CITY COUNCIL
CITY OF NEW YORK

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TRANSCRIPT OF THE MINUTES

Of the

COMMITTEE ON GOVERNMENTAL OPERATIONS JOINTLY WITH COMMITTEE ON TECHNOLOGY

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HELD AT: 250 Broadway - Committee Rm,
                  14th Fl.

B E F O R E:
                  GALE BREWER
                  Chairperson
                  FERNANDO CABRERA
                  Chairperson

 COUNCIL MEMBERS:
                  TECHNOLOGY
                  GALE BREWER
                  LETITIA JAMES
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                  ERIK MARTIN DILAN
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                  PETER F. VALLONE

1

2 [gavel]

3 CHAIRPERSON BREWER: Good morning. I'm

4 Gale Brewer. I'm chair of governmental operations.

5 I apologize profusely. I had three breakfasts and

6 they just went longer than I though. I started 6:30

7 this morning on breakfast. I just want to let you

8 know. Listening to people trying to be supportive

9 and in one of them there was a, a coffee shop which

10 we all go to on the West side. It's at 90th and

11 Broadway and you walk into it and everybody has an

12 issue from the waiter who needed housing problems

13 to everybody I was meeting with just so you know.

14 So anyway I'm sorry to be late and I apologize

15 profusely and I know that my colleague Council

16 Member Cabrera he's head of the Technology

17 Committee and he's on a way, on his way. So today

18 we're holding a joint hearing on internet voting.

19 The potential benefits of internet voting are

20 numerous including lower administrative costs,

21 easier access, and better ballot design. However,

22 and I emphasize this, the security and technical

23 risks are also numerous from my perspective. The

24 first use of internet voting in the United States

25 in elections was in 2000 via a small pilot program

for absentee voters in which 84 people

participated. In 2004 the Department of Defense

attempted to build another internet voting pilot

for absentee voters this time with the intention of

surveying a hundred thousand voters. However, due

to a number of security concerns that it was

unable, unable to overcome including the program's

vulnerability to hacker attacks the potential for

voter, voter amenity to be compromised and the

potential for ballot manipulation the project was

cancelled. Concerns over similar issues have caused

the Netherlands, meaning Holland, Finland, and UK,

the United Kingdom to abandon their internet voting

programs. Nevertheless a number of countries do

offer internet voting of some kind. And as the

technology evolves it will become increasingly

viable. This hearing seeks to understand where the

technology stands today and whether it is an

options for New York. And of course there are lots

of other issues that could be enhanced voting wise

in terms of technology like the pole worker books

and other ways in which internet can play a major

role. You'll to just know because I know a lot of

us are interested in the, in the technology Wi-Fi

2 vote and the government operation votes will happen

3 when we have a quorum and we will in the near

4 future. But I first thank all of you for waiting. I

5 appreciate it profusely. We'd like to call Michael,

6 Michael Ryan who is the Executive Director of the

7 New York City Board of Elections and Dawn Sandow

8 who is the Deputy Executive Director. I know they

9 don't have testimony but they're more than willing

10 to answer questions. Thank you very much.

11   [pause]

12   CHAIRPERSON BREWER: And we've been

13 joined by Council Members Weprin and Council Member

14 Koppell. Go right ahead.

15   MICHAEL RYAN: Good morning. I'm Michael

16 Ryan I'm the Executive Director of the New York

17 City Board of Elections. Before we get to the

18 question and answer this issue came up at least in

19 an official way…

20   [pause]

21   MICHAEL RYAN: Yes, that better? Yes,

22 I'm Michael Ryan. I'm the Executive Director of the

23 New York City Board of Elections and thank you for

24 having us here. This issue came up in an official

25 way via email fairly recently. So it's safe to say

2 that coming off the last election cycle we did not

3 have a full amount of time to adequately be briefed

4 on all of the concerns associated with, with

5 internet voting. And given the relatively

6 compressed time frame there was no consensus

7 amongst our commissioners to whether or not we're

8 going to take an official position pro or con but

9 certainly we can talk about not only the prospect

10 of internet forum with some of those other issues

11 that Chair Brewer raised with respect to technology

12 enhancing the voter process. Whether we go all the

13 way to the extreme of, of internet voting or using

14 some interim steps that, that, that can be helpful

15 I think you know it's important to start the

16 discussion because if we don't start the discussion

17 nothing ever happens.

18 　　　　CHAIRPERSON BREWER: That's why we like

19 you Mike Ryan.

20 　　　　[laughter]

21 　　　　CHAIRPERSON BREWER: I mean I have a

22 couple of questions that are relevant to the tech

23 and then maybe my colleagues have others too. But

24 I, I just want to understand even though we may not

25 be talking specifically about internet itself

2 voting what are some steps we could take in the

3 near future to talk about using technology to

4 enhance the experience of the voter. Are there some

5 specifics that you have thought about, maybe not

6 brought to the board yet, etcetera?

7 MICHAEL RYAN: Well I think the one that

8 we thought about the most is it's going to require

9 an expenditure and certainly we would have to come

10 back ultimately to the city council for that is the

11 electronic poll book. You know getting rid of the

12 paper books does a lot, not just on the front end

13 at enhancing the voter experience but also on the

14 back end. Because after the election… Well first of

15 all a lot of the delay at the table is based on the

16 individual poll workers ability to navigate the

17 book and get to the right spot and then hand the

18 book over to the voter and have them sign in the

19 appropriate spot. If we had technology to that

20 sorting that would happen relatively

21 instantaneously and that would you know eliminate

22 delay. Now when, when you think about 15 seconds

23 being saved it doesn't sound like a lot but when

24 you go to some of the busy poll sights,

25 particularly you know in, in Manhattan or the other

volume boroughs where there's nine you know EDs in one poll site 15 seconds per voter, every voter, over the course of the day and you know you're literally saving hours at the end of the day.

CHAIRPERSON BREWER: Well I certainly agree with you and I think before you started your job there was a demo of using a I would call it a laptop in a lever machine machine but I'm sure there's a fancier term.

DAWN SANDOW: Yes.

MICHAEL RYAN: It was… [interpose

CHAIRPERSON BREWER: Yeah, and Dawn…

MICHAEL RYAN: …it was a kiosk.

CHAIRPERSON BREWER: Yeah, yeah a kiosk. But I'm, and I would think that one of the issues there was the concept was excellent in terms of finding ways to incorporate all of the issues that are relevant to using the technology. So I wonder if you could talk about that. I must admit after that hearing my email was swamped with great idea but we should use laptops. And I think Dawn Sandow was concerned and other members that the laptops could be stolen. This is kind, you know we have to get down to the nuts and bolts of how do you make

1

2 these things happen in using technology but not

3 using I think perhaps that large device, for lack

4 of a better word. So I'm just wondering if there's

5 been more thinking because the possibilities are

6 there for using the technology to accomplish what

7 you want. How do you, what is the actual instrument

8 that does it is what the question might be and the

9 funding?

10 MICHAEL RYAN: There are various options

11 on the table laptops being one of them. The, the

12 other piece of the, the, the kiosk as it was

13 explained to me and I, and I, it was kind of…

14 [interpose]

15 CHAIRPERSON BREWER: It stood right

16 there.

17 MICHAEL RYAN: Right.

18 CHAIRPERSON BREWER: Just so you know.

19 MICHAEL RYAN: It was kind of a way of

20 repurposing the shell of the old voter machines…

21 [interpose]

22 CHAIRPERSON BREWER: Yes.

23 MICHAEL RYAN: …as well… [interpose]

24 CHAIRPERSON BREWER: Yes we know.

25

1

2   MICHAEL RYAN: …to, to recapture that.

3 But the other side to it was there was a lot of

4 thought given to not only the security of the

5 equipment in terms of you know people walking off

6 with them but also in the transportation since we

7 would be relying on it they want it to, the, the,

8 the effort was made to develop something that would

9 stand the test of time in being bounced around in

10 trucks and deliveries and, and those kinds of

11 things.

12   UNKNOWN FEMALE: And the antenna on top.

13   MICHAEL RYAN: And, and the antenna. I

14 mean you know one of the challenges that we'll have

15 to, we'll have to address is wireless accessibility

16 in all of our poll sites.

17   [background comments]

18   MICHAEL RYAN: Now for the ones that we

19 control, the, the city owned properties of which

20 that makes up you know the vast majority of the

21 poll sites we know that. That, that should not be

22 as much of an issue. But in the private sites

23 there, there is an issue and then it becomes not

24 only an issue technically but then you know from a

25 funding perspective as well. How do we, if we were

1

2 going to do a tech, tech upgrade you know how does

3 that get accomplished in a private site? But

4 getting back to the poll book for, for one quick

5 second. What that would also allow us to do is on

6 the back end when we're giving voter history we

7 wouldn't have to do all of that manual work at the

8 back end of the process. The voter history would be

9 in the system already. So it, it would provide two

10 benefits; one to the voter in speed of process and

11 two it would allow us for more accurate record

12 keeping.

13   CHAIRPERSON BREWER: So, so what are we

14 doing in terms of thinking about all of these

15 issues? Obviously if you talk about technology

16 somebody might bring up internet voting up. I guess

17 I'm not going to focus on it as much although we've

18 been joined by my colleague he can ask you more

19 questions about that issue. But what are we doing

20 just generally. Is it an advisory group perhaps

21 with some private sector companies or is it

22 internal to think about how to take the next step

23 technologically and what it would cost.

24   MICHAEL RYAN: Well after the election

25 we had myself and, and Dawn and some other members

of our, our staff had a roughly five hour meeting

with ESNS the vendor for the, you know for the

voting machines. And in all honesty I, I've been

joking about it but it's true. It was a five hour

meeting that felt like a two hour meeting because

it really didn't start to lag until about the last

15 or 20 minutes. We, we really brainstormed, we

got ideas from, from them about where they think

the future of, electronic voting is going. Clearly

there is a, you know a, a fine line there you know

in terms of new developments and we were clear that

it was for informational purposes only that we were

no way engaging in any negotiation with respect to

machines but if we don't know what's out there and

we don't know what's on the minds of the tech

companies it's difficult for us to asses. And I

think often you know that public private

partnership is not exploited for the greater good

as well as it could be. We always think that from

the government side that we have to be coming up

with the ideas and we're getting the tech companies

to fit an idea. But if they're halfway down the

road or three quarters of the way down the road

sometimes it might be better for us to, to jump on what, what they're already doing.

CHAIRPERSON BREWER: I would just hope that we'd go beyond ESSN, ESNS in terms of technology companies to think about this. I agree with you but I would like to see a broader group thinking about it.

MICHAEL RYAN: Well for the moment they're our vendor.

CHAIRPERSON BREWER: I know but the other folks might… [interpose]

MICHAEL RYAN: Absolutely.

CHAIRPERSON BREWER: Pro-bono volunteer their input in terms of New York City companies and you know the, the startups and you know people who are very innovative about these things. I'm not talking necessarily about the voting specifically but all these other issues that you're trying to address.

MICHAEL RYAN: Right.

CHAIRPERSON BREWER: Okay. Council Member Vallone has joined us and then we, I, my wonderful colleague Council Member Fernando Cabrera.

CHAIRPERSON CABRERA: Thank you for the co-chair and I apologize for getting here late. But a 35 minute trip turned out to be over a 2 hour trip getting over here. Do not take the West side going north-bound. You will be stuck there for at least an hour just at piece, part of the trip. Thank you for coming. I'm very interested in this idea of internet voting and have you, have you looked at what other people are doing? I don't know if this question got asked but what other countries are doing, other cities are doing to see if it's a possibility that could become a reality in New York City?

MICHAEL RYAN: Well be, before you got here and I will confess that if you were here on time Councilman you might have been alone because we were very late too. So, so, but before, before you got here I did indicate that we received this notice you know in the fairly recent past and we didn't have an opportunity to fully explore you know different things. And, and because of the timing of it there was not consensus amongst the commissioners as to what our official position should be. So I answer to that board of

 1 commissioners and certainly I have to respect that.

 2 But the short answer is there has been some thought

 3 internally with respect to what we could do with

 4 internet voting. The, and I, I guess we always

 5 focus on the problems because if, if we have an

 6 idea that something's going to work we don't

 7 necessarily have to discuss that all as much but I

 8 think the issues that Council Member Brewer, Chair

 9 Brewer raised with respect to security. I think

10 that's the, you know the overriding concern

11 absolutely. And the other issue is it, just to

12 point out, it would be a wholesale change in the

13 way that I mean really, really wholesale change in

14 the way business is done right down to the way

15 campaigns are run. If you think about the, the way

16 campaigns go and send out poll watchers to the

17 polls when people are, when people are voting. If

18 that now information was going to be made available

19 online since it is public information how does that

20 change the dynamic of poll operations and all those

21 things? I mean so it, it goes well beyond just

22 what's going to happen you know within the Board of

23 Elections or what we need to do. It really is.

24 It's, it's impactful on the entire process. So let,

let me begin with the first issue that you brought

up which is I would imagine the, the, the most you

know, the most controversial one would be that

issue of security. You know I, I was thinking about

this recently. We do banking online, we renew

vehicle registration online. We fill out federal

and local tax forms online. We apply for student

online. We even shop online. And I think for good

or for bad people care more about their money than

voting and yet we see that as a reliable, a mostly

reliable way of going about doing things online and

some people have said the encryption software is

more secure than voting machines. And with that on,

you know with that in hindsight right that, that

idea that we do you know, I do, my wife does. She

handles all the money, she gets all the money.

That's why I've been married for 26 years. But I

mean with all the stuff that we do online already

and it's, it is secure well I don't, I'm a little

confused as to why would this be, why in this

particular issue would security be an issue versus

when we do everything else online and we find it to

be secure?

MICHAEL RYAN: Well I, I, I think you know security is, is always an issue no matter, no matter what you're doing but again from a cultural perspective we have gotten very used to voting in a particular way.

CHAIRPERSON CABRERA: True.

MICHAEL RYAN: And, and so it may be more of the cultural dynamic than, than actually the, the technology at, at the back end. When we think about the highest levels of our government are operating and doing you know very sensitive things and, and doing it in a secure environment but we would be really changing our society if, if we do this in my opinion. Voting is a private thing but yet a very public thing. And, and the voter participation, the gathering at the pole sights you know on election day for, for those people that vote like other aspects of our life are very ritualistic. And you know we, if we adopted this across the board at some point you know down the road it would be a wholesale change to the way our society functions. And, and I think that to the extent that we're going to get resistance in that regard the resistance may be in the breaking down

2 of the, of the cultural rituals more so than in

3 the, in the technology itself.

4 CHAIRPERSON CABRERA: Do you, I mean do

5 you conceive that you could have both where people

6 could go still to the poles and they still can do

7 their online? Or, just to start with we could to

8 just military personnel you know they are overseas

9 or in upstate. Just so people can start getting

10 acculturated.

11 MICHAEL RYAN: Well in a sense we do

12 that already with paper. Military voters and

13 absentee voters vote outside of the, the regular

14 way to vote already.

15 CHAIRPERSON CABRERA: So it wouldn't be

16 a big jump there?

17 MICHAEL RYAN: For the… [interpose]

18 [background comments]

19 MICHAEL RYAN: You know and, and the

20 military ballots are already uploaded so that they

21 can have access to get them and, and print them out

22 themselves at, at remote locations. So a part of

23 it's kind of already happening but it's not taking

24 that, that next step to, you know towards full

25 implementation.

