
- Scalable
- Hardware Forms & Platforms
- Architecture
- Test Automation
- Speed/Performance
- Tools

## Technology Platform Tools





## Understanding Total Cost of Ownership

### Construction

- Software Plan, Design, Engineer, Build, Test and Operate
- Hardware – Design, Development, Test, Production, Support, Disaster Recovery
- System for Certification
- Training – Staff and Volunteers

### On-Going

- Software and Hardware Maintenance – Patches, Upgrades, Refresh
  - Certification
  - Training – Staff and Volunteers
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## Next Steps: 2018-2019

- Develop Work Plan from Slalom Report
  - Add Subject Matter Expert and Technical Project Management to the Project
  - Contact Peers and Investigate the Active Open Source Voting Projects
  - Address Funding Opportunities
  - Consult with the State on Certification
  - Develop Technical Design Standard and Architecture
  - Prepare for Construction Program
  - Develop Communications Plan for Stakeholders
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# Questions

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