

To: Elections Commission  
From: Commissioner Jerdonek

Date: November 12, 2021

Subject: San Francisco / Bay Area UASI Remote Ballot Project

At the October 21, 2021 Elections Commission meeting, I included in the [agenda packet](#) under the Commissioners' Reports agenda item a [memo I wrote](#) about a reference to a "blockchain" voting project that was listed as an agenda item of the August 13, 2021 meeting of [San Francisco's Voting Accessibility Advisory Committee \(VAAC\)](#).

I have learned a lot more details about this project since the October meeting. The purpose of this memo is to share some of those details and to list some questions I have. At the end of this memo, I also included a transcript of the portion of the October Commission meeting during which "blockchain" voting and my memo were mentioned.

## Contents

1. Summary of Findings
2. List of Attachments
3. Questions
4. Timeline
5. Bay Area UASI Background
6. Project Grant Narrative: Excerpts
7. April 2021 Remote Ballot Completion RFP: Excerpts
8. July 21, 2021 SF Board of Supervisors Resolution
9. Transcript of Blockchain Portion of Oct. 21 Commission Meeting

### 1. Summary of Findings

At the October 2021 Elections Commission meeting, Director Arntz said that San Francisco is not pursuing a blockchain internet voting system. Rather, he said the Department of Technology is using \$120K to develop tools for people with disabilities, and \$70K of that money came from a grant from the Urban Areas Security Initiative.

However, since the meeting I learned that there is actually a \$1.5 million blockchain internet voting project. San Francisco is co-leading a \$1.5 million project to design, develop, and pilot a system for voters with disabilities to cast a ballot over the internet without needing to print a paper ballot (in other words, internet voting). Marking, casting, and transmitting a ballot over the internet is not legal in California (see e.g. [California Elections Code Section 19295](#)).

The money is coming from a grant from the Urban Areas Security Initiative (UASI) Program. (UASI is pronounced "you-AH-see" in conversation.) The amount of the grant is

\$1,550,625. UASI is a federal grant program administered by the Department of Homeland Security (DHS) and FEMA, and in California by the California Governor's Office of Emergency Services (Cal OES). Here is the [federal program page](#), and here is the [California-specific page](#). A regional governmental organization called [Bay Area UASI \(BAUASI\)](#), of which San Francisco is a member along with eleven other counties and two other cities, applied for the grant in FY 2020.

Bay Area UASI's name for the project is "Enhanced Election Security – AFN Remote Ballots" (AFN stands for Access and Functional Needs). The system is planned to be piloted with at least 1,000 voters across the 12-county Bay Area UASI region. This includes the counties of Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.

The San Francisco Department of Technology proposed the project idea to Bay Area UASI sometime before March 2020. BAUASI approved the project idea at its meeting in March 2020, then it submitted a grant proposal to DHS/FEMA later that year, and DHS/FEMA/Cal OES approved the project in October 2020. The project is being co-managed by a member of the BAUASI management team (Mikyung Kim-Molina) and a member of the San Francisco Department of Technology (Chinna Subramaniam). The City and County of San Francisco also acts as the fiscal agent for BAUASI, so the San Francisco Board of Supervisors approves BAUASI funds to be accepted and expended.

On April 2, 2021, San Francisco issued a \$1.5 million RFP for the project on its [RFP website](#), with a proposal deadline of April 28, 2021. A winning bidder was selected, and San Francisco is currently in contract negotiations with that bidder. The contract may be signed any day.

## **2. List of Attachments**

In addition to this memo, I have included in the agenda packet the following documents that I obtained from the San Francisco Department of Emergency Management:

- The project narrative for the UASI grant (undated, but probably from around mid-2020), which is titled "IAM Project Narrative." (2 pages)
- The April 2, 2021 RFP for the Remote Ballot Completion Project. (19 pages)

## **3. Questions**

Here are some of the questions I have about the project:

1. Since ballots aren't allowed to be submitted over the internet in California, how does allowing them to be submitted over the internet for some voters enhance election security? Wouldn't this introduce a new cybersecurity target into our elections where there previously wasn't one? Moreover, wouldn't this make voters with disabilities the only ones vulnerable to this attack?

