Center for Urban Science and Progress

New York University

To: Patricia Anne Taylor, New York City Board of Elections President

From: Samuel Zierler

Date: October 8th, 2020

Re: E-Voting Initiative

**Summary**

The purpose of this memo is to present the rationale for establishing an internet voting system for borough and citywide elections in New York City. The Covid-19 pandemic has demonstrated that election systems in the United States are unprepared to handle crisis events. The expansion of vote-by-mail capabilities in many states was an appropriate measure to take, however it should not be the only alternative to in-person voting presented to the voters of New York City. There are multiple benefits to providing e-voting[[1]](#footnote-1) as an additional voting option to residents in New York City, the major one being a likely increase in voter participation. There are critical issues of concern with introducing internet voting that must be considered in the development of this program. These include verifying voter identification, security and confidence of the results, and protecting anonymity of voters. This program is not intended to replace in-person or vote-by-mail operations. Rather, it will provide a third option for participating in the election process.

**Status Quo**

Many voters who choose to vote in-person reliably experience a series of issues that make the process inconvenient and sometimes inaccessible. During the 2018 midterm elections, New York City voters faced long lines and broken machines. A breakdown by ProPublica found the machine issues were concentrated in many Brooklyn neighborhoods.[[2]](#footnote-2) Some parents with small children have to find childcare while they go to vote. Other voters may struggle with mobility and transport challenges if the polling location nearest to them is overwhelmed. These delays and malfunctions increase the "cost of voting,” that is, the time and energy expended by voters to cast their ballot. New York State recently introduced early voting, which will alleviate some of these issues, but likely not all. Easing restrictions on vote-by-mail programs, as was done in response to Covid-19, should also help to decrease wait times at polling sites; however it is not a panacea either. Not a system without its own hangouts.

**Why E-Voting?**

Like vote-by-mail, e-voting would make the voting process more convenient for many people. E-voting would expand access to voting for certain populations. Voters who are visually impaired or who have disabilities that affect their motor functions may find it difficult to vote by mail or in person. A fully digital option would reliably enfranchise these voters without compromising the privacy of their vote. Voters with little or no English proficiency could be provided an e-ballot in their native language. Traditionally, these voters have had to rely on onsite translation services, which may not be available at every polling site. Lastly, this program aims to reach the homeless population in New York City by offering e-voting at various shelters and public facilities, like libraries and community centers. Current mail-in ballots come with a return envelope that requires postage, which may be a barrier to voting for some residents.

**Security Concerns**

There are a number of security issues that an internet voting system poses. An e-voting program would likely be overseen by the Department of Information Technology and Telecommunications, in conjunction with the city Board of Elections, however no one department has the technology capabilities to implement a mobile voting platform. The underlying architecture used by several private sector companies (Voatz, Votem) who deploy mobile voting solutions is a blockchain, distributed network solution, designed to prevent vote tampering on a centralized server.

**Voter Identification Authentication**

Some existing mobile voting platforms employ face-matching software to confirm voter identities before casting a ballot. Users must upload an image of their state-issued ID and take a selfie, after which the software compares the two images to confirm a match. The Estonian i-Voting system utilizes national ID cards that maintain private digital keys assigned to every citizen. Voters slide the physical card into a reader to unlock their digital profile and access the voting software. Expanding on the Internet Master Plan from the Office of the Chief Technology Officer for New York City, the DoITT and the Board of Elections could first create a Digital ID program to support the underlying identification issues around mobile voting before e-voting is deployed.

**Next Steps**

It is important to establish a collaborative effort between city officials and non-government stakeholders. Several key government actors I hope to involve are:

* *Oscar Romero*, Program Director of Innovation at the Office of the Chief Technology Officer
* *Jessica Tisch*, Commissioner of the Department of Information Technology and

Telecommunications

* *Jumaane Williams*, New York City Public Advocate
* *Eve Baron* (or alternative member), Civic Engagement Commission
* *Naomi Zauderer*, Chair of the Voter Assistance Advisory Committee

Non-government contributors I hope to include are:

* *Elizabeth Howard*, Senior Counsel on Voting Reform and Election Security at the Brennan

Center for Justice

* Representative from “Tusk Philanthropies,” private financial backer to several mobile voting

trial programs that ran in the United States

1. The terms *e-voting*, *electronic voting*, *internet voting*, and *mobile voting* will be used interchangeably in the document and are all meant to refer to an electronically-based ballot system for filling out, submitting, and recording results during an election. [↑](#footnote-ref-1)
2. <https://projects.propublica.org/graphics/election-2018-broken-machines> [↑](#footnote-ref-2)