CHAIRPERSON CABRERA: You know I just think about the long lines. I mean I, the last presidential, and I went to different polls, last presidential election I heard people waiting over an hour. You know and people get discouraged. So we, we, what you know we found is that… [interpose]

DAWN SANDOW: We have to start giving out iPhones when they come in to vote.

[laughter]

CHAIRPERSON BREWER: Dawn you have to identify yourself before you talk.

MICHAEL RYAN: Don't you shut it up.

[laughter]

CHAIRPERSON BREWER: You know and I think it would be, wouldn't you say it would be more inexpensive to run an operation online, to having online voting.

MICHAEL RYAN: I think the intuitive guess would be yes but honestly we haven't done any evaluation along those lines. You know it would, like I said it will impact our entire system. It would, it would impact you know how we use poll workers whether it will be reduction in poll workers, storage, voting machines. All of those

things would have to be added up and, and, and

dealt with so that we can come up with a number and

then offset that against you, you know keeping in

mind that if it's done the way it's typically done

with government this would be a standalone secure

system all by itself which would require a level

of, of development. And, and we also know that

technology development has a tendency to be costly.

Now when you're weighing the cost of whatever the

development is versus whatever the ongoing savings

is whether it be consumables, less paper ballots,

or all of those things I mean that's where the

analysis is going to come in.

CHAIRPERSON CABRERA: How much was the

last presidential election? How much did it cost

us? How many millions? You say about a hundred

million dollars?

DAWN SANDOW: No.

CHAIRPERSON CABRERA: No?

[crosstalk]

DAWN SANDOW: About 27.

MICHAEL RYAN: About 20, 25.

CHAIRPERSON CABRERA: 20, 20 how much?

DAWN SANDOW: About 27 million.

CHAIRPERSON CABRERA: 27 million?

DAWN SANDOW: Mm-hmm.

CHAIRPERSON CABRERA: How much, that was, is that just for the primary or the general election.

DAWN SANDOW: General election.

CHAIRPERSON CABRERA: And how much was for the primary?

DAWN SANDOW: It probably wouldn't be that much less. It would probably be about the same.

CHAIRPERSON CABRERA: About the same?

DAWN SANDOW: Yeah. We would know more once you know… [interpose]

CHAIRPERSON CABRERA: So you're looking about 50 million dollars just for those two elections right?

MICHAEL RYAN: Right.

CHAIRPERSON CABRERA: And no runoffs or you know. I think so, I, how much you would estimate it would cost to develop you know software?

MICHAEL RYAN: We haven't looked at that at all and I, but you know given the timing like I said… [interpose]

CHAIRPERSON CABRERA: Right.

MICHAEL RYAN: …is only, we only got the notice two weeks ago so we… [interpose]

CHAIRPERSON CABRERA: Okay.

MICHAEL RYAN: …it's only, we only got the notice two weeks ago so it… [interpose]

CHAIRPERSON CABRERA: Okay.

MICHAEL RYAN: …it's clearly you know a big issue and, and not something that we've developed just yet.

CHAIRPERSON CABRERA: You there's a lot more I could say here but I, I just think when I see how few people vote and the absentee ballots to be honest with you, you know in many elections those, they're counted so late. We will have real time election. We don't have to wait all those hours and put you through all the pressure. Everybody calling in for results. You know how it goes on that night and the day after, as a matter of fact weeks. And I think it will prepare us. Also if we have runoffs. This year we had the situation

the worries about are, were we going to be ready

two weeks later for runoff and we, we did have one.

What kind of machines you know we're going to

require to, to, to have it all set up. I, I think

this would eliminate all of the above. I know that,

you know anything that you start off the transition

piece is, is difficult but I thinking the long run

and this is the way of the future really. And just

to see even other countries, a wholesale countries

that are adopting this approach and they're

reporting no problems. They're reporting more

people voting. But I know you didn't have an

opportunity… [interpose]

MICHAEL RYAN: Right.

CHAIRPERSON CABRERA: …to check that out

so…

MICHAEL RYAN: But, but I will tell you

one of the things that we, we have had an

opportunity to, to look at is Councilman you, you

touched on results at the end of the night. We are

taking a very critical hard look at how we do the

results at the end of the night. For those of you

that don't know there are two portable memory

devices that, that go into the machine, the, the

1

2 "backup stick" as they call it and the primary. The

3 way the system is set up right now is we run three

4 tapes and then pull out the primary stick. So

5 that's the one that the results are ultimately

6 uploaded from. So whether we transition to

7 uploading the results right from the poll site or

8 if we continue to do it the way we do it now where

9 the police department takes, takes them and then

10 uploads into the system we're still in the position

11 of having to wait for all of these tapes to print

12 out. Now in a complicated election like we had

13 recently with a lot of candidates on the ballot

14 and, and six proposals those tapes take a long time

15 to run. So one of the things that we're looking at

16 is, and we're working with the, the state board of

17 elections and it, it's going to be a tight

18 timeframe and hopefully we can accomplish it for

19 this coming general but it requires state

20 certification. We're hoping to move to a situation

21 where we write the information to the primary

22 device and then write the information to the backup

23 and then remove the primary and run the tapes off

24 the backup. That will then allow the, the primary

25 sticks to get off into the stream of commerce and,

and get going where they need to go much more

quickly.

CHAIRPERSON BREWER: Will this be

possible in next year? Are we… [interpose]

MICHAEL RYAN: Well, well… [interpose]

DAWN SANDOW: We're trying.

MICHAEL RYAN: …we're, we've asked. I

mean it's… [interpose]

CHAIRPERSON BREWER: Who are you asking?

MICHAEL RYAN: We, I sent a letter to

the, to the State Board of Elections and we're

having, the problem that we have right now is ESNS

has to develop its firmware protocol to present it

to the State Board of Elections ultimately for

their certification. It's, you know given the

process I'm hopeful that it could happen for this,

for this general. If it doesn't happen for this

general I'm, I'm certain that it can be implemented

in 2015.

CHAIRPERSON BREWER: Okay because I

think it's great to have this discussion. I don't,

I love my colleague but I don't want internet

voting yet.

[laughter]

CHAIRPERSON BREWER: But I do want early voting. That would help with the lines. And Council Assembly Member Kavanagh has a bill to that effect. I'm sure he'll talk about it in a few minutes. But you're right. The voting percentage is really low. And so the question is what are all the ways we can think about to increase it. I think we always have to have it at the polls and I think we always have to have early voting which we can't get the state legislature to agree to. And then I think there are so many internet steps. We talked about the poll books. I mean it's insane that we're sitting there writing our names and waiting in line to do that. And then we wait in line first of all to find our ED and then we wait in line to get to the station to sign the book. And then we wait in line to get to the security booth so we can fill it out. I never do that. I just, any box I can find, because I don't wait that, another time you know. And then we wait for the scanner. [foreign language] So you're right.

CHAIRPERSON CABRERA: I, I agree with you. I, I think we, we need to look at what we're doing now. But in the future. I don't know what

2 that future's going to be the near or, or a long

3 term future. I just see all the, all sorts of

4 savings. I mean it's just millions and millions of

5 dollars that we spend every single year in all of

6 these election. And then we have to send it. Now we

7 have congress in June and then in September and

8 then back. You know you just, we talking about

9 millions of dollars that we could be spending in

10 public schools is I would think conceivably be less

11 work for you, less pressure on you, less blame on

12 you, you know fair blame that I think a lot of

13 times comes your way. But, you know something for

14 us to, to start having this level of conversation.

15   MICHAEL RYAN: Absolutely and I think

16 before you stepped in that was one of the

17 observations that I made. If we don't start the

18 conversation nothing's ever going to happen. But it

19 was a relatively subtle statement that you just

20 made but I, I do not want it to pass without

21 expressing my absolute and utmost appreciation for

22 your observation that often, not to say that we

23 never do anything wrong, but that often the Board

24 of Elections is un, un fairly criticized from

25

people that simply want to take pot shots and, and maybe engage in some self-promotion.

CHAIRPERSON CABRERA: Indeed. Thank you so much.

CHAIRPERSON BREWER: Thank you both very much. We're going to go now to a quick vote on Government Operations and then we'll hear from the other people who are going to speak. We also I think have to vote in technologies. It's the end of the year so we're trying to squeeze all of these in. I want to thank Council Members Vallone and Dickens. I think Jackson was here for a few minutes. So now we're going to move if it's okay with the Sargent to Government Operations. Are we… [interpose]

MICHAEL RYAN: Thank you very much.

CHAIRPERSON BREWER: …are we all set sir? Sargent? Okay. And today's votes for… [interpose]

[background comments]

CHAIRPERSON BREWER: Alright so we're gaveling out of the joint Committee of Technology and Government Operations.

[gavel]

CHAIRPERSON BREWER: And we're gaveling in at Government Operations.

[gavel]

CHAIRPERSON BREWER: So it's Gale Brewer again and I'm here to talk about two votes that we're going to be taking; the override of the mayor's veto of Intro number 951-A by Council Member Vacca and a vote on Proposed Resolution 1988 air, A on lobbying which is sponsored by the Speaker Quinn and myself. 951-A is a piece of legislation that patches up a loophole in the city's administrative procedure act, as known as CAPA for agencies that are boards and commissions such as the taxi and limousine commission the commission or board members typically need to vote on any final rule. Despite this requirement the CAPA process is the same as per agencies at which a commissioner is making a decision. There's no notice requirement for the members of the board to ensure that they have time to see a rule before they vote. So a rule that has been negotiated throughout the night and the next day the members of the commission show up and are told that they have to vote and they haven't seen it and they

haven't participated in a negotiation so it makes sense for the members of boards or commissions be able to take some time to review the content of a rule before they vote. And that's what Intro 951 addresses. The second piece of legislation is a resolution that would implement one of their recommendations of the joint mayoral council appointed lobbying commission headed up by former Council Member Herby Berman. The committee passed many of these recommendations recently and it was signed by the mayor. This resolution however would call on the state of New York to pass legislation requiring the state's acceptance of city fillings by lobbyists who only lobby city officials. It would eliminate duplicative paperwork for lobbyists who lobby solely within the city and would not affect transparency because the information included in city filings exceeds that of state filings. So we were, we're going to ask the clerk to call on these to voting to accept and file the mayor's message of disapproval and repass Intro 951-A notwithstanding the objections of the mayor. Please call the roll.

1

2 WILLIAM MARTIN: William Martin

3 Committee Clerk. Roll Call vote Committee on

4 Governmental Operations. Council Member Brewer.

5 CHAIRPERSON BREWER: I vote aye.

6 WILLIAM MARTIN: Vallone.

7 COUNCIL MEMBER VALLONE: I vote aye. And

8 we'll put on the record that my father has a

9 consulting firm but I don't believe that conflicts

10 me out of this. Thank you.

11 WILLIAM MARTIN: Dickens.

12 COUNCIL MEMBER DICKENS: Aye.

13 WILLIAM MARTIN: By a vote of three in

14 the affirmative, zero in the negative and no

15 abstentions items have been adopted.

16 CHAIRPERSON BREWER: Thank you very

17 much. Now I'm going to adjourn this Governmental

18 Operations and we'll go back to technology.

19 [background comments]

20 CHAIRPERSON BREWER: Right. So I'm going

21 to out of this one.

22 [gavel]

23 CHAIRPERSON CABRERA: Okay we're back on

24 and we're going to… Good morning everyone and

25 welcome to this hearing and vote concerning

proposed resolution 1954 which calls on the port

authority on New York and New Jersey to amend its

contract with Boingo Wireless Inc. in order to

provide free internet access at its three major

airports. 15 of the 20's busiest airports in the

United State offers some form of free Wi-Fi

connectivity; LaGuardia, JFK, and Newark. Three of

the five busiest airports in the nation without

free wireless internet access. Boingo offers

domestic free Wi-Fi services at Boston Logan's

International Airport, Denver International

Airport, Nashville International Airport, Raleigh-

Durham International Airport thus it is evident

that Boingo's business model can support a form of

free Wi-Fi being offered at, at airports. And

Council Member Brewer I thank you for every time I

fly and I go to one of these airports, one of our

airports I sit there frustrated the fact that I go

to other cities and we're, you know the biggest

city in, in United States and, and it just

frustrates me and I sit there and say what, what

are we saying to the rest of the world when they

come here and we don't have free Wi-Fi and other

airports do. So thank you so much for putting this

2 forth and that's why I had to co, sponsor with you,

3 join you in this bill. And I'm going to turn it to

4 Council Member Brewer you have somewhere to…

5   COUNCIL MEMBER BREWER: No, I just, I

6 appreciate it very much and I look forward to

7 trying to change port authority's mind. We've been

8 talking to them and they are aware of it. And I

9 think that the press and the interest has shown

10 great possibilities for having free Wi-Fi. Thank

11 you very very much. I want to think Will Colegrove

12 in particular from my office who's been focused on

13 this.

14   CHAIRPERSON CABRERA: We have some

15 witnesses before I move forward. I don't know if

16 Council Member Koppell and Weprin were recognized.

17 Thank you for joining us. We have Steven Sigmund,

18 Rebecca Lynch, Jordan Isenstadt, and Katherin

19 Scopey[phonetic]. Did I say that right? Please if

20 you could, if you could join us. Come forward and I

21 ask if you could make your statements brief. We

22 have a lot of resolutions today, a lot of voting

23 going on. And as soon as you're ready you may

24 begin.

25

1

2   CHAIRPERSON BREWER: Steve go ahead.

3 Start.

4   STEVEN SIGMUND: Alright thanks. My name

5 is… [interpose]

6   CHAIRPERSON BREWER: Move over to the

7 mic though.

8   STEVEN SIGMUND: My name's Steven

9 Sigmund and I'm the Executive Director of the

10 Global Gateway Alliance. GGA is a business labor

11 academia and government coalition whose mission is

12 to advocate for modernization of our airports and

13 related infrastructure. We're here today in full

14 support of resolution 1954. As the council member

15 noted GGA conducted the survey that showed that 15

16 of the 20 busiest airports around the country

17 provide free Wi-Fi and three of the five that don't

18 are, are here in New York. The 2012 travel and

19 leisure study which ranked New York area airports

20 the worst in the country specifically sited our

21 lack of free Wi-Fi and the difficulty in finding a

22 Wi-Fi signal at all and even after paying for it.

23 And just as important free Wi-Fi has become an

24 expected convenience throughout New York City

25 public spaces. Free public Wi-Fi is available in 20

2 parks, five subway stations, public libraries, and

3 museums throughout the city, payphones,

4 restaurants, coffee shops, other locations, a

5 hundred blocks weth[phonetic] of Harlem soon and,

6 and in this building but not at our airports. And

7 as you can see on the chart behind me there's free

8 Wi-Fi essentially everywhere in our region except

9 our airports. So GGA supports Council Member

10 Brewer's resolution wholeheartedly. We thank the

11 members of the committee for, for your support and

12 we urge it, its passage in the full council. We

13 join in calling on Boingo to amend its contract

14 with the port authority. It's an archaic contract

15 by internet standards, 15 years old. And they

16 should allow passengers free Wi-Fi at the New York

17 airports. Thank you.