2. Since submitting ballots over the internet isn't legal in California, the product can't be used in governmental elections as described. What, then, is the practical utility of this project for people with disabilities and enhancing election security? Will the 1,000-voter pilot be for a mock election rather than a real election? Or will changes in state law be pursued to allow internet voting and/or the pilot to proceed?
3. If federal grant money was available for enhancing election security, why wouldn't San Francisco suggest a grant proposal that funds open source voting using paper ballots? Unlike internet voting, it would have concrete benefits since it is legal in California. Moreover, open source voting has a long record of reports, discussion, and support within San Francisco and the State of California—and not only because of its security benefits.
4. San Francisco posted the RFP for the \$1.5M project on its [RFP website](#) on April 2, 2021. When did the San Francisco Board of Supervisors authorize to accept and expend this money? Since the City and County of San Francisco serves as the fiscal agent for Bay Area UASI, all UASI grant funds need to be approved by the Board of Supervisors (e.g. see [here](#) for the approval of the FY 2020 increase).
5. Why wasn't anything said about the \$1.5 million at the October 2021 Commission meeting? Director Arntz only mentioned \$70K coming from a UASI grant.
6. Why does the RFP mention prior engagement with "immutable records technology" (which is another way of saying blockchain) as a minimum qualification if Director Arntz said there is no blockchain voting project?
7. What exactly is the \$120K being used for, and how is it related to the \$1.5 million?
8. Was any kind of public report or study done on the feasibility of internet voting project before submitting a grant proposal to design, develop, and pilot a system, for example looking at existing and past internet voting projects and the wealth of literature that already exists on the topic?
9. Has there been any kind of public discussion in a San Francisco meeting body about spending \$1.5 million on a project for transmitting ballots electronically and without printing a paper ballot? As recently as the April 15, 2021 meeting of San Francisco's Committee on Information Technology (COIT), only \$120K was mentioned in relation to the project, and this was after the \$1.5 million RFP was already posted. Also, at the July 21, 2021 Board of Supervisors Budget and Finance Committee meeting, a \$1 million increase in UASI funds was approved (from \$32 million to \$33 million, where the original \$32 million included the \$1.5 million elections project). During this meeting, less than one minute was used to describe to Budget Committee Chair Haney what the \$33 million was for, and the election project wasn't mentioned in that description. (See later in this document for a transcript of that portion of the committee discussion.)
10. The Department of Elections is listed as one of the partners in the project (e.g. in the RFP), and the project is categorized under the Open Source Voting project in various San Francisco documents. The project is also of obvious interest to the Commission because of the Commission's recent adoption of a policy to oppose internet and email voting in local, state, and federal elections, which the Commission did in its April 19, 2017 ["Resolution on Internet Voting."](#)

- a. Why wasn't the Elections Commission told in early 2020 that the Department of Technology was proposing this project to Bay Area UASI as a possible federal grant proposal?
  - b. Why wasn't the Elections Commission told about the project before the authorization of accepting and expending \$1.5 million on the project went before the Board of Supervisors?
  - c. Why wasn't the Elections Commission told that an RFP for \$1.5 million was being drafted, or that it was going to be posted?
11. Given that this project was categorized under the Open Source Voting project, why is "open source" not mentioned in either the UASI project grant narrative or the RFP?
  12. In the Spring of 2019, we compiled for Director Gerull a list of more than 50 email addresses of people interested in open source voting. Were any of those people contacted about the RFP? If not, was any outreach done for the RFP? Who was contacted?
  13. At the October 2021 Commission meeting, Director Arntz said there's been no development of anything and that there's no prototype. However, one of the RFP bids mentioned working with the Department of Technology on a prototype of the Remote Ballot application that involved blockchain.
    - a. What is the prototype application, and who worked on it?
    - b. How much did the prototype cost, and how was it paid for? Was there an RFP?
    - c. Since the project is categorized under the Open Source Voting project, why has the source code for the prototype not been made publicly available?
  14. My understanding is that the contract is still being negotiated. Can San Francisco hold off on signing the contract until the Board of Supervisors has had a chance to hold a public hearing about the project?

