

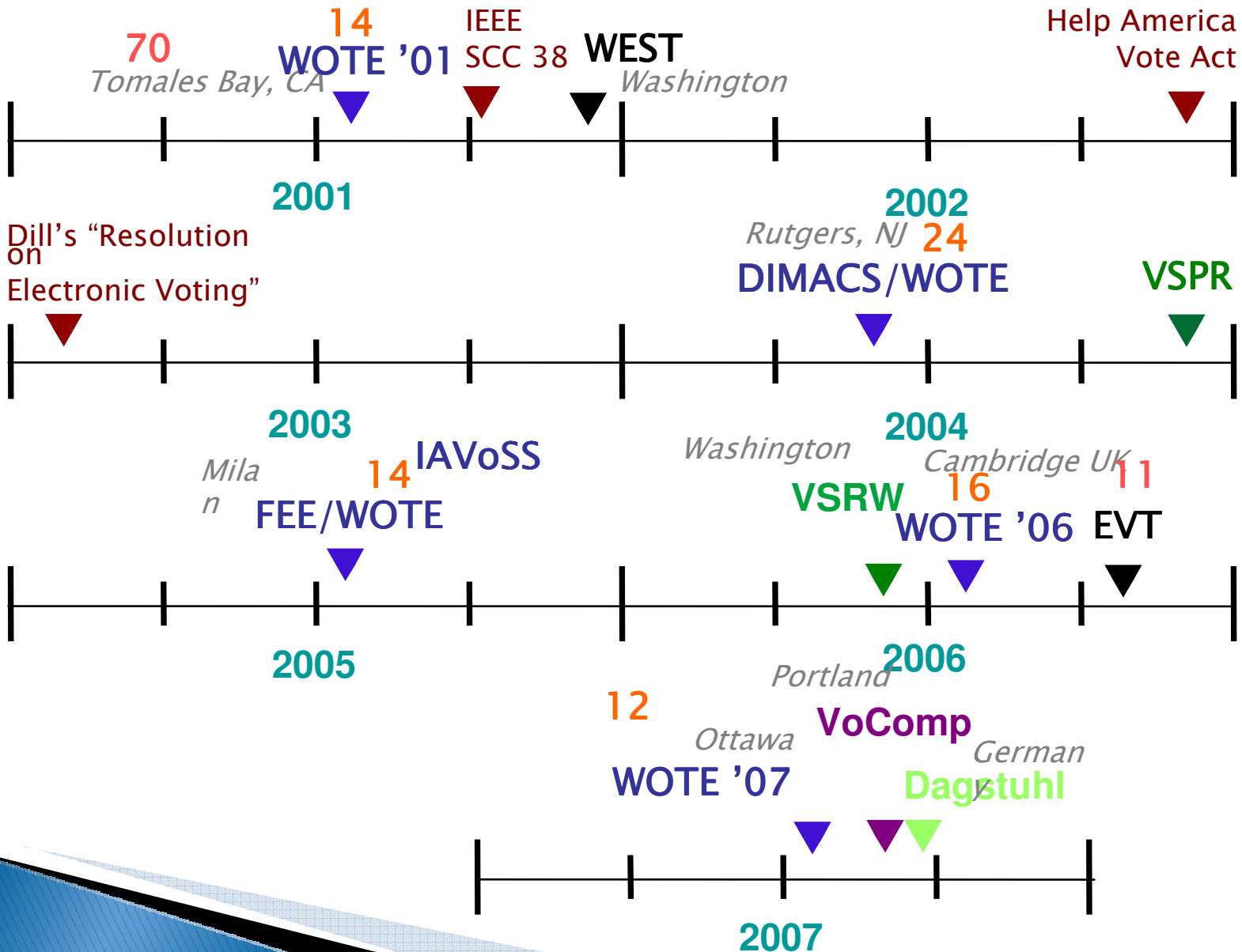


# Scantegrity II

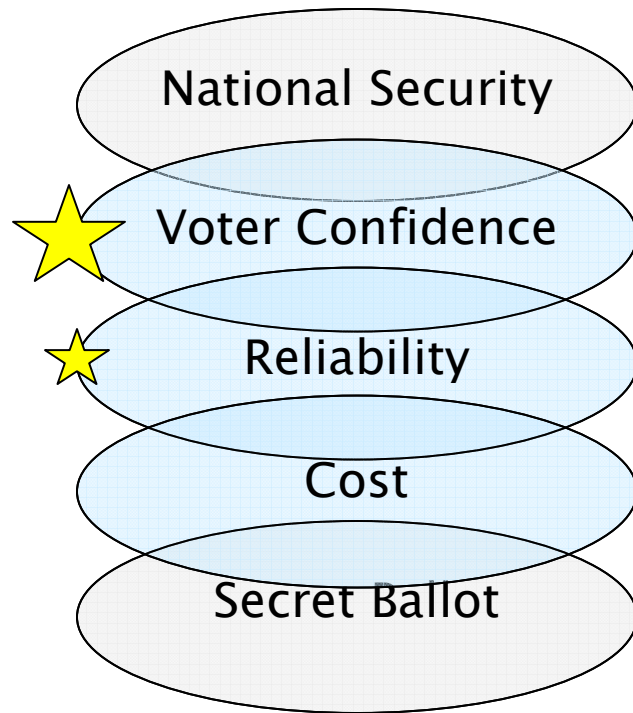
Vote confirmation for Opscan



# Voting Technology Events



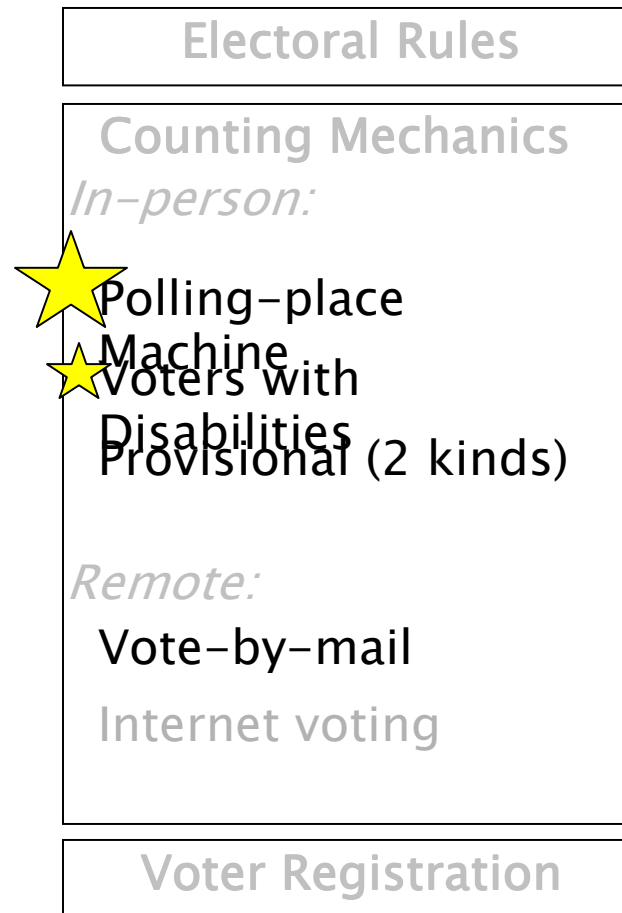
## Policy Issues



### Trends

Transparency  
Open  
Systems/Software