18   JORDAN ISENSTADT: Good morning. My

19 name is Jordan Isenstadt. I'm the Deputy Director

20 of the Association for a Better New York. ABNY is

21 one of New York's longstanding civic organizations

22 advocating for the policy's, programs, and projects

23 that make New York a better place to live, work,

24 and visit. We represent a broad fabric of New

25 York's economy and our membership includes New

York's most influential businesses, nonprofits,

arts and culture organizations, educational

institutions, labor unions, and entrepreneurs. I'm

here this morning to offer ABNY's support of

resolution 1954. I want to thank Council Member

Brewer for introducing this resolution and Council

Member Cabrera for calling for this hearing today.

For millions of business of business travelers

airports are an extension of their office. In fact

50 percent, 55 percent of all business travelers

carry three to four smart devices at all times.

Access to free and reliable Wi-Fi at airports is

just another part of keeping business running

smoothly and efficiently especially given the

increase in time spent at the airport due to long

lines at security checkpoints and frequent delays.

A vast majority of global airports say they now

offer travelers free Wi-Fi but the New York City

airports with its 110 million passengers and JFK

having the most international arrivals we're, we're

still without free Wi-Fi which just seems

incomprehensible. Airports also account for 63

billion in regional economic activity and nearly

half a million jobs in the New York City area

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2   alone. It's not a situation where we need to

3   reinvent the wheel it's countless airports around

4   the world have instituted free Wi-Fi offerings and

5   now it's time for port authority to do the same.

6   This resolution will make a difference to thousands

7   of travelers each day. ABNY wants to thank the New

8   York City council subcommittees here for

9   considering this important issue. And thank you for

10   the opportunity to testify.

11   REBECCA LYNCH: Hello, my name is

12   Rebecca Lynch and I'm here to testify on behalf of

13   George Miranda and the Teamsters Joint Council 16

14   representing 120 thousand working men and women in

15   the greater New York area. I just want to start by

16   thanking Chairess[phonetic] Brewer and Cabrera and

17   also Council Members Weprin, and Koppell, and

18   Vallone if he comes back. In addition by the way I

19   just, as a side not in addition to representing the

20   Teamsters Joint Council 16 George Miranda's own

21   local represents all the airports East of the

22   Mississippi and within his local anywhere we'll

23   discuss in my testimony. But anywhere from flight

24   attendants and mechanics. Thank you for giving me

25   an opportunity to speak before your committee on

resolution 1954 which would give greater benefit to

millions of New Yorkers and Visitors to our city.

As a board member of the Global Gateway Alliance

the Teamsters recognize the importance of world

class airports as a union that represents pilots,

mechanics, cleaners, and truckers in the nation's

airports. We recognize the importance of world

class airports for the great number of jobs they

create. The Global Gateway Alliance study with the

partnership of New York City found that almost half

a million jobs are created by our airports. Better

amenities and options such as the proposed wireless

internet access at our airports will lead to more

amiable travel for New York's airport patrons and

that in turn translates to increased business

leading to increased hiring from our communities

and increased revenue for New York City, the air

carriers, and merchants in our airports. A 2012

airport survey conducted by the travel and leisure

ranked LaGuardia Airport the worst airport in the

United States. JFK and Newark Airports didn't fare

much better. This is not the reputation we want. It

is not what New York City should have. Something as

simple as the proposed free Boingo Wi-Fi would make

a world of difference for travelers in our New York

City airports. They have set a precedent that has

been offering a free advertiser supported Wi-Fi

option since 2007. Since its implementation the

usage has doubled. Wireless internet has a huge

impact out of airports in Boston with over 20

percent of passengers taking advantage of free Wi-

Fi and in San Francisco with over 30 percent. Our

passengers deserve the same level of amenities that

they have come to expect in parks, subways, coffee

shops, and airports around the world. On behalf of

the Teamsters Joint Council 16 and the residents

and travelers of New York City I want to thank you

for this resolution and urge Boingo to amend its

contract so we can begin planning the future of New

York City's airports. Thank you very much.

CHAIRPERSON BREWER: I took a picture of

you for your mother too.

[laughter]

CHAIRPERSON BREWER: It's a private

joke. We love her mother.

REBECCA LYNCH: Thank you.

CHAIRPERSON CABRERA: Is there anybody

else who's here to testify.

[background comments]

CHAIRPERSON CABRERA: Okay.

[background comments]

CHAIRPERSON BREWER: You have to wait. Thank you.

CHAIRPERSON CABRERA: Okay so now we call for a vote.

WILLIAM MARTIN: William Martin, Committee Clerk. Roll call vote Committee on Technology resolution 1954. Council Member Cabrera.

CHAIRPERSON CABRERA: Aye and encourage everyone else to vote aye.

WILLIAM MARTIN: Brewer.

CHAIRPERSON BREWER: Yes. Thank you.

WILLIAM MARTIN: Koppell.

CHAIRPERSON KOPPELL: Just that, I would like to explain my vote. I would just observe that it's an, I didn't realize that we didn't have Wi-Fi at our airports. I can hardly believe that this is the case. And in fact one of the commissioners of the port authorities, my constituent and well known to me I'm going to discuss I don't care whether they have the, whether they amend the contract they got to do it. And it, it's absurd. Council Member

Brewer I am, I'm surprised that we haven't done

this before. It, it's just an outrage. Of course

I'm going to vote yes. Let me close by thanking the

chair for his chairmanship of this committee and I

want to also go back and thank Council Member

Brewer because she really created in a sense this

committee and done such great work with technology

over the years that we've served together. So thank

you both and I withdraw my request and I vote aye.

WILLIAM MARTIN: Weprin.

COUNCIL MEMBER WEPRIN: Aye.

WILLIAM MARTIN: By a vote of four in

the affirmative, zero in the negative, and no

abstentions item has been adopted. Members please

sign the committee report. Thank you.

[gavel]

CHAIRPERSON CABRERA: We're close?

[gavel]

CHAIRPERSON BREWER: We're gaveling back

in the joint Committee of Governmental Operations

and Technology. We'd like to Assembly Member Brian

Kavanagh.

BRIAN KAVANAGH: Thank you very much.

I'd like to note as a preliminary matter that I had

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2 only one breakfast so I got, a beat a few of you

3 here but though not by much. And I'd also like to

4 note that I'm sure my mother would appreciate a

5 photo of, of me while I testify…

6   [laughter]

7   BRIAN KAVANAGH: …if, if that's

8 possible.

9   CHAIRPERSON BREWER: I want to make sure

10 your mother's not in the assembly but I will make

11 sure that she gets a photo.

12   [laughter]

13   BRIAN KAVANAGH: Okay. So just thank you

14 for the opportunity to testify. I'm Brian Kavanagh.

15 I represent a district on the East side of

16 Manhattan and the State Assembly, the 74th Assembly

17 District. I'll try to smile while I say the next

18 sentence. I'm a member of the Assembly Election

19 Committee and I chair the Commission on Government

20 Administration and I chaired for many years the

21 subcommittee on election operations and voting in

22 the assembly. I'd like to thank Chair Fernando

23 Cabrera I think this is the first time I've

24 testified before your committee and also Chair

25 Brewer and I think this may well be the very last

time that Gale Brewer chairs the Government

Operations Committee before moving on to another

job. But you know thank you for so much work on, on

election issues and so many other issues over the

last few years. So again thank you for having this

important hearing. I'm going to focus my testimony

on the, a little bit on the feasibility of internet

voting and some of the issues that you've talked

about already on alternative times and places we

can allow people to vote that will serve some of

the purpose of internet voting and also ways we can

make the, we can use the internet to make it easier

for people to participate in the electoral process.

While internet voting is an exciting frontier and

an election administration it's still from

perspective a long way from being secure enough to

use. The National Institutes for Standards and

Technology was asked in 2011 by the Federal

Election Assistance Commission to research internet

voting as potential avenue for absentee voting by

military and oversees citizens. And even in that

context that institute found that to be too many

technology and security issues to make it feasible.

And it doesn't seem that much has changed in, in,

in that regard since 2011. And the report concluded

that internet voting systems are currently

vulnerable to internet threats like malware and

spyware and face difficulties in, in voter

authentication and auditability. Their

recommendation was that internet voting not be

implemented until subjected to further study. I

just want to make, I just want to talk briefly

about the security issue here. The, the chair

mentioned a lot of transactions that many of us

consider at least as important as voting that are

done routinely over the internet. The fundamental

difference between voting, instituting a voting

system by internet and all of these other things is

that the individual user is in a position to verify

the outcome. So if you use an ATM to deposit money

into your account and the money doesn't go into

your account you, the person who deposited, are

able to notice that and question the bank and get

the thing repaired. And actually you know ATMs are

not perfect and they do make mistakes. The problem

with voting is if you have a million people each

engaging in a transaction and the sum of all those

transactions is the way we determine who gets to

1
2 run the city or run the state or, or you know serve
3 one of our local districts no individual person is
4 in a position to say well my vote wasn't, was
5 counted or was not counted. And there's simply no,
6 there are currently we have a system where people
7 filled out a piece of paper, it gets scanned. It is
8 the scanner that's telling us how many but at the
9 same time we have a box of all the, the pieces of
10 paper and when election is closed we can open the
11 box and we can audit it and we'll look at it.
12 Internet voting if somebody were, so if somebody
13 were to tamper with the results of an existing
14 election, hack the machines, all these things we've
15 heard, our concerns sometimes with the scanner
16 machines and so far there has not been any evidence
17 that that's been a problem with these machines. But
18 even if there were you do have a way of auditing
19 it. With people sitting in their homes on their own
20 computers voting it would be very hard. And that's
21 the really, the, the biggest challenge from a
22 security perspective. There's just no way to know
23 if you actually have a security problem. So just
24 briefly there're two, two quick points on
25 alternates to make it easier. One is early voting.

The assembly has adopted a bill that would permit

early voting, would, would actually mandate early

voting throughout the state. It does solve a lot of

the problems that internet voting is intended to

solve, it allows you potentially to vote at a

different location than your normal place if it's

more convenient. It allows you to pick a time over

the, you know the preceding days where you can vote

and it would make it easier. It presumably would

reduce the lines at poll sites. The other big

alternative is an expanded ability to vote by mail.

I have a bill that would take out of the state

constitution some restrictions on absentee voting.

Currently you are required in order to get an

absentee ballot to be unavoidably absent from the

county of your, in New York City's case, from the

City of New York on the day of election. It should

not be that you're unavoidably absent. There's

also, the constitution currently mandates specific

excuses that allow you to get an absentee ballot. I

have a bill that would strip those out and just say

legislatures like the City Council and the State

Assembly can set the parameters but much broader.

It does require a constitutional amendment at this

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2 point. We have moved that in the committee and the

3 assembly in the past but it would take a, a big

4 push to do it. And that is also an option that

5 allows people to vote in their home. Routinely

6 other states have done that to substantial success.

7 On, so I'd like, just briefly on, while security of

8 internet voting continues to be assed there are

9 many other ways we can use internet, the internet

10 to streamline the voting process. One you've talked

11 about a lot already, poll books. That demonstration

12 of the kiosk. My understanding is those kiosks cost

13 about 15 thousand dollars to create which would be

14 quite an expensive proposition citywide. Whatever

15 benefits you get from the fact that it's really

16 hard to steal a thousand pound steel machine with a

17 tablet embedded in it it's far simpler to buy

18 tablets, distribute them over poll sites, you know

19 set them up so they can't easily be used for

20 something else. You know the security features that

21 you'd have to hack through. Tablets cost a few

22 hundred dollars apiece maybe. If you have lost a

23 few of them each election day that would not only

24 be cheaper than the capital cost of converting all

25 those kiosks. The storage costs of… I mean those

2 machines cost currently about 750 thousand dollars

3 a year to store. So you could buy a whole lot of

4 tablets with the kind of money that it would take

5 to implement that kind of system. I compliment the

6 board on thinking about that. Electronic poll books

7 would, is probably the single easiest use of the

8 internet to dramatically improve election

9 administration. And we should, we should do it. It

10 also would have the benefit of being immediately,

11 if you're at the wrong poll site immediately

12 somebody can look up and tell you where to go and

13 all that. So there's lots of benefits of that and

14 we should move in that direction but not with

15 hulking steel machines. The other great opportunity

16 comes in the possibility of creating online voter

17 registration which is a commonsense measure. And it

18 has been implemented partly in the state of New

19 York through the DMV and I'll talk about that again

20 in a second. But in addition to promoting greater

21 access online voting can create substantial cost

22 savings. In Arizona where voters have been able to

23 register online since 2002 the cost of paper

24 registration was 83 cents per registration. The

25 cost of online registration in Arizona presently,

well this is according to a 2010 study is three

cents to process. So boards of elections that are

currently getting paper forms hand written and then

having to enter that data generally in big stacks

of paper by bleary eyed people right before the

election would, if, if the data could be, come in

in an electronic format, be transferred in

electronic format and they add it to the rolls in

electronic format it would make election

registration cheaper and much more effective. And

it would also dramatically reduce errors in the

books which is one of the reasons the lines get so

long. So far in New York as I mentioned we only

have that for current DMV customers. You need to

either be a license holder or a, a fee paying ID

holder from DMV. We should expand that initiative

by using it as a model for other agencies

particularly focusing on agencies that are

currently required to register voters under the

national voter registration act which is a variety

of social service agencies and other agencies that,

that people deal with routinely. It should be the

case that if you have interaction with a government

agency and there is a signature and an

authentication process required through that

interaction that also should be sufficient to allow

people to vote. Our current system, although the

DMV is a great step forward, it does skew

potentially skew the election in favor of people

who have cars and registrations and drivers

licenses which is a, which is a problem that the

national voter registration act was intended to

offset by using social service agencies about 50

years ago. But it's, it's went back now and in a

world where people with cars and drivers licenses

are now advantaged in certain ways in getting into

the registration system and that should be

addressed. I also have just a broader bill called

the voter empowerment act of New York which would

provide for online voter registration and

streamline a variety of the other processes

Sometimes people call it automatic registration. It

shouldn't necessarily be automatic. People in our

society probably should have the right to stay

unregistered if they really insist upon it. But it

should be the norm that people get registered. That

would, that would increase access. One of the major

reasons people don't have access now is it's very

difficult to change your address and stay on the

voter rolls. And so a significant number who are

being disenfranchised in that way, having a system

that's reliable and on, on the internet to register

and stay in the system is actually probably a

greater advantage to people than the actual right

to vote when election day rolls around because if

you're not registered you can't vote anyway in our

state. And I know some folks also today will

probably also talk about same day registration

which would be helpful but needs constitutional

amendment is probably several years away at this

point. We also, also, in a similar vein worked on

preregistration 16. Currently you can register to

vote, you can preregister to vote if you in the

year of the election if you will turn 18 by the

time that election happens. For presidential years

that means you know if the presidential primaries

in February it means you got, and you're going to

turn 18 sometime after January one but before the

presidential election you might have a couple weeks

where you can preregister. It should be that 16 and

17 year olds when they're still in school, when

they're engaged in civics classes, when they're

showing up for the first time at DMV in many cases

should be able to preregister to vote, do all the

things necessary to get registered except obviously

certify that they're 18 because they're not and

upon their 18th birthday it becomes automatic. And

that way again would expand the rolls and make it

easier for lots of people to vote and, and also

make it easier to administer elections. You talked

about in addition to electronic poll books and

online registration the New York City Board of

Elections should use the internet to better inform

voters of election information including dates of

elections and poll site locations and changes. I

compliment the board on some of the work they've

done to put some material on the internet, to use

Twitter and other applications to get real time

information on election day. But there's still a

lot more work to do. We passed a bill that took

effect for the first time this November that

requires results to be on the board, on the board's

websites on, on the internet. That's a step

forward. The board did a good job of implementing

that. But there's a lot more to do in terms of

using that to, to inform voters. It would

1

2 particularly relevant in the event of a last minute

3 poll, polling location changes like we saw in the

4 aftermath of super storm Sandy. The internet could

5 be used in those context to a quick and inexpensive

6 way of disseminating up to the minute information.