#### 4. Timeline

Here is a condensed timeline of events and meeting related to the Remote Ballot project:

- **November 2019(?)** The San Francisco Department of Technology proposed the Remote Ballot project idea to Bay Area UASI.
- **February 19, 2020.** At the February 2020 Elections Commission meeting, Director Gerull discussed her Open Source Voting COIT Budget Request. For the "In-home Voting for Residents with Disabilities" Project, the document shows \$30K for FY19-20 and \$170K for FY20-21.
- **March 12, 2020.** Bay Area UASI voted at its March Approval Authority meeting during agenda item #4 to approve proposing the internet voting project for funding. The project was called "Identity Access Management (IAM) for Elections Security" in its agenda packet.
- **July 15, 2020.** During the July 2020 Elections Commission meeting, Director Gerull provided an Open Source Voting Status Report. For "Remote Vote by Mail for Residents with Disabilities," she wrote, "Began preliminary engineering on

securing identity and access for remote access" and listed "Remote Vote by Mail Identity and Access Management" as one of two projects that San Francisco would continue.

- **October 23, 2020.** Cal OES notified Bay Area UASI in a letter that it was approved for \$31,012,500 in funding. Evidently, this amount included the \$1,550,625 in funding for the AFN Remote Ballot project.
- **November 12, 2020.** Bay Area UASI reported on the funding approval at its Approval Authority meeting during agenda item #3.
- **April 2, 2021.** San Francisco issued an RFP with title, "Formal Invitation for Bids for: Remote Ballot Completion and Submission for People with Access and Functional Needs." The deadline to submit proposals was April 28, 2021. The Notice of Intent to Award was May 24, 2021. The not to exceed amount was listed as \$1,500,000 for the initial term.
- **April 15, 2021.** San Francisco's Committee on Information Technology (COIT) approved \$120K for the Remote Ballot Completion project during its meeting.
- **July 27, 2021.** The Board of Supervisors [approved a resolution](#) to accept and expend an increase to Fiscal Year (FY) 2020 UASI grant funds in the amount of \$1,012,500 for a total of \$33,012,500. The \$1,550,625 for the Remote Ballot project was part of the initially approved amount.
- **August 13, 2021.** The project was discussed during the August meeting of San Francisco's Voting Accessibility Advisory Committee (VAAC) and described in the agenda packet as using "blockchain to digitally sign and return vote-by-mail ballots."
- **September 9, 2021.** Bay Area UASI discussed an update on the FY 2020 National Priority Projects at its Approval Authority meeting during agenda item #5. In the agenda packet, the project is called "Enhanced Election Security – AFN Remote Ballots" with \$1,550,625 listed as the project amount.
- **October 21, 2021.** At the October 2021 Commission meeting, I reported on finding mention of the blockchain voting project in the agenda of the August 2021 VAAC meeting and during the meeting.

## 5. Bay Area UASI Background

[Bay Area UASI](#) is an organization responsible for administering federal UASI grants for a Northern California region that [spans 14 jurisdictions as of 2011](#). These jurisdictions are the twelve counties of Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma, and the three major cities of Oakland, San Francisco, and San Jose. (I believe Bay Area UASI's literature says 14 jurisdictions rather than 15 since San Francisco is both a city and county.) Bay Area UASI was established by an MOU agreed to by all of the member jurisdictions.

Bay Area UASI's website has this description of itself—

The Bay Area Urban Areas Security Initiative sustains and improves regional capacity to prevent, protect against, mitigate, respond to, and recover from terrorist attacks and catastrophic disasters.

Bay Area UASI (BAUASI) is governed by an [11-member](#) Brown-acted body called the [Approval Authority](#) that meets monthly. San Francisco’s representative on the Approval Authority is the Executive Director of the San Francisco Department of Emergency Management. Since BAUASI is a Brown-acted body, all meetings are open to the public and allow public comment.

Meeting agendas, packet documents, and audio for each meeting can be found at the “Approval Authority” link above and clicking the appropriate month. Note that not all months have a meeting. For convenience, here are the months when BAUASI met in 2020 and 2021. In 2020, the Authority met six times, in January, March, May, June, September, and November. In 2021, the Authority met or will meet five times, in January, March, June, September, and November.

The City and County of San Francisco serves as the fiscal agent for Bay Area UASI. Thus, even though BAUASI serves a 12-county region, nearly all of BAUASI’s approximately 20 employees are employees of the City and County of San Francisco. Being the fiscal agent also means that all UASI grant funds need to be approved by the San Francisco Board of Supervisors (e.g. see [here](#) for the approval of the FY 2020 increase).

Each year FEMA posts a Notice of Funding Opportunity (NOFO) for its UASI grants. These notices can be found [here](#). The FY 2020 NOFO was special because it allowed grant proposals specifically for elections security.