## Problems



## Technologies

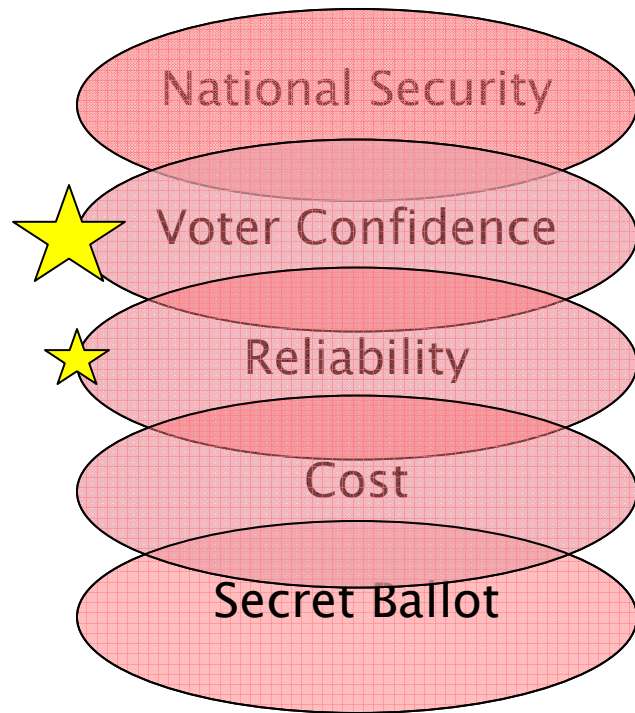
DRE

DRE w/  
record  
(VVPAT, etc)  
Optical Scan

Online

Vote  
Confirmation  
Number

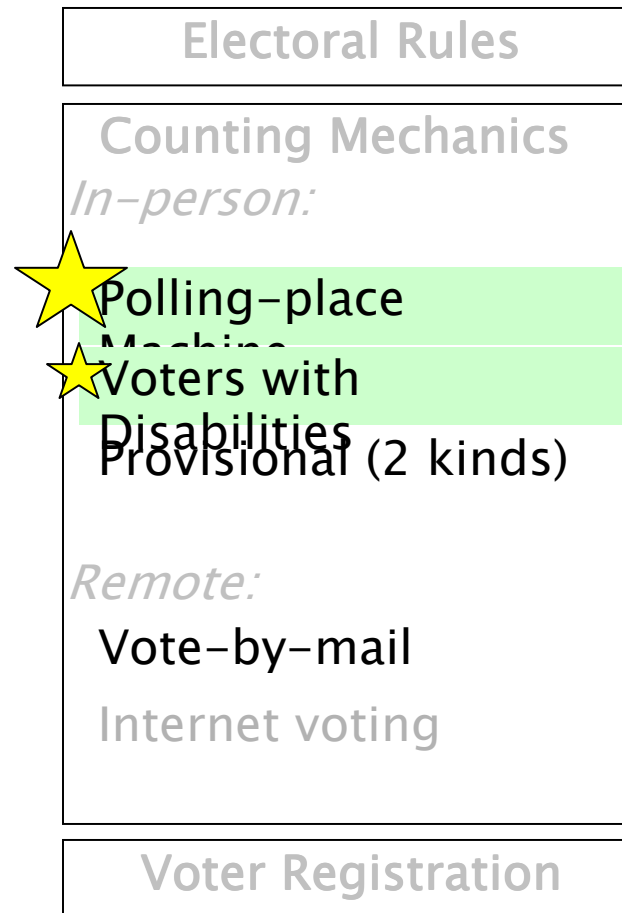
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## Technologies

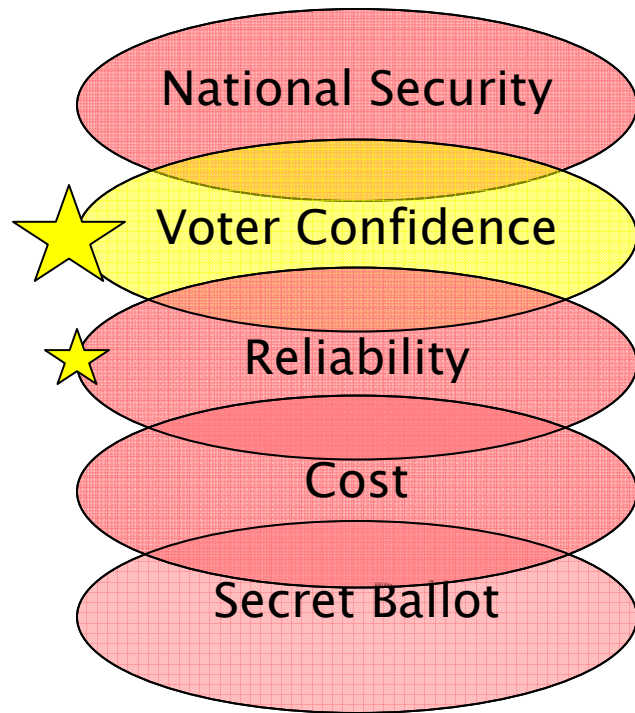
DRE

DRE w/  
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## Policy Issues



## Trends

Transparency  
Open  
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## Problems

Electoral Rules

Counting Mechanics

*In-person:*

★ Polling-place

★ Voters with

Disabilities

Provisional (2 kinds)