7 Of course it's, it's necessary to have proper

8 contact information. The board has to its credit

9 added a space for email addresses and on

10 registration sites. But getting, getting reliable

11 systems to distribute information reliably through

12 smartphones and, and email is also a, a major

13 opportunity that we should pursue. Again thank you

14 for the opportunity to testify today. If anybody

15 does have any questions I'm happy to entertain

16 them.

17   CHAIRPERSON CABRERA: Well first I want

18 to thank you for all your efforts at the state

19 level and it seems that you covering all the bases

20 and I, if we could be of help from the city please

21 let us know be more than glad to join your efforts.

22 I, I'm curious have, have you looked at Estonia's

23 smart electronic ID card system that they have over

24 there because you know they have a nationalized

25 online voting system and would that satisfy the

2 verifiable piece that I think is very very

3 important that's why we hold the, these hearings to

4 see how we could, you know what's best.

5   BRIAN KAVANAGH: Right.

6   CHAIRPERSON CABRERA: You know what's

7 the best practice.

8   BRIAN KAVANAGH: I, I have not

9 personally looked at that system specifically. I

10 think that kind of system was reviewed in the

11 report I sited from the Voter Assistance

12 Commission. But the, like I, you, there are

13 security systems that would make internet voting

14 doable. You could create a system, you know with

15 some people that its security to banking

16 transactions. There were, there were things where

17 you get a real time number sent to you on a, on a

18 chip that allow you to access your bank accounts

19 and you type, have to type that in in real time.

20 There are ways we could secure it in having sort of

21 sophisticated ID systems and you know scrambling

22 the information as it's transmitted and all that

23 stuff. There are two basic problems with that. One

24 is making, creating a citizenry where everybody has

25 to obtain that and in order to participate in the

system creates some, some obstacles that are maybe

greater than the current obstacles to voting. There

would, you would end up being… A, a really secure

system would have obstacles, it would have

passwords, it would have a certain kind of software

you need, it would have technological requirements

that some people in our setting presumably would be

able to participate in. Others may not be able to.

So one, we talked about cost before. It is very

likely that an internet voting system would be

cheaper to administer than a bricks and mortar you

know out there in the world voting system. The

problem with that analysis though is you'd probably

need both for the foreseeable future. So you're not

going to say everybody needs to get this

sophisticated smartcard ID thing in order to

participate and otherwise you're out of luck.

You're going to end up running conventional poll

sites and having conventional absentee ballots for

the foreseeable future. So you would be adding

that. It'd be expensive. The other basic problem is

we still have enormous skepticism now having

implemented paper and scanner systems a number of

years ago. We're the last state to do it and even

2 we've had them for a few years now. You still have

3 people that in their heart believe this is

4 vulnerable to hackers and creating an online system

5 where people really are, where the general public

6 as a whole, where there's not a significant portion

7 of the public that does not believe that in fact

8 the outcome is correct would be an enormous lift.

9 And I just, I think we're very far from it even if

10 we got the best technological minds in, in to, to

11 think about it. It's just like they've done in

12 Estonia.

13   CHAIRPERSON CABRERA: I, I definitely

14 appreciate you comments and we need to look at all

15 those variables. Indeed I, the, you know the

16 information I had got from Estonia has been that

17 voting has gone significantly up, that they have

18 not encounter security issues. Again this is, this

19 is smaller country United States but if we were

20 just talking about New York City you know it would

21 be something compatible in terms of population what

22 they have. And I understand the cultural piece is

23 different there than here. And what I mean the, the

24 whole acculturation process of getting used to

25 trusting you know the whole internet experience.

But it, it, it will be interested to a… I, I be more interested in, in all of us, we looking at what they're doing, see what's working, how we can make it better. We're more technologically advanced than they are and how to improve what they already have and you know just to look at possibility. I'm always into possibility thinking. And, but…

BRIAN KAVANAGH: And I, and I think this is a worthy, this is as, as you said before this is a worthy subject to look at toward the future.

CHAIRPERSON CABRERA: Right.

BRIAN KAVANAGH: You know I, I agree it is really a very exciting prospect. I think we're not there yet. I would not that getting an electronic poll book system and electronic registration are necessary and significant steps toward a system that would be reliable enough to do internet voting.

CHAIRPERSON CABRERA: Fair enough.

BRIAN KAVANAGH: If you can, if you can… If somebody at a poll site is able to clock in the fact that you just voted right now that's the kind of real time information you are going to need to have electronically. So getting used to those

mechanisms would be a major step. Now it's not just valuable in its own right. It also would be a major step toward being able to rethink the technology of this long term.

CHAIRPERSON CABRERA: That's very helpful. Council Member Brewer.

CHAIRPERSON BREWER: Thank you. I'm scared of Estonia. I don't know. I think I might…
[interpose]

[laughter]

CHAIRPERSON BREWER: I don't want a card I just love my, my colleague but no Estonia. I, I just lost the Estonia vote I'm sure.

[laughter]

CHAIRPERSON BREWER: But I don't know about Estonia's and I don't want it to be like Estonia I'm just saying. And also that little card it reminds me, you've, you know we don't want people to have to have ID to go vote. That's an issue that the civil liberties union is focused on in many states. So I don't want ID and so I just throw that out. I haven't been to Estonia.

[laughter]

CHAIRPERSON BREWER: But anyway I appreciate, that I'm hugely supportive of what Mike Ryan is trying to do in terms of the end of the day. I've been at the police stations when we're there with like two computers, backup drives, counting at the table, oh gosh and waiting for the yellow packets to come. I, I've done it myself. That has to go and if we could figure out a way of on the site having enough connectivity because that's also a problem, the walls are thick in some of the buildings. There's not always wireless in the gym etcetera. And that's where I would like to focus so that we're not doing the police station thing. And secondly this poll book we need to have not just ESNS but also the other large companies and some startups as a tech support system. No money, this would be pro-bono to the Board of Elections stating this is what we need to do together. So I would love to work with you Brian Kavanagh on that and getting all of your wonderful legislation passed because I think that would really help in terms of turnout. And I think you're right this turnout is just pathetic. So all those issues would work. And one question I had though I

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2 never understand with the DMV how do we get around

3 or is it a problem is original signature. That's

4 what's always thrown up. So when you register to

5 vote you do sign something. How does the DMV deal

6 with that because I have had my license for so many

7 decades I don't pay attention to the DMV?

8 BRIAN KAVANAGH: The, the D, the D, the,

9 the, through an executive order and some you know

10 some good work with the DMV the, the state

11 determines that the signature on file through the

12 DMV and their authentication process is sufficient

13 to create a registration.

14 CHAIRPERSON BREWER: Yeah because they

15 have it already on the signature of the license.

16 BRIAN KAVANAGH: Right and it also helps

17 that the DMV is actually mandated by federal and

18 state law to provide registration as a service. But

19 as I noted before and you know this Council Member

20 Brewer the, a wide range of agencies are also

21 mandated to provide registration directly and it…

22 Again I have a piece of legislation that would

23 mandate that and systematize it but there probably

24 is an opportunity for government agencies at the

25 city and the state level by executive action to

2 create more opportunities to register and we should

3 push this like… [interpose]

4   CHAIRPERSON BREWER: Well we have, we

5 have you know… [interpose]

6   BRIAN KAVANAGH: Right.

7   CHAIRPERSON BREWER: …there is an

8 executive order from at least maybe Kochert [sp?]

9 or you know to do other agencies. A, it's not

10 enforced.

11   BRIAN KAVANAGH: No, what I'm saying is

12 that… [interpose]

13   CHAIRPERSON BREWER: But we need online.

14   BRIAN KAVANAGH: Right.

15   CHAIRPERSON BREWER: Go ahead.

16   BRIAN KAVANAGH: You know what I'm

17 saying is the, the yes. The, the you know I, I, it

18 was a lead researcher on a study nationwide of

19 every state and their compliance with National

20 Registration Act a few years back and very few

21 states actually comply with, especially in the

22 context of social service agencies. So there's a

23 compliance with their current form, in the current

24 process issue. What the current process basically

25 involves every customer coming in and being handed,

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2 being asked if they want a paper registration form

3 and if they don't get, a paper registration form,

4 they're supposed to sign something called the

5 declination form and all those forms are supposed

6 to be like gathered up and sent off to A Board of

7 Elections where they can be hand entered. It is

8 probably the case that what happened at the DMV is

9 a good, they're, they're technological issues to be

10 worked out about how you make internet voting

11 available through other agencies but again the DMV

12 and the governor's council decided that they had

13 the capacity, the legal, and legislative authority

14 to implement online registration through DMV

15 without statutory changes. And it is an, it's, it's

16 something that the city and the state should be

17 explore. And I've had governor's office about this

18 but it's something the city and the state should be

19 exploring; whether there are, there're agencies

20 where you can automate it. Because one of the

21 reasons it doesn't happen now is it's very

22 cumbersome for the worker who's, you know they're

23 trying to sign somebody up for food stamps and like

24 oh by the way I'm supposed to do this whole voting

25 thing with you and it's complicated and there's

 1

 2 paper and then the paper has to get to the right

 3 place. It's, so creating a system that it's easy.

 4 It's like you want to register to vote alright I'm

 5 going to check this box on my screen, you're going

 6 you know.

 7 CHAIRPERSON BREWER: Right when you get

 8 in the SNAP you get the online opportunity to

 9 register. That does not exist now.

10 BRIAN KAVANAGH: Right. And that would,

11 and that would… [interpose]

12 CHAIRPERSON BREWER: So we have to

13 figure out what is the mechanism to make that

14 happen.

15 BRIAN KAVANAGH: Right. And which

16 agencies have the technological, technological

17 capacity to do it and this, there're, there're

18 technical issues but there may not be legislative

19 and the legal issues. And the fact that, that, the,

20 the state has implemented DMV registration system

21 and is, is very promising.

22 CHAIRPERSON BREWER: And there's some

23 apps now that were, been done by the Board of

24 Elections which I think you mentioned in passing as

25 well as by VAC, But I think they're also helping

1

2 you know at least let people know what the process

3 is. It doesn't help registration. It doesn't help

4 with early voting. So what are your possibilities

5 of your wonderful bill's passing? What can we do to

6 help with those?

7   BRIAN KAVANAGH: Again you know we have

8 one, one thing I haven't mentioned today which is

9 high on our agenda which is the, the, the voter

10 friendly ballot act which I know this committee's

11 also been supportive in the past. And that, that's

12 an effort again to make, to make it easier when

13 somebody actually shows up in person to do it. But

14 each of these, we need, we are going to need

15 bipartisan consensus to move these things forward.

16 Again we did early voting last year. And, but

17 having, having city officials that want to push for

18 this and say it's a priority is, is really

19 valuable. And again early voting is, early voting

20 is not my bill in the assembly but it's something

21 you know I'm, I'm a prime sponsor of and that, that

22 is I think one of the single biggest changes that

23 will make, that will make things easier. But all

24 these things we, you know it's an ongoing

25 conversation and we do need, we do need your

support to help us convey the you know folks that

are skeptical that this is something, these are

things we really need to move on.

CHAIRPERSON BREWER: Alright. Thank you

for all of your amazing testimony over the years

and on this issue in particular you are the expert

and I deeply appreciate your waiting to testify

today. I don't have any other questions or anything

else. Thank you very much Brian Kavanagh. I'm his

biggest fan just so you know.

[laughter]

BRIAN KAVANAGH: Thank you.

CHAIRPERSON BREWER: You should run the

world.

[laughter]

BRIAN KAVANAGH: It's mutual.

[laughter]

CHAIRPERSON BREWER: That's what I

think. I really believe it.

BRIAN KAVANAGH: Okay. Thank you all.

CHAIRPERSON BREWER: Our, our next is

Eric Friedman, Campaign Finance Board.

ERIC FRIEDMAN: Good morning, good

morning Chairs Cabrera and Brewer. My name is Eric

Friedman, Director of External Affairs for the New

York City Campaign Finance Board. I extend

apologies from our Executive Director Amy Loprest

who couldn't be with us this morning. Pardon. And I

thank you for the opportunity to testify today.

Fewer than 24 percent of registered democrats voted

in the September primary this year. In November for

the fourth consecutive election voter turnout hit a

new all-time low for a general mayoral election in

New York City. Barely 25 percent of all registered

voters cast a ballot. To address this downward

trend our voting system must be modernized. In an

ideal world our voting system would allow New

Yorkers to connect with government and participate

in the democratic process with the same ease and

convenience they've come to expect in their

everyday lives. A system that allows voters to cast

their ballot from a remote location using any

device with an internet connection is sometimes

discussed as a cure to lower voter turnout. Make

voting easier and more convenient the thinking goes

and more people will do it. It could be a money

saver as well. Holding elections via internet could

reduce or eliminate the cost of administering poll

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2 sites as well as printed ballots. But serious

3 challenges remain to be addressed before any

4 reliable, broadly used system of internet based

5 voting is ready for adoption. In, in a conventional

6 system a handful of ballots may be compromised

7 through fraud but an online network voting system

8 may be vulnerable to more wide spread manipulation.