### **5.1. March 2020 Bay Area UASI Approval Authority Meeting**

At its March 12, 2020 meeting, the Approval Authority authorized its staff to apply for an FY 2020 UASI grant with 10 projects across the four national priorities:

Approval of \$11.7 million for regional projects supporting the four National Priorities pursuant to the UASI FY 2020 Notice of Opportunity Funding (NOFO).

The Remote Ballots project was one of two projects in the “Enhancing the Protection of Soft Targets/Crowded Places” priority. The project description was—

Establish partnerships with local government entities (e.g. departments of Information Technology, Offices of Disability, and departments of Elections) to support the disabled community and people with access and functional needs during the voting process; create a pilot program that uses IAM-related technology to enhance transmission of election ballots and sender verification.

The Remote Ballots project was proposed to Bay Area UASI by the San Francisco Department of Technology. It was one of two elections projects. The other election

project that Bay Area UASI moved forward with is called “Cyber Navigator Program” and is under the “Enhancing Cybersecurity” priority.

## 6. Project Grant Narrative: Excerpts

Below are some excerpts from the 2-page “Project Narrative” for Bay Area UASI’s grant proposal for the Remote Ballots Project. The narrative equates voter fraud with terrorism:

This project supports terrorism preparedness by alleviating the potential for voter fraud committed by malicious actors who prey on the most vulnerable members of our society. Digital identify theft for the purposes of altering election results is a form of voter interference that can be committed by either foreign or domestic terrorist groups. This project prevents a threatened or actual act of terrorism by acting as a gate keeper that ensures the integrity of the voting process by securing the identity of the voter casting the actual ballot.

Here are some of the project details from the narrative:

This project will harden elections capabilities by enabling secure identify (sic) verification, using provable encryption for digital signing, and guaranteed secure transmission of the ballots from the voter to the region’s Departments of Elections.

...

This pilot project will ultimately provide 1000 end-user licenses for a period of one year. Development, implementation, tech support, training, hosting, and licenses for 14 jurisdictions.

...

Further outcomes of this project include a successful increase in the number of voters with disabilities returning ballots.

...

Collaborative efforts include stakeholders from 14 Bay Area jurisdictions and their respective elections offices, disability offices, and information technology offices. This project also involves coordination with the fusion center (NCRIC), DHS-CISA, MS-ISAC, Elections-ISAC, State Office of Elections, and Cal-CSIC.

...

This project would be a partnership amongst local government entities such as the Department of Information Technology, Office of Disability, and Department of Elections to support the disabled community and people with access and functional needs during the voter process.

## 7. April 2021 Remote Ballot Completion RFP: Excerpts

On April 2, 2021, San Francisco issued an RFP called “Remote Ballot Completion” on [its RFP website](#), with event ID “0000005209.” You can see a screenshot of the RFP posting

below. The 19-page RFP document had the longer title, “Formal Invitation for Bids for: Remote Ballot Completion and Submission for People with Access and Functional Needs.”

The screenshot shows a web interface for an event. At the top, there is a navigation bar with 'Events Search' and 'Event : SFGOV-0000005209'. To the right are icons for sharing, email, and information. The main heading is 'EXT DEM | Remote Ballot Completion' with a sub-heading 'Event Completed' and 'Start Date: 04/02/2021 12:00PM PDT'. Below this, there are two columns: 'Bid Package' and 'Details'. The 'Bid Package' column contains a 'See Attachments' button, a paragraph of text, and a 'Place Bid' button. The 'Details' column contains a paragraph of text and several key-value pairs: Event ID, Format/Type, Round, and Version. At the bottom of the 'Details' column is a 'Payment Terms' section.

[Events Search](#) > Event : SFGOV-0000005209

## EXT DEM | Remote Ballot Completion

Event Completed  
Start Date: 04/02/2021 12:00PM PDT

### Bid Package

[See Attachments](#)

To ensure that your bid is successfully placed please review the attachments and submit the required documents.

[Place Bid](#)

### Details

DEM is seeking qualified suppliers (“Proposers”) to provide proposals for a Cybersecurity Identity Access Management (IAM) solution to enhance remote ballot completion and submission for people with access and functional needs.

