**Kickoff Meeting - NOTES FROM KEITH INSTONE -**   
  
I am sure there are lots of other usability related things that were covered but I forgot to scribble down, so I will want to review the rest of the notes as well (esp. Dean's and other LEO's). But this is a start to making sense...  
  
**ABOUT THE PROJECT/REPORT** (which can be viewed as an experience design problem all by itself)  
\* Target audiences: Election officials (primary). Secondary? Legislative officials, broader technical community, vendors, ...  
\* Purpose: Non-technical guide to internet voting systems, to educate them about verifiability ("Now I get it it! We need to make sure voters can verify their ballots because of all of the things that can go wrong."), to help them make decisions (might be "do not do internet voting!"), evaluation tools to apply to vendor products/services ("How does your system handle large scale automated attacks?"), raise issues with legislatures, etc.  
\* May take the form of more than just a PDF posted on the OVF site. Depends on our specific goals and how best to reach election officials. Possible examples: Present at election official conferences, conduct online discussion, etc.  
\* Be proactive: addressing the future. Opportunity to "get ahead of the game".  
\* Why all this matters to election people.  
\* High level UX steps: (1) Integrate UX/usability/accessibility/etc/ into conversations through-out project (not separate) (2) Review human factors and other research (e.g., usable security) and incorporate into report (3) Do UX work products (user profiles, scenarios, design prototypes, etc.) to help the project (e.g. how we think) and for the report (4) Do UX activities (user research, usability testing, field studies, etc.) to help the project.  
\* Show a ROADMAP of how to get from where we are today to what we want. Have technical milestones, but also show voting experience at each stage (to show it is acceptable).  
  
**ABOUT VERIFIABLE VOTING SYSTEMS**  
\* Usability issues with property #1: Individual voter can verify that their ballot was counted as cast. (1) Understanding encryption (e.g., not showing them their actual ballot but having them believe it was counted as cast) and trusting it all. (2) Mechanics/user interface of getting a tracking # and inputting it. (3) Election official admin (e.g., setting up proper encryption?). (4) Supporting (unknown) process for challenges ("my ballot was messed with").  
\* Usability issues with property #2: Data shared publicly so anyone can tally the results to confirm official vote count. In general, not as many usability issues, since we expect this to be done by someone with at least some tech skills (e.g., a smart high school kid). (1) Understanding format of data. (2) Sample tools to use (e.g., as simple as import into Excel and do math there?).  
\* Understanding crypto concepts. How to explain to the typical voter. (And typical elections official.)  
\* It is easy to trick the user into believing the wrong thing (e.g., change their ballot choice, not notice it). How to convince them they have NOT been tricked?  
\* Show optional step of verifying ballot, but not required, to each usability concerns. Make everything else seem as "normal" as possible.  
\* Voters expect to see a copy of their ballot, as counted by the election officials, to confirm it made it there correctly. This is a privacy problem and invites coercion, selling of votes.  
\* TRUST matters in many different ways.  
\* For public verification of election results, key may be who people trust to do the verification. Candidates. Political parties. League of Women Voters. Etc.  
\* Assume people will not follow directions, yet it all still works.  
\* Poor man's E2e: FedEx like tracking number, plain text voting record  
  
**REMOTE VOTING EXPERIENCE**  
\* Absentee process. Paper ballots and postal mail. Substitute email/PDFs for postal mail. Substitute fax for postal mail.  
\* Barcodes help with the transition from paper to electronic representation of ballots.  
\* Human are often the security hole on digital systems. Test the protocols.  
\* Overall calendar (e.g., how much time there is to return a ballot) affects the experience and the system design.  
\* Internet voting on 4 goals: Bad on tally, anon. Easy to coerce. But EASY TO VOTE!  
\* Code voting helps with tally, anon but hurts usability. Code voting been proven to be unusable (in Norway)?  
\* Seems like the harder we try to keep the ballot selections private, the more difficult it is to use. E.g. http://en.wikipedia.org/wiki/ThreeBallot  
\* How to integrate remote votes (e.g., UOCAVA) with the "in person" votes? What is the election admin experience for this? Easy, hard?  
\* What if some users choose to give up privacy for usability or being able to vote at all? Happens today with disabled at polls (e.g., choose a friend to help them). Email a PDF to election official.  
\* What if some users choose to give up security for ease of use? Different story, since that affects the overall election results (their vote might get hacked).  
\* Open source model could let others add custom user interfaces.  
\* Using multiple channels (voice, text, devices, mail, fax, apps) to increase security.  
\* LEO goals (for remote voting): increased participation (disabled, overseas, disenfranchised, …), higher customer/voter satisfaction, save money, easy to administer, more accurate/faster election results, …  
\* How important is PAPER in the remote voting experience? For security, auditability, etc, as well.  
  