9 There are multiple entrance points for mischief.

10 Malware on the voter's personal computer could

11 sivert[phonetic] the voter's intent without his or

12 her knowledge. Ballots could be intercepted in

13 transit over the public internet. Servers or

14 backend systems controlled by election

15 administrators could be compromised by remote

16 attacks. As mentioned in the committee report the

17 District of Columbia Board of Elections and Ethics

18 in 2010 conducted a test inviting hackers to find

19 vulnerabilities in a system they created as a pilot

20 program for military and overseas voters. A team

21 from the University of Michigan broke into the

22 system within 36 hours. They found a document

23 containing every voters name and password and

24 changed the voting results. It may be more

25 difficult to preserve the secrecy of ballots cast

over the internet. You know our current system of
in person voting requires that we authenticate each
voter's eligibility to cast a ballot and guarantee
the voter's privacy. In a system of online voting
these imperatives may contradict each other. I
think Assemblyman Kavanagh addressed this issue
pretty, pretty well during his testimony. In
October 2013 report on internet voting commissioned
by the province of British Columbia notes that
unlike in person voting the connection between the
voter's identity and the content of the ballot cast
electronically is fundamentally and necessarily
linked for both technological and policy reasons.
Lastly the lack of access to high speed internet in
many communities still represents a real concern.
Nationwide statistics show that lower income
communities do not have the same access to
broadband internet at home as their better off
neighbors. And computers and libraries or work
environments may not be private. Even if the
security and privacy issues that I have talked
about are addressed certain New Yorkers may still
simply not have equal access to the potential
benefits of internet voting system. Currently none

of the 50 states provide internet based voting for

the general public. 32 states in the District of

Columbia allow voters serving in the armed services

or living abroad's return voted absentee ballots

electronically via email or through a web portal

under limited circumstances. For instance one

instance Missouri allows only military voters

serving in a quote "hostile fire" area to return

ballots via email or fax. In the wake of super

storm Sandy New Jersey allowed some voters to email

in their ballots. An experiment that it, at least

one official in New Jersey described it as a

catastrophe due to the overwhelming demand. New

York State does not allow citizens currently

serving abroad to return their ballots

electronically. If we are to move forward in this

area we should consider changes to the law that

would allow administrators to explore internet

voting for the narrow, very narrow purpose of

helping more New Yorkers abroad or serving in the

military to cast valid timely votes if and only if

the challenges that we've described above can be

addressed. There are several ways however that

available technology can improve the in person

voting experience in New York right now in

significant and in measurable ways. And we've heard

about a lot of those already. We agree

wholeheartedly that all New Yorkers should be able

to register to vote and update their voter

information online. The state has done a useful and

important thing by establishing electronic voter

registrations through the DMV but as we've heard

only for New Yorkers who possess, who already

possess a state ID allowing all voters to register

and update their records online will help ensure

the New Yorkers who change addresses for instance

receive the information they need to stay engaged.

We can also create smart linked databases that

automatically, automatically share information

between government agencies that will do a lot to

ensure the voter rolls stay up to date. The voter

empowerment act mentioned earlier by some Kavanagh

his testimony would accomplish some of the

important objectives. We can continue making voter

information available in more convenient and

accessible ways. The Board of Elections made poll

site locations and sample ballots available through

their website and through a mobile app. Our own New

York, NYC Votes app provided information about candidates and poll site locations to thousands of New Yorkers during this election season. Our voter guide in print, in video, and online gave every registered voter access to comprehensive and nonpartisan information about the candidates and about the voting process. We can make better use of technology to collect data about activity at the poll sites and learn more about voter experiences. Collecting better data across the entire system can ensure problems that the poll sites are addressed quickly and efficiently and help optimize the allocation of resources on election day. We will also be soliciting voter feedback about the past election through our own online survey which we hope will provide information that can prove the voter experience. A lot of this can be achieved through the use of electronic poll books which we've heard a lot about also. Jurisdictions in at least 27 states do already use some form of electronic poll books according to the Brennan Center for Justice. Electronic poll books can absolutely streamline the check in at the poll sites. If they're linked in a live way to the

state, statewide voter registration database they

can be used to determine a voter's correct address

and correct or update voter registration records at

the polls making affidavit ballots practically

obsolete which I know are, are kind of a, an issue

for a lot of people. All of these technological

improvements are available now. Each would make

voting quicker and easier, could save us money, and

improve the health of our democracy. For these

reasons and, and many others a state election law

must be overhauled to reflect the ways technology

has evolved since the bulk of the law was written

in the 1970s. Thank you for the opportunity to

testify today and happy to answer any questions.

CHAIRPERSON CABRERA: Well thank you so

much for your comments. Indeed they are helpful.

They are the variables that I, you know we keep

hearing today and we need to look at. I, I will

point out that the Jersey experience I, I didn't

expect it to be anything less than that due to the

fact that it was, there was no preparation and it

was done very quickly and I understand was need was

huge and based on just having a hurricane coming

through. I'm curious have you notice, have you seen

2 any studies later than the 2010, earlier we heard

3 12, 2011, I was just commenting to my co-chair that

4 in technology is she knows better than I do you

5 know two years, three years is a lifetime. Have you

6 seen anything more recent than that?

7 ERIC FRIEDMAN: I, I will say that just

8 in, in, in preparing for, to appear today you know

9 the, I, the report prepared by Elections BC in

10 Canada you know was very thorough. I explore the

11 issue from pretty much every angle and, and raise a

12 lot of the same concerns about security at, at, at

13 multiple points of entry really. You know I, I

14 think like one of the real challenges when it comes

15 to security is, is, I mean you can do everything

16 you can and, and the best minds have been on this

17 you know in a defense context, in a financial

18 context, still people are saying on the server side

19 it's, it's really difficult to secure, to secure

20 the election, you know the data collection servers

21 to a level of risk that's acceptable. But you've

22 also got to secure every voter's home computer

23 which is, which is a really kind of practically

24 insurmountable challenge to guarantee the, the

25 authenticity of, of every voters vote you know and

2 most of the, a lot of the time you know when, when

3 you have malware or spyware you know infecting

4 someone's home computer they might cast a vote and,

5 and it could be, could looked at, you know they

6 could end up with a, voting for somebody different

7 they intended to they'd never know.

8 CHAIRPERSON CABRERA: Right.

9 ERIC FRIEDMAN: You know they could be

10 directed to phishing sites that may be purporting

11 to cast their vote but it ends up disappearing into

12 the ether. Yeah, so there, there's this… You know

13 all of it goes back to… [interpose]

14 CHAIRPERSON CABRERA: That would be a

15 pretty sophisticated operation wouldn't you agree?

16 ERIC FRIEDMAN: Absolutely. And then,

17 there, there'll people much more sophisticated than

18 I who… [interpose]

19 CHAIRPERSON CABRERA: Right.

20 ERIC FRIEDMAN: …who, who play with this

21 stuff. So I, you know, these are the concerns that

22 are out there and so… [interpose]

23 CHAIRPERSON CABRERA: And they're real.

24 I mean they're, they're real concern and that's why

25 we need to have this type of early discussion so we

 1
 2 can start possibly begin to address them. I, I, it
 3 always baffles me that we can put a man on the
 4 moon, we did that decades ago, we could pretty much
 5 every time we set our mind to do something we could
 6 get there. I pretty sure, I don't foresee this
 7 would be an immediate future but in the you know
 8 not-so-far future hopefully someone could come up
 9 with the type of software that would have this
 10 level of protection and so I'm, I'm hopeful.
 11 Council Member, Chair.
 12   CHAIRPERSON BREWER: Thank you very
 13 much. I am still going to the polls and formally
 14 voting and definitely want the poll books to work
 15 and what registration we can look at some executive
 16 orders on the city level I think that would be
 17 terrific. That's as far as I've gotten. But I have
 18 one question about the, just something that I
 19 should have asked the board but maybe through VAC,
 20 I would like to see a lot more context as was
 21 mentioned earlier in terms of letting people know
 22 about poll site changes etcetera. And the board has
 23 got the website you can put your email in and so
 24 on. But how do you, I think the idea of using the
 25 information on the net to keep your own

information updated is incredibly because people

change address, phone numbers, and emails often.

Has that worked, do you know? Or maybe you haven't

studied in other locations. Having a huge database

myself it's not easy to keep this information up to

date. So do you know if that works elsewhere or

have you had any studies of that? Because it's one

thing to say this is what we're going to do, it's

another thing to actually make it happen.

ERIC FRIEDMAN: Right. On this

particular issue I don't really have a, a good

sense of what's happening in other places. I can

say that you know we're definitely taking steps in

that direction here you know. The voter

registration forms have started to, have added a

line for email. So that, that creates a much kind

of easier and instantaneous way to, to stay in

touch with, with voters. You know we've been

collecting email addresses for voters as well and

communicating information about upcoming deadlines

and, and, and things of that nature. We, the Board

of Elections has been great in, in communicating

with us in terms of when, when poll sites change so

that we're making sure that the correct information

is getting out to people through, through our

channels and, and helping to, helping to notify

people when, when there are changes. I mean I think

that there, there, there is much further we can go

in that direction and you know it's, it's step by

step we're trying to get there.

CHAIRPERSON BREWER: The issue for me is

that the culture has to change as the Council

Member indicated in the sense that the older voter

is not plugged into using social media in order to

know what's going on.

ERIC FRIEDMAN: Well… [interpose]

CHAIRPERSON BREWER: And so you know

maybe 10 years, 20 years it'll be different but

that's what it is now. And so all of these ideas

are great. We still have to use the same old as you

say your voter guide etcetera so is the means of

communication. So there [crosstalk] isn't a lot. I

would just caution you on one, your excellent

testimony about where it says we can create smart

databases that automatically share information

between government agencies. That will make voters

crazy. So you just have to really careful, maybe

2   qualify that but I would be very careful in that

3   statement.

4   ERIC FRIEDMAN: Yeah I, it… [interpose]

5   CHAIRPERSON BREWER: I'd throw that out.

6   ERIC FRIEDMAN: …it could be phrased a

7   little better. I mean I think that Assemblyman

8   Kavanagh spoke a little bit about this. Just when

9   you interact with one government agency you know

10   that information can, can, can help keep the voter

11   rolls accurate and up to date. I mean… [interpose]

12   CHAIRPERSON BREWER: It does you just…

13   [interpose]

14   ERIC FRIEDMAN: …one of the, one of the

15   things that we've found just from researching voter

16   behavior in New York City is that… I mean one of

17   the really strong factors in, in sort of depressing

18   voter turnout is mobility. Right? When you move, I

19   think you alluded to this, to this sometimes you

20   can lose touch.

21   CHAIRPERSON BREWER: Or, or die. I get a

22   lot of dead people return, deceased.

23   ERIC FRIEDMAN: Right right but when

24   you, when you change your address there's what

25   dozens of different forms you need to fill out to

make sure that you are, keep getting your mail and

all your utilities and this is one thing that may

get kind of dropped off the list. Having that kept

up to date either automatically or, or having the

ability to change that online could go a really

long way to making sure that people who move even

within the city… [interpose]

CHAIRPERSON BREWER: No, I agree. Have

to be careful with health information and other

kinds of information doesn't get shared.

ERIC FRIEDMAN: Understood.

CHAIRPERSON BREWER: That's what I'm

saying. Alright thank you.

ERIC FRIEDMAN: Thank you. Thank you.

CHAIRPERSON BREWER: Thank you very

much. Now we're going to gavel out of this for one

minute the joint committee gavel in… [interpose]

[gavel]

CHAIRPERSON BREWER: …to Governmental

Operations and ask the Council Member Dilan and his

beautiful child to vote.

COUNCIL MEMBER DILAN: Oh Lia you want

to vote? Yes?

LIA DILAN: [whispers] Yes.

COUNCIL MEMBER DILAN: Thank you Chairman Brewer and Cabrera and I just want to say to the chair before I vote. It's been a pleasure to serve here with you twelve years. I understand this may be your final hearing as Gov. Ops. Chair. I also understand that you're onto some about bigger and better things and I wish you well in, in those endeavors and I know you will be great. And with that Lia how do we vote? Do we vote yes?

LIA DILAN: Yes.

COUNCIL MEMBER DILAN: We vote yes on, yes on both right? Say it. Say you say aye.

LIA DILAN: Aye.

COUNCIL MEMBER DILAN: Okay. [laughter] Thank you Madam Chair.

CHAIRPERSON BREWER: Thank you very much. That's a wonderful fitting end to our 12 year relationship. Congratulations on all of your work on housing and thank you very much. Thank you Lia for voting today. Thank you. So we're gaveled out of… [interpose]

[background comments]

CHAIRPERSON BREWER: Okay. Gavel…

1

2   WILLIAM MARTIN: Vote now on…

3 [interpose]

4   CHAIRPERSON BREWER: Call the vote.

5   WILLIAM MARTIN: Vote now stands at four

6 in the affirmative, zero in the negative, and no

7 abstentions.

8   CHAIRPERSON BREWER: Okay now? Okay. So

9 now we're gaveled out of Governmental Operations…

10 [interpose]

11   [gavel]

12   CHAIRPERSON BREWER: …and back into the

13 joint committee and thank you very much Council

14 Member Dilan.

15   [background comments]

16   CHAIRPERSON BREWER: Doug Kellner is the

17 next presenter, New York State Board of Elections

18 and the go to person on elections in the state of

19 New York and United States.

20   DOUG KELLNER: Thank you Chairman

21 Brewer. I appreciate the opportunity to speak with

22 you. I have written remarks which I will submit

23 this afternoon by email. There are four topics I

24 thought that I should address in summary fashion. I

25 hope I'm duplicating too much of what has gone

before. The first is to discuss internet voting

itself. Second is to talk about what we've been

doing with military voting and the restrictions on

that. The third is to talk about Governor Cuomo's

successful program in allowing voter registration

transactions over the internet through the

Department of Motor Vehicle's Database. And finally

discussions that we still hear from time to time

about New York City possibly having the scanning

machines themselves transmitting the results over

the internet which is worth just a minute of

discussion. So on internet voting itself there is a

short piece which I'm going to submit with my

written testimony written by David Jefferson who is

a computer expert at the Lawrence Livermore

National Laboratory called; 'If I Can Shop and Bank

Online Why Can't I Vote Online?'. Certainly there

are a lot of people who are not familiar with the

unique issues of voting technology that ask that

question all the time including I hear our mayor

say it from time to time. But the answer is is that

voting transactions are very different from the

financial transactions that we're now able to do

online. The biggest difference is that voting has

to be secret so that you are unable to determine

how a voter actually voted while still counting the

voter's vote. And that requirement for secrecy

means the transaction is essentially un-auditable.

And, and therefore not verifiable and subject to

hacking. When banks do financial transactions the

fact is, is they suffer losses all the time. And

the numbers are in the hundreds of billions of

dollars. These are losses that the banks are

willing to absorb as a price of doing business. And

the main difference here is that when there is a

bank transaction with a loss the money is missing.

So there have been many elaborate schemes that have

a, hacked into bank financial transaction systems

but the bottom line is that eventually someone

discovers that the money is missing. But when you

steal a vote and flip a vote from one candidate to

another candidate you can't prove that the vote is

missing because the vote was cast secretly. And so

that's the short summary explanation of why you

can't vote online. There are many expert reports in

this area and no one has successfully shown that

there is a fool proof system out there. When there

is we should embrace it but at this point in time

it's just not in the books. New York state law has

a provision as part of the election modernization

and reform act of 2005 that's very explicit on the

subject. Election Law 7-202 subdivision T provides

that the voting machine may not include any device

or functionality capable of externally transmitting

or receiving data via the internet or via radio

waves or via other wireless means. And that's a, is

a legal requirement in New York Law that basically

the voting machines have to be insulated from any

outside sources that could hack or compromise the

integrity of the process so that we are able to

assure accurate, verifiable, and transparent

election processes even though we use a machine. If

you don't have an audit trail that is verified by

the voter itself which we have in the form of the

ballot that the voter puts in the scan it, scanner,

in effect you have what they call black box voting

where you have delegated the function of counting

the ballots to the computer programmers who have

programmed the voting machine. And I remember that

two decades ago there was great criticism for, in

the United States of the Mexican system for

counting their ballots. Mexican voters would vote

on paper ballots. The ballot boxes would be locked

up and shipped to a central counting sight where

only the election officials could control the

ballots and count the ballots and then the election

officials would announce the results. And that was

not a transparent process and it was not a

verifiable process. And it was subject to great

criticism. I might add that Mexico has since

reformed and now has adopted verifiable voting

procedures and interestingly when they adopted

those verifiable voting procedures political

parties other than the party in power started

winning elections. So… Alright and my other quick

points on military voting. Pursuant to federal law

the states are required to allow military and

voters residing overseas to download their ballots

or to ask that their ballots be delivered to them

by email. And New York is in full compliance with

that system and our system has been working very

well. Some states have gone a step further and have

allowed military and overseas voters to return

those ballots by fax or email. New York has

reviewed and studied this option and we have

rejected it for the same reasons that, you will,

either the voter has to completely surrender voter

privacy and basically say this is my ballot and

then be able to confirm that the ballot received by

the Board of Elections is the same as the ballot

the voter has sent. Or there is the very real

possibility that transmissions can be intercepted

and ballots can be forged or substituted. As a

nationwide issue it may not be a, a, a big problem

because the number of voters is relatively small

and nobody is pointed to an election that where the

outcome is actually turned on the military ballots.