Event ID: SFGOV-0000005209  
Format/Type: Sell Event RFX  
Round: 1  
Version: 4

### Payment Terms

Below are some excerpts from the RFP:

On page 9 (numbered p. 6):

Under the direction of UASI project manager and San Francisco Department of Technology, and in collaboration with the San Francisco Elections Department, engage with California Secretary of State to build governance and consensus.

Also on page 9 (numbered p. 6):

This innovative project will enable secure identity verification, the use of provable encryption for digital signing, and guaranteed secure transmission of ballots from voters with AFN to the elections departments where they will ultimately be printed and counted.

Also on page 9 (numbered p. 6):

- Design, build, and test a modular internet-based solution for a pilot subset of AFN [Access and Functional Needs] voters, (with a goal of at least 1000 participants) in the region to:

- Eliminate the need for AFN voters to print and fax ballots
- Electronically prove the identity of each AFN voter
- Electronically verify the identity of each AFN voter
- Electronically sign the ballot
- Electronically submit the ballot to a county Election Department
- Ensure non-repudiation of the ballot submission

On page 12 (numbered p. 9), one of the minimum qualifications is experience with “immutable records technology” (aka blockchain). Specifically, MQ5 (Minimum Qualification #5) says—

Prior engagement with immutable records technology of digital signature and digital record submission and integration of the technology with IAM.

IBM, for example, [defines blockchain](#) as follows:

Blockchain is a shared, immutable ledger for recording transactions, tracking assets and building trust.

## **8. July 21, 2021 SF Board of Supervisors Resolution**

On July 27, 2021, the Board of Supervisors [approved a resolution](#) to accept and expend an increase to Fiscal Year (FY) 2020 UASI grant funds in the amount of \$1,012,500 for a total of \$33,012,500. This was [File No. 210680](#) and Resolution No. 378-21. The resolution was introduced on June 8, 2021 and enacted on August 4, 2021.

You can find mention of the Remote Ballot project if you click on “5. Executed Grant App,” for example, in the above link. On the bottom of page 15 (and top of page 16) under Project Title “National Priority - Soft Target - Identity & Access Management Project,” it says—

The BA [Bay Area] Management Team will utilize a consultant to conduct gap and needs analyses and then provide Identity and Access Management (IAM) related technology. Project will harden elections capabilities by enabling secure identify verification, using provable encryption for digital signing, and guaranteed secure transmission of ballots from the voter to the region's Departments of Elections. Funding will provide for jurisdiction-specific assessments. Project will be conducted during the grant performance period.

The resolution above only covered the \$1 million increase though. The Remote Ballot project was apparently part of the original approved \$32 million. However, I wasn’t able to find where the original \$32 million was publicly discussed.

As part of the above approval, the resolution was also heard by the Budget and Finance Committee on July 21, 2021. Here is a transcript of the portion of the [video of this](#)

[meeting](#) in which the grant funds were discussed (video timestamps are included for convenience):

Supervisor Haney: [1:13:20] I appreciate the update on the sort of, the general increase in numbers. This is a fairly large set of money from the United States Homeland Security office, which, you know, I think, for a lot of folks may raise some questions. Can you describe in a bit more detail what these funds are going to?

Mary Landers (DEM): [1:13:42] Of course. So, you're talking about the Urban Areas grant? So San Francisco acts as the fiscal agent on behalf of the twelve Bay Area counties and 108 cities plus the, and includes the three core cities of San Francisco, Oakland, and San Jose. So the funds are divided up through an extensive process whereby the various hubs in the Bay Area meet and determine the needs based on risk and threat, and then it's voted on by our Approval Authority. San Francisco is the fiscal agent for the bulk of the funds. The extra \$2 million is for the statewide funding of a risk-management program on behalf of the State of California. Does that answer your question?

Haney: [1:14:34] Well, I get that we're the fiscal agent for all of these funds going to all of these different cities, but what are the funds being used for?

Landers: [1:14:39] So they're being used for all kinds of things, including, um, community resilience projects, an extensive training and exercise program that is run out of the offices. They also purchase, um, large equipment items. Some of the things that are purchased are, um, security, you know, rescue vehicles for, emergencies, of Fire Department emergencies, Police emergencies, Health Department items such as testing equipment for, that was used extensively during the pandemic. I'd be happy to provide you with a greater list if your office wishes it.

Haney: [1:15:26] How did San Francisco wind up being the fiscal agent for all of these different cities? How did that happen?

...