**PROJECT TARGET USERS, SCENARIOS AND CONTEXTS**  
\* Overseas, in an office setting, Military person in combat zone (e.g., limited access to internet), MIlitary person not in combat zone.  
\* Access to nearby embassy, consulate, etc.  
\* Micropolls (2 trained people and a laptop)  
\* Remote = "not able to be at the polls on election day". Far away. Busy/lazy. Disabled. Etc.  
\* Overseas (bad term, what about Canada and Mexico?) but use it anyway. Permanent vs. Temporary. Military vs. Civilian. Military in combat zone vs. not.  
\* Within US: Temporarily away from home (voting district).  
\* Students in school abroad. Missionaries. Medium timeframe away?  
\* First responders (to a natural disaster, for example). Short term, no time to plan ahead.  
\* Other "unscheduled deployments" by civilians (e.g., common workplace activity within a global company).  
\* Voter identification & authentication harder vs. in-person. States rely on BMV-issued credentials.  
\* First time voters (18 year olds, newly "recruited" by a cause, etc.). Include more educational material as part of the voter experience.  
  
**GENERAL VOTING EXPERIENCE**  
\* Social media helps with "customer support" during the elections process (e.g., resolve issues quickly on election day). Has positive effect on the experience, on trust.   
\* Voting is an emotional event for many people. Thus, it is more than just about the mechanics.  
\* A lot of the current voting experience is driven by outdated and "crazy" policies. Cannot really separate voting experience issues and policy.  
\* Pie in the sky experience: Vote using your own device.  
\* No work has been done to design a good auditing experience. Too manual.  
\* Level of training and overall poll worker competence is a key part of voter experience at polls. E.g., polls workers being able to use technology.  
\* Technology changes for voters, poll workers, etc. can be very difficult.  
\* Language can be a barrier. Accessibility (for disabled people, for example) is a barrier.  
\* Law = rule + reason. Understand rationale behind voting laws. Show impact on voting experience. Change.  
\* Election goals: Tally accurate/verifiable. Votes anonymous. Coercion difficult. Voting not onerous (= usable). Not possible to do all, trade-offs.  
\* Act of voting is not private, but who you voted for is supposed to be private. Private from whom?  
\* Huge differences in local policies, practices, ballots affects voting experience A LOT. Federal elections only is much simpler.  
\* Technology tends to push towards centralization (e.g., to save $) but election model is extremely distributed (many local jurisdictions). Centralization adds security concerns.  
\* Paper adds an extra step to an all-electonic voting process.   
\* Using personal technology could improve the voter experience, but could also open up another digital divide.  
\* It is mostly about OPTIONS for voters: many ways for them to vote.  
\* Build a ballot on personal device, bring it to the polls to be scanned. Separate ballot marking from tabulating.  
\* Perception of access and/or security is just an important as reality.  
\* 2x2 matrix: In person vs. Remote. Before election day vs. On election day. Example: Poll = in person/on election day. Early voting = in person/before. Absentee = remote/before. Any remote/election day?  
  
**NEXT STEPS FOR THIS PROJECT**  
\* Need data on various attributes, conditions and contexts (e.g., how many devices people have, # near military bases).  
\* Need online place to write, discuss, collaborate, etc. e.g., wiki. Of course, this "remote team getting work done" needs to be a usable system itself!  
\* Detail user groups (civilians, military, disabled, etc.), attributes of use (e.g., office, first time, time-crunch), broader contexts (e.g., battlefields, big city near an embassy) and scenarios (tell a story from a users point of view).  
  
**RELATED PROJECTS, WHAT ELSE TO LEARN ABOUT**  
\* Democracy Live. Esp. UOCAVA voting: http://www.democracylive.com/move-act-solution/  
\* Everyone Counts. Esp. Military and Overseas Voting: http://www.everyonecounts.com/military-and-overseas-voting/  
\* Travis STAR voting system: https://www.supportthevoter.gov/files/2013/09/Dana-Debeauvoir-STAR-Voting-System-Diagram.pdf & https://www.usenix.org/conference/evtwote13/workshop-program/presentation/bell  
\* LA County Voting Systems Assessment Project: https://www.lavote.net/Voter/VSAP/  
\* Lots about voting experience at https://www.supportthevoter.gov/  
  
  
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