But New York takes the view is that we're, we make

it as easy as possible for the voter to receive the

ballot but the voter has to download the ballot,

print it out, fill it out, and then return it to so

that either by mail or some other physical means so

that the actual ballot with the voter's signature

is received by the Board of Elections. An example

of where we fully embraced internet technology is

Governor Cuomo's program which he instituted as one

of the very first things when he took office four

years ago was to allow voters to update their voter

registration status or indeed to fill out a voter

registration transaction through the Department of

2 Motor Vehicle's computer interface on the internet.

3 And there are very substantial and robust security

4 safeguards in that but the bottom line is that

5 voter registration transactions are public

6 transactions, they're not secret sot that they're

7 auditable. And so far hundreds of thousands of

8 persons have availed themselves of that opportunity

9 to register to vote online through the DMV website.

10 And it's been very successful and I'm unaware of

11 any significant problems and no problems at all

12 with respect to fraud in the use of that internet

13 web procedure. And I thank Governor Cuomo for

14 breaking that log jam and bringing that very

15 substantial upgrade to the voter registration

16 process in New York. Final issue reporting results.

17 We've spent a lot of time this committee in

18 particular has been very proactive in terms of

19 urging the New York City board to improve and

20 upgrade its election night reporting system. And in

21 the last two years the city board has been very

22 responsive to that and now has in place an election

23 night reporting system that is very accurate and is

24 fairly quick but it's a significantly more accurate

25 than the old system. The current process is to

2 bring the memory sticks from the voting scanners to

3 the police precinct and upload them at the police

4 precinct. Many of us have suggested and, and the

5 board has been actively working on eliminating that

6 step of having to go to the police precinct. And

7 the, the ideal procedure in my view is for the

8 board to have a computer at each poll site, a

9 laptop or some other method of taking the memory

10 stick from the voting machines, inputting the data

11 into the computer at the poll site and then having

12 that computer upload the results to the board of

13 elections without having to go through the delivery

14 to the police precinct. And that would save a step

15 and in the long run would be less expensive than

16 the current process. Some have said well let's go a

17 step forward why don't we just put that device

18 right on the voting machine and have the scanner

19 itself upload those results? And the answer is that

20 if you could prove to us that the transmit, that

21 the output would only go in one direction and that

22 the voting machine itself could not receive any

23 communication from the outside that could trigger a

24 program that would change the results in the voting

25 machine I'd be all for it. But the fact is is that

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2 there's no such thing as one way communication with

3 electronic data because in order to set up the

4 communication there has to be a handshake where the

5 person receiving the data says okay I got your

6 information we'll use this channel and this format

7 for transmission the data, go ahead, do you read

8 me? And they have to go back and forth to set up

9 that hookup. And it's that process of going back

10 and forth what they call the handshake where the

11 outside entity could then trigger something in the

12 machine that would insert a program or data that,

13 in, in essence could hack the results that are in

14 the voting machine itself. And so as far as I'm

15 concerned that particular procedure is not

16 acceptable until you can prove to me that it's

17 impossible to receive an outside signal that could

18 trigger a Trojan horse that's been buried into the

19 scanner. But I certainly do urge the city board to

20 move ahead with their project to take the memory

21 sticks from the machine and load them onsite into a

22 laptop for the transmission of the election night

23 results. So those are a quick summary of the four

24 issues that I think are relevant to the hearing

25

2 that you've raised today and I hope that that's

3 helpful.

4   CHAIRPERSON BREWER: As usual thank you

5 very much Doug Kellner. I have a couple questions

6 picking up on what you mentioned and so did Brian

7 Kavanagh which is regarding the DMV I understand

8 that between the executive order and the fact that

9 you already have a signature on your license that

10 issue of the signature is not a, a problem when you

11 register to vote because you have it on the license

12 and we are as a society agreeing that it's the same

13 signature on the registration form. But what we

14 want to do is how do we take that legally to the

15 next step. In other words for the social service

16 agencies etcetera where right now between the city

17 and the state we have this not monitored system of

18 signing up with the paper. So when you go to get

19 food stamps you want to be able to also sign up to

20 register to vote. Right now you get a piece of

21 paper, I know that doesn't happen, and that paper

22 goes, if it exists at all, God knows where. So I

23 guess my question is what's the legal step to try

24 to duplicate DMV with other agencies.

25

1

2   DOUG KELLNER: Well we have to actually

3 do it. As I say the governor did the DMV program by

4 executive order and through the executive

5 department and he had the National Voter

6 Registration Act, the so-called motor voter law

7 that explicitly authorized motor vehicle

8 transactions. We have similar statutes already on

9 the books in New York that apply to most other

10 government agencies where citizens interact. So if

11 the powers that be are willing to fund the process

12 and say yeah we're going to do it that can happen.

13 We also have in New York, since the year 2000 the

14 state technology law has adopted the uniform

15 electronic signatures act and basically that law is

16 extremely broad and underused and says that

17 electronic signatures are good for all transactions

18 with the state government unless explicitly

19 prohibited by law. So it switches the presumption.

20 So as I say very few people have used this. One of

21 the issues that we've thrown around at the state

22 board of elections is can you, do you have the

23 right to apply for an absentee ballot by an

24 electronic signature. And my answer is yes. The

25 law, there's no explicit requirement for an inked

signature on an absentee ballot. The, the same is
true that there's no explicit requirement for an
inked signature on a voter registration form. So,
so we believe that legally electronic signatures
are already in place and can be used for election
transactions. So it's just a question of funding
it. Now the governor used about three quarters of a
million dollars in state funds that came from the
DMV budget in order to put that into place. The
state Board of Elections is a small agency with a
very small budget and could not possibly absorb
that kind of charge without somebody appropriating
the funds.

CHAIRPERSON BREWER: And the money then
would be for doing the software, hardware
conversion essentially.

DOUG KELLNER: Correct. The link.

CHAIRPERSON BREWER: Okay. The other
question I have is in terms of the night of, So if
you, I, I totally agree that taking a, I call it a
flash drive memory stick from the scanner to a
laptop. So I guess one of the questions is we need
in my opinion to have a more, a broader discussion
about how to do that because in some situations you

have lack of wireless or even just lack of whatever

it is that would prevent that laptop from working

at that site. You know I know these schools and

there's a whole bunch of issues. So is that

something that the board is looking at or is it, is

it not a problem that I… [interpose]

DOUG KELLNER: Well… [interpose]

CHAIRPERSON BREWER: …may not be

somebody that you've looked at… [interpose,

crosstalk]

DOUG KELLNER: The city board…

[interpose]

CHAIRPERSON BREWER: It's very much in

the lease.

DOUG KELLNER: …is looking at it. The

state board is not working on that, that aspect.

The city board is looking at it. I'm not sure just

how far along they are but you know one of the,

and, and you're right that the internet hookup for

that communication is one of the issues because…

You know is it going to be done?

CHAIRPERSON BREWER: You have thick

walls. You have many different issues.

DOUG KELLNER: Right. One of the, the things that I've heard from ESNS is that for about $40 they could develop a plug in device that would, that would take the memory stick and hook it up to any mobile phone and then you could transmit the results by mobile phone.

CHAIRPERSON BREWER: Oh okay.

DOUG KELLNER: So that's another way of doing it.

CHAIRPERSON BREWER: Unbelievable.

DOUG KELLNER: But again are you, are we going to give every site a mobile phone or are we going reimburse people for using their own phones? You know there are logistic issues. So it, it is something that people at the city board I know have been thinking about. And hopefully they'll have some progress report on that soon.

CHAIRPERSON BREWER: Okay. Thank you very much for your always concise testimony over the years. Council Member Cabrera may have a question but Doug I can't thank you enough for so many years of support. This is our last hearing on this topic Governmental Operations from my chairship. And I just want to thank you for always

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2   being there and I look forward to continuing to

3   work with you.

4   DOUG KELLNER: Thank you.

5   CHAIRPERSON BREWER: Thank you.

6   CHAIRPERSON CABRERA: Just one quick

7   question, brief question. In case, God forbid we

8   were to have another Sandy or something bigger and

9   the, the hit in New York would be something very

10   similar to what happened in Jersey because you know

11   they had it worse than we did. Would, would the use

12   of online or online technology will be something

13   that would be, would you amicable to the idea that

14   if, you know and just in case of emergencies

15   something like that could be used or is that out of

16   the, still out of this fear of consideration?

17   DOUG KELLNER: I, I, I, I thought it was

18   a bad idea when Jersey did it. My evaluation of

19   what happened afterwards is it was close to a

20   disaster because it, it actually had the effect of,

21   of disenfranchising literally tens of thousands of

22   voters who thought they would be able to

23   communicate that way instead of the extra effort of

24   going to a poll site or getting the absentee ballot

25   procedure. I thought the procedure that Governor

Cuomo used was much better. And, and Governor Cuomo

looked at it also and, and Governor Cuomo's

procedure of allowing the ballot to be cast at any

poll site on an emergency basis had the effect of

enfranchising about, between three and four hundred

thousand additional voters. And I thought that that

was very good and very well thought out. The Jersey

plan was a disaster because the county boards did

not have any of the resources so that email servers

were not available. They couldn't handle the volume

that was coming in. And then there was no way to

verify in the end and, and people pointed out that

New Jersey law required still a verification and,

and therefore anyone who did not subsequently print

out their ballot and mail it in had their vote,

their vote was not counted and, and that was in the

tens of thousands of people who fell into that

category. To use an electronic transmission system

it really needs to be worked out in advance. If you

can, the security needs to be worked out in advance

but you also need the hardware and the, and the,

and enough resources to do it and, and of course if

you work it out in advance then you also give

warning to the hackers in advance who can also

 1

 2 develop their methods to compromise the system in

 3 advance.

 4   [laughter]

 5   CHAIRPERSON CABRERA: Exactly. Thank you

 6 so much.

 7   DOUG KELLNER: Thank you.

 8   CHAIRPERSON CABRERA: That was really

 9 very helpful.

10   CHAIRPERSON BREWER: Thank you very much

11 Doug. Susan Lerner, Kate Doran, and Susan

12 Greenhalgh.

13   [pause]

14   CHAIRPERSON BREWER: Yeah come on if you

15 already signed in go ahead. Whomever would like to

16 begin go ahead.

17   SUSAN LERNER: Okay so thank you very

18 much. I'm Susan Lerner, Executive Director of

19 Common Cause New York. I'm going to skip our

20 introductory information about our organization and

21 get right to the point. And that is that in recent

22 years national cyber security experts have sounded

23 increasingly urgent warnings that the internet is

24 highly insecure, impossible to safeguard

25 absolutely, rich with possible avenues of attack,

and rife with potential attackers. With alarming

frequency networks with the most robust security

protocols are being penetrated by attackers.

According to National Intelligence Director James

Clapper[phonetic] cyber attracts have surpassed

terrorism as the top threat to US national

security. Attackers have successfully penetrated

the most hardened and secured networks including

the CIA, FBI, Google, Sony, and the Department of

Defense. And I brought something which I copied

from the internet which was on CNN yesterday which

is, it was discovered that Chinese hackers hacked

into the Federal Election Commission website during

the time when the government was shut down. Just to

illustrate some of the challenges that we face.

It's naive to presume that a system designed for

voting over the internet can resist attacks more

successfully than the nation's most fortified

networks. Allowing ballots to be cast by email,

eFax, or through internet portals at least with the

current security tools is an invitation to partisan

operatives and nation states to tamper with the

integrity of our elections. And it was interesting

to me Council Member Cabrera that you pointed to

Estonia which has had a famous tick for tack

hacking exchange with the former soviet union with

the Russian Federation. So I'm not sure they're

necessarily the best example. The problem is

particularly partitions because it is unlikely that

such attacks will be discovered as both Assembly

Member Kavanagh and Commissioner Kavanagh pointed

out, Kellner rather, sorry. Because we vote by

secret ballot it would be difficult if not

impossible to detect a cyber-attack on an online

election. As the federal agency responsible for

setting voting system standards and researching

internet voting the National Institute of Standards

and Technology, NIST determine that too many of the

security challenges inherent with internet voting

cannot be resolved or adequately mitigated with the

computer security tools currently available. NIST

concluded that secure internet voting is not yet

feasible and more research is needed. Any claim by

a vendor that it has developed a secure internet

voting system is in direct contradiction to NIST's

best assessment after years of research and

analysis. Likewise the federal voting assistance

program at the Department of Defense doesn't

advocate for online voting for the military because

of the security risks. And basically I'd like to

just read the conclusion of that, that's a project

of the Department of Defense reached and that is

that electronic delivery of a blank ballot when

combined with the postal return of the voted ballot

remains the most responsible method for moving

forward until such a time as applicable federal

security guidelines are adopted by the EAC. We

should heed the cautions of our national and

computer security experts and recognize that

internet voting is just too dangerous in our

democracy too precarious to risk putting our

elections online. You know perhaps at some time in

the future as you've suggested these problems will

be solved but right now we really would be

tremendously at risk. I'd also like to address some

of the other topics that came up today that

obviously aren't in my written testimony. We are at

Common Cause strong supporters of the various

reforms which both Commissioner Kellner and

Assembly Member Kavanagh mentioned. I, I didn't

bring with me, because I didn't realize we would

get into it, a report which Common Cause issued

just two weeks ago on early voting where we

interviewed the election administrators of

different counties where we thought that Common

Cause that the counties had some analogies to

situations we have here in New York with our voting

to see what their experience was with early voting.