## 9. Transcript of Blockchain Portion of Oct. 21 Commission Meeting

Here's a link to the video of the October 21, 2021 Elections Commission meeting:

<https://www.youtube.com/watch?v=ZAPZz0l1EXc>

So you don't have to sit through the video, below is a transcript I made of the parts relevant to blockchain voting. I also included timestamps to the point in the video above. (I didn't have time to transcribe the public comments, though.)

**Public comment:** [4:04]

1. [4:37] C. Jay Coles
2. [8:02] Richard Tamm
3. [10:01] Jim Soper
4. [13:43] Brent Turner
5. [15:00] David Jefferson
6. [18:23] Barbara Simons

**End Public comment:** [21:00]

**Jung:** [1:17:10] Any reports? Commissioner Jerdonek, and then Commissioner Mogi.

**Jerdonek:** [1:17:16] Yeah, so in the process of doing research for the open source voting stuff I came across a Voting Accessibility Advisory Committee meeting where there was an agenda item about this blockchain voting project that several public commenters were discussing during the general public comment. So I did some research, and I tried to collect everything that I could find about the project, and I included that as a document in the packet.

[1:17:51] And um, you know, this is something that was new to me. I didn't really know about it before last week basically. And I do think it's something that we should take a look at at some point, just because we have a policy position on internet voting. But also just to kind of learn more about what is this project and where is it coming from and just get a little bit more transparency into it. Of course, we can't do any of that today because I'm just basically reporting on my findings. So that's all, thanks.

...

**Arntz:** [1:21:28] Can I also comment though on this, on the, uh, Commissioner Jerdonek's report real quickly?

**Jung:** Go for it.

**Arntz:** I don't want to wait until — for November.

**Jung:** Yeah, please.

**Arntz:** [1:21:40] All right, thanks. Uh, so I just mischaracterized the project. We're not building a blockchain voting system. That's not the intent whatsoever. Basically, and I think the fellow from VotingWorks actually mentioned that he's working on the same thing, the same issues.

[1:21:59] There's two items that really frustrate people with disabilities when they vote, especially with the increase of vote-by-mail voting. Even with the remote accessible vote-by-mail system, they still have to print out a ballot, and they still have to sign an envelope to get the ballot back to us to be counted. And people with dexterity issues can't always sign their envelopes, you know. So they can use the remote accessible system to mark their ballots with the assistive devices that are on their computers, but then they have to physically sign the envelope. So that's one issue that people have brought forward many times to me.

[1:22:41] Another issue is that with remote vote-by-mail system, blind people don't tend to have printers, is what I've learned. And so they can vote at home using their assistive devices when marking a remote accessible vote-by-mail ballot, but they can't print it because they don't have a printer. So we've worked the last several elections with the libraries trying to arrange for the branch libraries to provide their printers to people with sight disabilities or who are blind who needed to print out remote accessible vote-by-mail ballots. And that's not always successful. It's a real challenge for the library to pull off.

[1:23:15] And then also, one of the frustrations and it's in the letter, I think Commissioner Jerdonek provided all the information to answer the question, really, that is being presented — is that the Mayor's Office on Disability was, at the time, was seeing a lot of potential funding going towards the development of an open-source voting system. But that open-source voting system component — it was really not focused at all on improving accessibility. There was talk about improving accessibility, but nothing substantive in anything that they were seeing. And that's been their experience with all voting systems and a lot of other interactions they have in their daily lives is that, they something is going to improve—but when they engage with whatever that improvement is, it doesn't match what they expect or what they hoped it would be. And the improvement is incremental.

[1:24:05] And so that letter that was provided by the Mayor's Disability Council is indicating—hey, you know, if we're going to be developing a voting system, we gotta find a way for people to be able to vote independently and privately, just as the law requires, but not just have something that checks the boxes. But something that actually is effective. And that's where this project is coming from—it's trying to find a way that we can provide people the ability to, who have mobility issues to be able to handle and sign envelopes, and also people who don't have printers, to find a way for them to actually get their ballots to us.

[1:24:42] Um, blockch—this is something that, these are conversations we had before the pandemic in 2019, and this is with the Mayor's Office on Disability, and during those conversations blockchain came up in conversation and stuck in my head, and I used it. But

I was not in any way—there's nothing going on in San Francisco to develop a blockchain voting system.