And to hear directly from election administrators

who run early voting systems, how it works, and

what the challenges are. And I'd be happy to

provide both of your offices with copies of that

report because we think that'll, early voting would

address many of the concerns which you've raised

and certainly the concerns around super storm Sandy

and emergency situations. The people we spoke to in

Maryland pointed out that in Maryland there was a

surge in early voting very early in their early

voting cycle which was unusual and the election

administrator said that she went out into the early

voting centers and said you know why did you decide

to vote now as opposed to closer to the election

time. And she said that virtually everybody said to

her I've been watching the weather reports. There's

going to be a hurricane and I want to be sure that

I get to vote, it might interrupt voting on

election day. So early voting is an excellent

response. If we had had electronic poll books and

if we had had no fault absentee voting we would

have been able to do much more with people who were

displaced with the super storm Sandy. We were

prepared at Common Cause to, to hire vans and to

move people from the evacuation shelters to the

Board of Elections headquarters in order to file

absentee ballots. But we were stopped by the fact

that we would have had to ask them to lie that they

were outside of New York City on Election Day and

therefore we were unable to do that. If there were

no-fault absentee voting then there would be much

greater flexibility and I think many more people

would take advantage of that. And as to the

question of the full automation of voter

registration and tying it into more databases

Council Member Brewer that has been a topic of

discussion that the New York State Voter Coalition

has been talking about for a year or two and it

actually within the last year I had asked one of

our interns to do some research to determine if we,

outside of government, could identify which

agencies might maintain databases that had digital

signatures. It was very very difficult for us

outside of government to be able to identify and to

get cooperation from the city agencies to tell us

what was actually in their database. I think that

this is something which either the mayor's office

or one of the committees here at the council could

request this kind of information from the social

service agencies. To allow us to identify agencies

like the, the SNAP program where they're already

maintaining a database that has a digital signature

because we have been very concerned about the fact

that the DMV hookup which is very effective and

very useful disadvantages New York City residents

where you only have 50 percent of the residents who

have driver's licenses. And certainly what we have

seen in our registration drives is that the vast

majority of people that we find we help register

are people who have moved and that the best comment

we have found, when people pass by the registration

table, the way to get them to pay attention is we

say to them are you registered at your current

address? And a large percentage of people stop and

say oh my goodness you know I'm not. Gee, thank you

so much. So we end up spending a lot of time and

energy, which is great, helping people who have

moved say; oh I've meant to I haven't had a chance

you've made it convenient and I, I've done so. But

if they were able to do that with a change of

address at the DMV, which I think they can at the

DMV, but at other agencies or through the postal

service this would save a tremendous amount of time

and money and facilitate registration if we're

going to keep this cumbersome voter suppression

style of registration. Because frankly,

historically voter registration has been a

suppression tool and we should be moving towards

some form of universal registration or opt in

automatic registration rather than continuing the

vestiges of a system that was designed to prevent

the immigrant population of New York City from

voting.

CHAIRPERSON BREWER: Okay.

SUSEN LERNER: Okay?

[laughter]

KATE DORAN: Good afternoon. My name is

Kate Doran. I serve on the board of the League of

Woman Voters of the City of New York and I'm

delighted to be here today. Thank you very much for

holding this hearing, giving us a chance to

comment. We believe that internet voting may be an

ideal to which we could aspire because of

convenience and because of much of how we interface

with government is trending paperless. But we are

not confident that at this time there is an

internet system secure enough to merit extensive

and expensive appropriation of city funds and other

resources. What we now have is a voting system

which when well administered is accurate, reliable,

and secure. We believe that the city's resources

should be concentrated on improving the

administration of our paper ballot optical scan

system which others have noted is relatively new to

voters. So there's plenty of chances to, to make,

help voters become more comfortable with it. Now we

believe that the New York City Board of Elections

should be more proactive in seeking out

technologies that could support the system we

currently use. I sit in on the commissioner's

meetings every week and regularly more frequently

actually I hear them say that they are ministerial,

that they administer and we believe that they

should be proactive. One example I don't think

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2 others have talked to much about this today but one

3 example that we would like to see is we would like

4 to see the city board investigate printing ballots

5 on demand. It's tangentially internet based but

6 voters are unified in their desire for a clear,

7 more legible ballot. Tiny fonts are necessary says

8 the board because they must print a single ballot

9 style in all covered languages. Ballots on demand

10 would solve the problem. Some have suggested I

11 think including Commissioner Kellner that the board

12 print a two language ballot but the board contends

13 that a two language ballot would be difficult for

14 poll workers to manage. With ballots on demand poll

15 workers would need to, only to know each voter's

16 language preference. Printing ballots on demand

17 would also mean that necessary changes to ballots

18 owing to lawsuits and people, could happen, that

19 those changes could happen much closer to the day

20 of an election event. So we urge the council to be

21 proactive here and to ask the board to give you a

22 report comparing the costs and the relative

23 advantages of printing ballots in advance which

24 they currently do. The printing, the trucking, the

25 whatever versus purchasing the technology which we

know is out there. DSNS, DS 2, 200 machine is we

understand capable of handling rank choice or

instant runoff voting. Here is another example of a

place where we believe the city Board of Elections

should be taking the initiative and we hope that

the council will nudge them along. I'm going to

quote now from our esteemed Doug Kellner. He

recently made a presentation to the New York City

board in which he said; The New York City Board of

Elections can administer rank choice voting. We use

the ESNS DS200 optical scanners to count ballots

and cast them at poll sites. The DS 200 machines

use the unity 5.0.0.2 software, both the hardware

and the software are capable of formatting and

recording ballots that use rank choice voting. The

New York City Board of Elections would only need to

develop a program to apply the statutory algorithm

to determine the final results not a particularly

difficult or expensive process. So we urge you in

the council to encourage the city Board of

Elections to develop such a program, to work with

the state, and to offer, and to offer whatever

assistance that is available and that you have the

authority to, to do. We are not ready to support

2   internet voting. We do however strongly support

3   online voter registration for all the reasons that

4   you've heard today. Paperless registration is more

5   accurate, more secure, and cheaper and we're

6   pleased about what the DMV has done. We also

7   learned recently that the New York state of Health

8   Market Exchange is allowing voters to register on

9   their website. Now I don't know if they capture a

10   signature but they certainly will capture people

11   who are disenfranchised by the DMV as, as Susan

12   Lerner mentioned because everybody's supposed to

13   get health insurance. And they have sensitive

14   information I don't know if they ask for a wet

15   signature. We suggest moreover that you ask the New

16   York City Board of Elections to report to you about

17   its goals and strategies for achieving greater

18   numbers of online registrations. Now our, our New

19   York State League supports early voting. We in the

20   city are on the fence a little bit. And we

21   understand that before the New York City Board of

22   Elections early voting would impose significant

23   additional burdens in jurisdictions where election

24   administration is already quite complex and

25   challenging. We believe however that for early

voting to succeed we must have electronic poll

books. And you, I know you've heard a lot about

that today. Ideally electronic poll books provide

real time information as to when and where a voter

has cast a ballot. But leaving aside early voting

electronic poll books could be the next evolution

in poll site registration lists. Since the board

started to photocopy voter signatures. I asked some

of the older members of our league among there are

quite a few and none of them could even remember

those cards. I think the board actually used to

bring an actual card to the poll site and compare

the signature. Now the signatures are photocopied

into those registration books. Now some of you know

that I serve as a poll site coordinator so I'm, I'm

very familiar with these books. And in my written

testimony I said that they frequently print

incorrect signature. I think that's a coarse

description. I really, what I meant was, people

come in, women who've been married and they're not

happy that their signature reflects a previous

identity and perhaps electronic poll books could

update that information more quickly. Sometimes

more often than we ever like to see there is no

signature at all. Now that's entirely the fault,

our fault. I'll call myself a Board of Elections

worker for that day and that's our fault and those

voters are very upset because we have to insist

that they vote by affidavit ballot or they could go

and get a court order. We have no way of, of

knowing who they are without comparing a signature.

And if it's not there and that, all of these things

create longer lines too. Every time we have to

interact with a voter whose signature is a problem

we have to have a conversation about it, we have to

calm them down and that creates long, much longer

lines on election day. Now redesigning poll worker

training and changing the deployment of poll site

staff must accompany technological changes to

election administration. And I'm sure you saw

Commissioner Kellner's excellent discussion of

that. We have testified, this League has, several

times in the past about on the topic of training

and we've put forth a model that would produce

better outcomes and could be internet based in so

far as the printing manual could be online and it's

a very public document. Poll workers would identify

themselves. People would, voters would identify

1

2   themselves as people who want to be… [crosstalk,

3   interpose]

4   CHAIRPERSON BREWER: So it's not online

5   now to the best of your knowledge?

6   KATE DORAN: It may be.

7   CHAIRPERSON BREWER: Okay.

8   KATE DORAN: It may…

9   CHAIRPERSON BRWER: It is. It's online

10   now.

11   KATE DORAN: It is. It is but it's no,

12   no, no prospective poll worker is encouraged to

13   take it, look at it, and then prepare themselves to

14   see if they want to be a poll worker. Email

15   communication can play a very important role as a

16   less expensive way to deliver important and last

17   minute notice to voters. So we congratulate the

18   state and city Boards of Election for agreeing and

19   deciding to include a field for voter's email

20   address on the paper registration form. And we hope

21   that the board will use this information

22   efficiently but we certainly don't think that they

23   should stop there. With political will and

24   dedication New York City can be a leader in a model

25   in technological advances in an election

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2 administration while still keeping our paper based

3 system. So we thank you very very much and to meet

4 the technology committee before and since Gale

5 chaired it and we especially thank Chair Brewer who

6 with her unique skillset and persistence has made a

7 real difference. I can personally say that the

8 Board of Elections is a changed and better place

9 owing to her oversight and attention. Thank you

10 very much. Good, good luck to you.

11 CHAIRPERSON BREWER: Thank you very

12 much. I appreciate that. I think it's your

13 attention to the details as a policy wonk and an

14 actual poll worker. You're kind of unique.

15 Congratulations really.

16 KATE DORAN: Thank you.

17 CHAIRPERSON BREWER: Go ahead.

18 SUSAN GREENHALGH: Thank you. I'd like

19 to thank the committees and chairs Brewer and

20 Cabrera for the opportunity to testify today. My

21 name is Susan Greenhalgh and I'm from the Verified

22 Voting Foundation. Verified voting is a national

23 not-for-profit advocacy organization committed to

24 safeguarding democracy in the digital age. We are

25 fortunate enough to have on our Board of Directors

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2 and our Board of, Board of Advisors some of the

3 most esteemed and prestigious computer scientists

4 and security experts. And we receive guidance on

5 voting technology issues from these people which

6 we're very happy to, to be able to resource. Our

7 boards include Doctors, Doctor David Jefferson,

8 Doctor Barbara Simons, and Doctor Aubrey Reuben.

9 All three of these scientists were asked by the

10 Department of Defense to review an internet voting

11 system for the DOD in 2004 which is referenced in

12 the report. The, these scientists wrote a report

13 warning that the system was insecure. It led to the

14 cancelation of the project by then Deputy Secretary

15 of Defense Paul Wolfowitz and citing the concern

16 that this was, was a national security issue and

17 that the legitimacy of the votes could not be

18 guaranteed. And in their report these scientists

19 basically said that the problem was not the system

20 that was being considered but it was the nature of

21 the internet itself. That the internet, the way it,

22 the architecture of the internet has developed over

23 the years as it's grown up it has so many different

24 vectors of attack or opportunities for

25 vulnerabilities that it is, it becomes almost

impossible to truly safeguard any type of internet

voting system with the security tools that we have

available today. Since 2004 they say at the end of

this there is really no good way to build a voting

system without a radical change in overall

architecture of the internet and the PC or some

unforeseen security breakthrough. And since then we

haven't had that unforeseen security breakthrough

or radical change in the architecture of the

internet. Instead we've had an increase in attacks,

an increase in organized cybercrime the organized

groups in, in, many in Eastern Europe that are for

hire to attack systems. And state sponsored cyber-

attacks as well making the internet a much more

dangerous place while at the same time we haven't

been able to catch up with the security tools. The

National Intelligence Director Mike McConnell

recently said the US is losing the cyber war. So

going to Chair Cabrera's comments earlier about

banking online and shopping online I believe

Commissioner Kellner and, and Assembly Member

Kavanagh also addressed that issue regarding the

inability to verify the voter's choice because we

don't, we vote by secret ballot and there's no

mechanism to verify it on the other end without

compromising voter secrecy. But there's another

point of that that I'd like to, to bring up in that

banking online is not truly safe and billions are

lost every year and billions with a B in online

banking fraud. If I just googled before I got up

here cyber bank fraud and numerous stories come up.

Three more major banks reported possible cyber-

attacks, Barkly Bank Theft Eight Arrested for

Alleged Hacking. JP Morgan Warns 465,000 Card Users

on Data Loss after Cyber Attack. This is constant.

It's happening all the time. On banks are able to

just factor that cost into the cost of doing

business. They take out insurance, they write it

off and they pay, charge you more on your fees to

pay for the cost. We can't do that with the voting.

We can't calculate a certain amount of votes that

we're going to lose to tampering or fraud or

deletion and just accept it. We can't, we can't

really tolerate any level of fraud. So we can't use

that model as a way of, of saying that we should be

able to, to bank, to vote online. I also want to

address the, the argument we hear a lot in that 30

plus states are allowing people to vote over the

internet or to transmit their voted ballots over

the internet and they're not having any problems or

they haven't been hacked and they haven't been

compromised and, or, Estonia hasn't been hacked and

hasn't been compromised. And the problem is we

don't really know because we can't ever go back and

ask each person did they vote this way and that

their ballot was not compromised. These states, or

many of these states put these bills in place way

before the, the cyber threat grew up as I explained

earlier that it, it's just continued to increase.

And now we're really understanding the depth and

breadth of this problem and it's not a place for

our elections to be at this point until we can have

those security tools that will make it, it, it

safe. And there are, it's the computer security

experts that are working on it. They're estimating

between ten and 20 years we may have a secure

system. But we're not there yet. There are vendors

that are out there that our selling their systems

because they want to make money and they're telling

us that their systems are absolutely or

impenetrably secure. And there's no way of, of, of

knowing that. The only system that actually was

subject to a white hat attack was also in, in your

report was the Washing DC system and hackers were

able to get inside within 36 hours. The other

systems that are on the market now have not been

subject to that type of publically reviewable

security test or penetration test or what we call a

white hat attack or red test, penetration test to

find out what the vulnerabilities are and what

their securities are, security level is. So we

don't really know. All we have is the vendor's

assurance that they're secure but there's nobody

else verifying that or, or some other way. There's

no federal certification process or security

testing on these systems because as people have,

have mentioned earlier the National Institute of

Standards and Technology has said we can't do it

securely yet. So they haven't set up a, a testing

or, or a standard system because they don't say we,

they say we can't do it yet. And just to, to speak

about Estonia briefly. The common, the cards that

you'd spoke about, the smart, smart cards; we're

not expecting the US would permit those type of

identity cards here yet. They may help with voter

authentication but they're not going to actually

1

2 allow the vote to be verified in a meaningful way.

3 But separately two of our board members did travel

4 to Estonia at the invitation of one of the parties

5 that was involved in the election. Then they

6 reviewed the system and did find vulnerabilities in

7 the security and, and possible avenues of, of

8 attack. They were not able to determine whether the

9 system had been compromised or not. They could find

10 the holes but they couldn't say whether anyone went

11 in or went out because any skilled hacker is going

12 to erase all their tracks which is another problem

13 with discovering if something has been hacked. It's

14 been estimated that most hacks are not discovered

15 for at least nine to 14 months after the attack

16 happens and that's if it's discovered at all. The

17 Chamber of Commerce was attacked and the Chinese

18 were exfiltrating data for it, from it for over 13

19 months before they discovered it just to give you

20 an example. So for that reason also the idea of

21 transmitting election results over the internet is,

22 is not advisable in our opinion or the, the opinion

23 of our security experts and with that I'll, I'll

24 close and I deviated from my written testimony

25 quite a bit so…

1

2   [laughter]

3   CHAIRPERSON BREWER: That was fabulous.

4 Thank you very very much. Yes, why don't you just

5 pull up a chair there. We have your testimony from

6 before. You gave it out.