[1:25:07] As far as the funding is concerned, so when the pandemic hit, the Mayor's Office was going to each Department looking for unused funds, and what the Department of Elections had in a program budget was the open source funding. And there was no project that was immediately committed to those funds, except for the interface to the risk-limiting auditing tool that the Department of Technology is developing. But also this request from the Mayor's Office on Disability and the Disability Council to consider developing tools for people with dexterity issues and sight disability and who are blind, so they could vote independently and privately.

[1:25:49] And the reason that the 50—and it wasn't a full 120—it was \$50K that was pulled. And the idea was to do this using open source software. So it would, to me it checked all the boxes. And that's why, that's why the project continues in time, and the money, the other funds were pulled by the Mayor's Office in response to the pandemic.

[1:26:09] Then the remaining moneys are coming from a grant, uh, from a group, the Urban Areas Security Initiative, that came through the Department of Emergency Management. So Department of Emergency Management can request this grant — not Department of Technology, not Department of Elections — so the grant moneys went to this Urban Areas Security Initiative, and then from there, the Department of Technology took \$70K to develop these tools for people with disabilities.

[1:26:42] So right now there's been no development of anything. There's no prototype. There's been big conversations like, before the pandemic and a little bit this year. But nothing's really started that's concrete. And that's where things stand. So there's been—I just misspoke because I had blockchain in my head from conversations from a few years ago. But no one's trying to develop a blockchain voting system, and my comments in the meeting about not being afraid of what people consider a security concern is really, what are the options?

[1:27:18] You know, just because people don't like a certain way around handling election information doesn't mean we shouldn't even look at it and consider it. Because, you know, there's a lot of frustration with people with disabilities in voting even though there's tools that are provided, there's services. You know, there's still instances where they have, they have barriers. We are trying to find, and really, we're trying to think of ways to overcome those barriers. And that's what's going on here. We're not trying to subvert any policies. We're not trying to get around anything the Board's doing. We're looking at these issues, these obstacles that people have and trying to think of ways to resolve them. And that's, that's what's, that's the basis of all this, so. And if we can't talk about this today, I'll be glad to talk about it in November.

**Jung:** [1:28:09] Okay, well maybe we don't have to. Commissioner Jerdonek, does that answer your questions?

**Jerdonek:** [1:28:40] Um, I mean it answers some of them. I guess—I very much appreciate the information that you're sharing, Director Arntz. And I'm very supportive of efforts to, you know, improve accessibility—creative efforts. I guess maybe what I would ask then—would you be able to maybe perhaps during one of your next Director's Reports, just provide a little bit more, you know, information about the project. You know, just things like—you know, more sort of like similar to what you're saying now, but maybe, just so that we can kind of be kept informed basically.

**Arntz:** [1:29:00] I can. And then, at one point, and also, Commissioner Jerdonek, I mean, you provided a lot of your own answers in your report. Because Director Gerull last July in 2020, you know, brought this forward. This is the vote-by-mail tool that she mentioned in her report. This is not something different.

**Jerdonek:** [1:29:20] Yeah, so I guess—the surprise to me was—and I know Director Gerull had mentioned blockchain as sort of like one of the things, but it was sort of like the jump from mentioning it to then being a full project, but there was no kind of visibility into the decision-making process that resulted in blockchain being decided on. And if it's not a blockchain voting project, then that's also new information.

**Arntz:** [1:29:56] Well, I don't think she described it as a blockchain in her information. And really, blockchain I think was mentioned just as something that would be potentially reviewed and considered. But it wasn't, you know, this is not—the intent here is in no way to create something just because blockchain could be used in relation to elections. That's not the purpose of this at all.

**Jerdonek:** [1:30:19] Yeah, that was my concern. But no, I appreciate you shedding some light, and um, if you could just kind of keep us posted on what's going on in terms of accessibility within that Department, that would be great. So thank you.

**Jung:** [1:30:32] Okay, that sounds like a good solution. One thing I might propose to the Director to maybe make this more efficient is, you know, maybe include, to the extent that there is additional information that you have or can provide, or context you can or want to provide, maybe add it as a paragraph in your next written Director's report, and then Mr. Jerdonek or whoever else can ask questions about it during that portion of next month's agenda.

**Arntz:** [1:31:05] Certainly.

**Jung:** Okay. Does that make sense, Commissioner Jerdonek?

**Jerdonek:** Yeah, that's great. Yeah, thank you.

**Jung:** Okay.