7   [pause]

8   KATHERINE SCOBOCK: Good afternoon. My

9 name is Katherine Scobock[phonetic] and I'm

10 testifying on behalf of Theresa Hummel who was

11 unable to be here today. And I will be reading

12 excerpts from her three page testimony. And I want

13 to thank Gale Brewer and Fernando Cabrera and

14 members of the committee council. And Theresa

15 especially wanted me to congratulate you Gale

16 Brewer on winning the election and I do as well.

17 Thank you for allowing me to present testimony at

18 this important hearing. The New York City Council

19 has provided leadership in the past to ensure that

20 citizens could participate in and observe our

21 election procedures and could participate in the

22 selection of the voting equipment we now use.

23 Resolution 228-A of 2006 urged the New York City

24 Board of Elections to conduct public testing of all

25 voting equipment before purchase. Introduced by

Robert Jackson it passed unanimously on August 16th of 2006. Resolution 130-A of 2007 urged the New York City Board of Elections to select paper ballots and optical scanners as our city's new voting technology rather than un-auditable touchscreen voting machines. Introduced by Charles Barron it passed unanimously on March 14th of 2007. I urge you now to reject the idea of internet voting because it is vulnerable to undetectable fraud as you've just so beautifully heard and because it prevent oversight of election procedures by election administrators as well as citizens. I urge you now to reject the idea that Democracy is strengthened by convenience rather than by citizen participation in oversight of our government and find ways to strengthen civic education in our city to increase both citizen participation and oversight in voter turnout, representative government, and the roll of we the people. In a representative democracy the government needs to do its work in public and the people need to show up and observe and give guidance. Government behind closed doors is easily corrupted. Our government needs to not only be honest but to do its work in

public so that people can fulfill their work of

oversight. No computer connected to the internet is

secure. And I repeat as we've heard this afternoon;

no computer connected to the internet is secure.

The FBI computer crime survey of 2005 reported that

87 percent of organizations were aware that they

had security incidents in one year with 20 percent

having 20 or more incidents. 64 percent of

organizations lost money showing that the incidents

were serious not trivial. 44 percent had incidents

perpetrated by their own insiders. So this FBI

survey showed that our most knowledgeable

corporations can't achieve secure computers.

Computers are inappropriate for use in elections

because they introduce unmanageable risks and

vulnerabilities. It is an oversight of vote

handling and election procedures is impossible with

internet voting. Our election administrators cannot

run secure elections with computers without a voter

marked paper ballot and proper audits after each

election. The New York City council can take action

to revitalize our democracy. I urge the New York

City council to take action in the following areas

to improve participation of our people in all forms

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2 of involvement with our government and in our

3 elections. A, require all our schools to teach age

4 appropriate civics starting in kindergarten so that

5 our people understand our governmental

6 infrastructure and the citizen's roll in oversight.

7 B, require all our schools to teach the skills for

8 lifelong sustained involvement so that individuals

9 are knowledgeable and feel comfortable about

10 staying informed, getting involved, showing up, and

11 speaking in the offices and hearing rooms of our

12 government. C, require our media to provide

13 impartial, unbiased, and full reporting of the news

14 relating to our governmental policies and actions.

15 So in conclusion I strongly recommend the rejection

16 of computer voting. Thank you.

17   CHAIRPERSON CABRERA: Thank you ladies,

18 very informative. Ms. Greenhalgh I, I really

19 enjoyed your testimony. You mentioned that you had

20 the scientists, the researchers, I don't know the,

21 I don't remember specific which of the two terms in

22 2004. Have you reengaged them since then to get an

23 update of their perspective? I'm very curious.

24   SUSAN GREENHALGH: Yes, those, those

25 scientists are, are, are on, on our, on our boards

so we, you know we work with them regularly. They

are constantly reviewing what's being published

about these systems. Some of our members of our

board have been able to have the privilege to look

at some of these systems in Estonia. There is a

system in the US that, that one of the board

members was able to look at. He had to sign a

nondisclosure agreement so that he couldn't really

publish anything about what he seen. Yes, but

they're, they're regularly involved in this issue

up until today.

CHAIRPERSON CABRERA: Why, why did they

say, why did they recommend that, or why did they

forecast that it would be 10 years? Is it because…

and I like the, the little phrase here of the

overall architecture of the internet. Is, is it

because of the architecture of the internet? Did

they foresee that ten years from now it will be a

major overhaul or because we're going to do better

what we have right now?

SUSAN GREENHALGH: Well that's an, an

interesting question because there is a project

being worked out right now at the, DARPA which is,

I'm sorry I don't know the accurate, DARPA's part

of the Department of Defense. It's being led by

Doctor Peter Kooiman who is also on our board which

is to develop a new internet. If you google it he,

he, there was a big story in the New York Times

Science section oh probably less than a, in, in the

past year that he's leading this, this project to

develop a new internet that's secure because it,

the internet grew up so quickly it was, it grew up

without the idea of security in it and that's why

it, it has inherently and fundamentally so

insecure. So that, that is one possible avenue. How

fast that'll develop well we don't know but look

how fast the internet developed this way.

CHAIRPERSON CABRERA: Right.

SUSAN GREENHALGH: But separately

there's, there are people working on end to end

verifiable, verifiably encrypted systems where the

voter would have an opportunity to have their vote

encrypted and then find out on the other end that

it was voted, that it was received correctly and

then tabulated separately. And these systems there

are, there are people researching them and working

on them. But the ones that are working on that are

estimating 10 to 20 years.

2   CHAIRPERSON CABRERA: Wow that's cutting

3 edge information and I, I will really appreciate it

4 if you could keep me informed as it gets developed

5 or if it gets developed.

6   SUSAN GREENHALGH: Yeah sure.

7   CHAIRPERSON CABRERA: If, if they end up

8 at their end game because really that's the kind of

9 information that I was looking for at this hearing.

10 I'm still hopeful and if it takes 10 years it's 10

11 years and I think it's important to have this level

12 of discussion. I, I think about my co-chair's open

13 data bill that, how long it took you to get, five

14 years and five years ago I know there were the

15 doubters who didn't think it could be done, how is

16 it going to be done and now it's a reality and it's

17 monumental. I mean it's historical in the

18 technology field to have such a bill go through. So

19 I'm, I'm looking forward for you know the experts

20 in, in organizations like yours to keep me updated

21 such as common cause you know all of you really.

22 Because that, that's is of our most importance I

23 think to, to work with what we have right now. I

24 think your suggestions and, and those who were made

25 by the state were brilliant and we need to work in

those because the voter turnout is, it's, when I

see what other countries are doing in, in terms…

When I see the amount of people that go vote and

when I see what we have here and we're supposed to

be the basket of democracy, you know the epicenter

of democracy. It just, it's, it's dishearten that

it's such a small group of the population of New

York City get to it like their elected officials.

And that might work for encumbrance to be honest

with you. But I, you know I'm really about seeing

that they're truly the base, you know majority of

people get to choose.

SUSAN GREENHALGH: And, and, and your

impetuous is one that we wholeheartedly support but

I have to share with you our experience working

with our members with an app that we develop to do

what's called crowdsourcing conditions at the

polls. We thought that it would help us in

monitoring what was going on and assisting the city

board. If we had some way in which people could use

their smartphones to tell us if there were problems

at the polls or to report that everything was okay.

And what we found to our surprise is that a smaller

percentage of voters actually have smartphones and

1

2 know how to use their full capabilities than we

3 expected.

4 CHAIRPERSON BREWER: Because they're all

5 old.

6 SUSAN GREENHALGH: Yeah well that's… So,

7 which tells us that technology may not be the

8 solution here but some of the basic, we have to go

9 back to some of the basics in terms of, and, and I

10 agree with Theresa, civics and more encouragement

11 from government. The modalities of communication

12 which the city has have not been fully exploited to

13 let people know when the elections are especially

14 if the craziness if we have three different

15 primaries again. That'd be madness. Or two

16 primaries next year. So I, it's very enticing to

17 look at technology as the solution and I think

18 there are things that technology can do but I think

19 that our problem in terms of voter engagement is

20 more basic than just a technological fix

21 unfortunately.

22 [laughter]

23 SUSAN GREENHALGH: And we're looking

24 forward to coming up with more creative solutions

25 and to… And one thing that I think the city has not

done is fully engage the extraordinary brain trust

that is the, the tech meet up and the sort of

energy and pro-bono willingness that the technology

community here has to help is something that I

think the city could very profitably explore.

CHAIRPERSON CABRERA: I'm just thinking

about the next generation young people.

SUSAN GREENHALGH: Yeah.

CHAIRPERSON CABRERA: I have my four or

five year old grandchildren already playing with…

[interpose]

SUSAN GREENHALGH: On the iPhone.

CHAIRPERSON CABRERA: Yeah with the

iPhones… [interpose]

[laughter]

CHAIRPERSON CABRERA: …with the iPads

and I think they're the, going to be the generation

that it's going to be more appealing to go ahead

and vote and it just makes it a lot easier. But I

hear what you're saying.

CHAIRPERSON BREWER: Thank you very

much. Susan I have a question just to keep updated

with this original signature.

SUSAN GREENHALGH: Mm-hmm.

CHAIRPERSON BREWER: Doug Kellner had some suggestions but I think we need to look at that really carefully and figure out which agencies… [interpose]

SUSAN GREENHALGH: Yes.

CHAIRPERSON BREWER: …can in fact use it etcetera and can it be done on the city level or only on the state level. The motor voters kind of divided. You know there are some… [interpose]

SUSAN GREENHALGH: Well the city… [interpose]

CHAIRPERSON BREWER: …motor voter city agencies… [interpose]

SUSAN GREENHALGH: Right.

CHAIRPERSON BREWER: …and then obviously there are the state agencies… [interpose]

SUSAN GREENHALGH: But there is a state, there is a city… [interpose]

CHAIRPERSON BREWER: No, no I know.

SUSAN GREENHALGH: Yeah.

CHAIRPERSON BREWER: I'm aware of all of that… [interpose]

SUSAN GREENHALGH: I know you are.

2   CHAIRPERSON BREWER: …having

3 unfortunately been through it all… [interpose]

4   SUSAN GREENHALGH: Yeah.

5   CHAIRPERSON BREWER: …about to go

6 through it again today. But I'm just saying we need

7 to figure out what we can do legally with each. And

8 we're both.

9   SUSAN GREENHALGH: Right.

10   CHAIRPERSON BREWER: And I just think

11 that something it's the Devil's in the details.

12   SUSAN GREENHALGH: Yeah I agree but I, I

13 think the, we're missing the basic information. As

14 I said we tried, we tried to put it together and

15 from outside or without help perhaps… [interpose]

16   CHAIRPERSON BREWER: We can do it.

17   SUSAN GREENHALGH: …from this committee

18 or others. We couldn't get the agencies to give us

19 the information.

20   CHAIRPERSON BREWER: We will, we will

21 figure that out. And the other, and the other

22 question I had is how, do any of you think that

23 the, how soon can we work on this poll site

24 transition so that we can move the scanners to get

25 the information more quickly and also just a poll

book being electronic? What, what do you think in

terms of time? Either so can't cause you got the

on. You know the, the, the actual experience being

on the ground etcetera.

SUSAN GREENHALGH: One of the things

that we founded in our early voting report is that

several of the counties said that they found the

electronic poll books to be one of the most

important technology improvements which they had.

And that they found that was key, even more than

ballot on demand. But the two together they found

were most effectively, that they talked very

practically about needing lead time and needing the

ability to set up the systems well. Even with the

electronic systems it's not instantaneous.

KATE DORAN: Right. Anecdotally I

suspect that if we had a more technologically 21st

century poll site we may be able to encourage

younger people to want to be poll workers and that

would be, that's something we absolutely need. I

mean it, I really, I'm really very interested in

hearing the board do some, seeing the board do some

research on the printing ballots on demand.

CHAIRPERSON BREWER: Okay.

KATE DORAN: And I could hope that you could… [interpose]

CHAIRPERSON BREWER: Yeah I, I think this hearing I want to thank my colleague because this hearing has turned into a really good discussion about all the opportunities. And so it's really helpful on the national perspective, international and local and figuring out what our can dos and what need to get done. So it's very exciting to hear these possibilities.

I just wanted to briefly add that before or until we do get online registration books as one who has been involved in the voting process, you mentioned Gale waiting in line at the various places identifying your ED, then getting your registration book signed, if at each EDAD in the table when people line up to sign the book if there is a problem let the problem person move to a special person at that table to… [interpose]

CHAIRPERSON BREWER: Okay.

…handle problems so that the rest of the line can… [interpose]

CHAIRPERSON BREWER: That's the weeds.

That's, yes that's a very simple thing that could be done.

CHAIRPERSON BREWER: Okay I, I don't know if I can do that.

[laughter]

Okay.

CHAIRPERSON BREWER: I'm just saying.

That would be in the training process.

CHAIRPERSON BREWER: [mic static] weeds.

That's totally in the weeds because with the… [interpose]

CHAIRPERSON BREWER: The weeds.

…ballots have stub numbers on them… [interpose]

CHAIRPERSON BREWER: Please I… [interpose]

…and what are we going to do? I mean I… [interpose]

CHAIRPERSON BREWER: One day I took over a poll site illegally and just started doing it you know during the Obama. I used a four letter word, I screamed it out and there were 800 people in line and I just, now I, you know I did it four hours.

2   I had a volunteer who did that this

3 past election.

4   CHAIRPERSON BREWER: Yeah it's pretty,

5 [crosstalk] good one.

6   But on, I, I also would like to say

7 Madam Chair that it has been quite our delight and

8 pleasure to testify and to work with you and your

9 office. And I know whoever replaces you will

10 certainly be very capable but we're going to miss

11 you…

12   CHAIRPERSON BREWER: Thank you very

13 much.

14   …as the chair of this committee.

15   CHAIRPERSON BREWER: Well I do want to

16 thank everybody. I certainly want to thank Dave

17 Seitzer, Tim Madisol[phonetic], Will Colegrove from

18 our office, Rob Newman my colleague, and everybody

19 who's been part of this committee. We done?

20   CHAIRPERSON CABRERA: What I want to say

21 thank you.

22   [laughter]

23   CHAIRPERSON CABRERA: Truly you know

24 from the technology committee on behalf of, of all

25 the, my colleagues we want to thank you. You got

this committee started, you were the chair, and you

stayed on. And truly you've been a mentor to Dan,

myself and, and, and those in the committee. I

truly wish you the best as the borough president of

Manhattan and I believe with your knowledge and

wisdom and work ethic I don't know any council

member that works harder than you. This is

lifestyle for you. This is more than a lifestyle,

this is an obsession for you. [laughter] And I want

to thank you. Thank you for all the hard work and

the last stated meeting there'll be more words to

be said.

CHAIRPERSON BREWER: Thank you very much

and congratulations everybody… [interpose]

[applause]

CHAIRPERSON BREWER: …and it's all great

staff. Thank you very much. This is concluded.

[applause]

[gavel]

<u>C E R T I F I C A T E</u>

World Wide Dictation certifies that the

foregoing transcript is a true and accurate

record of the proceedings. We further certify that

there is no relation to any of the parties to

this action by blood or marriage, and that there

is interest in the outcome of this matter.

Date _____   January 08, 2013_____