*Remote:*

Vote-by-mail

Internet voting

Voter Registration

## Technologies

DRE

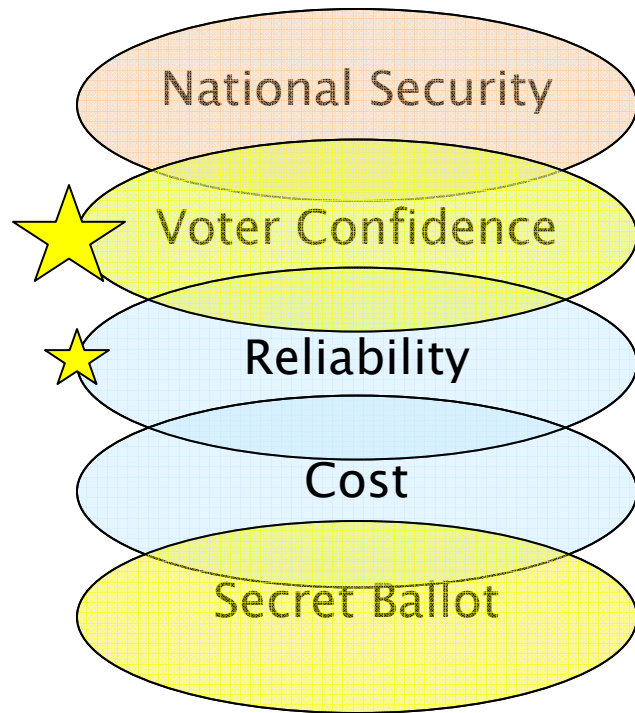
DRE w/  
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Optical Scan

Online

Vote  
Confirmation  
Number

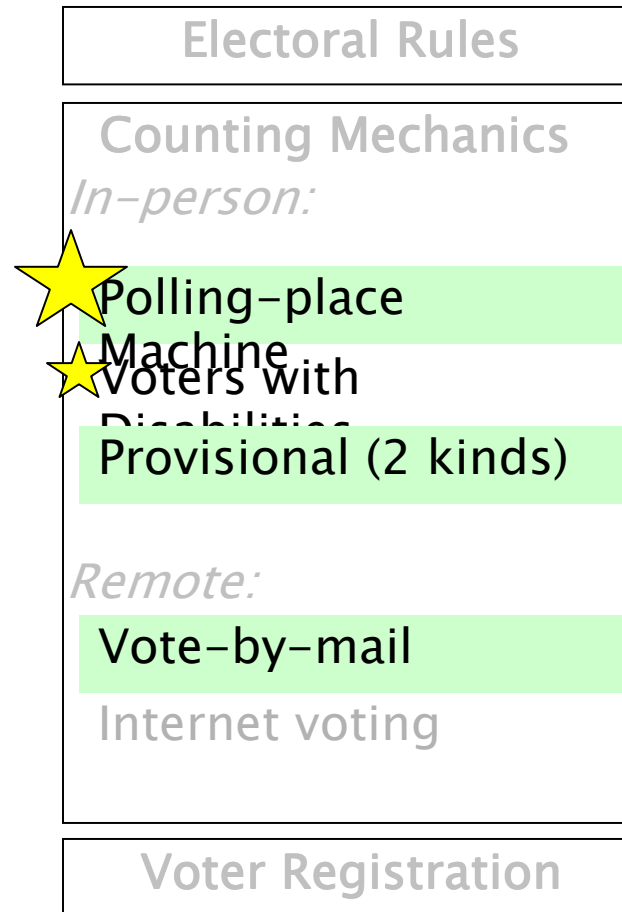
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## Technologies

DRE

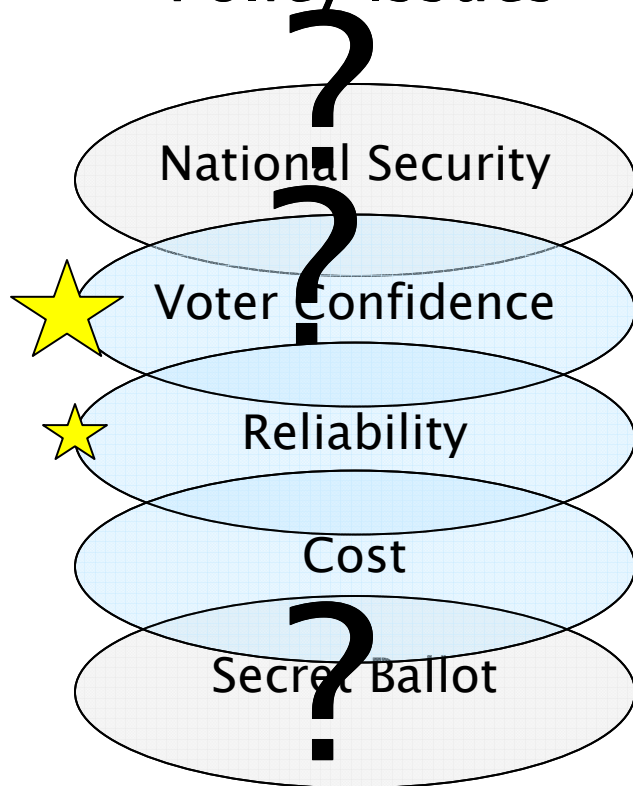
DRE w/  
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Polling-place

Machine

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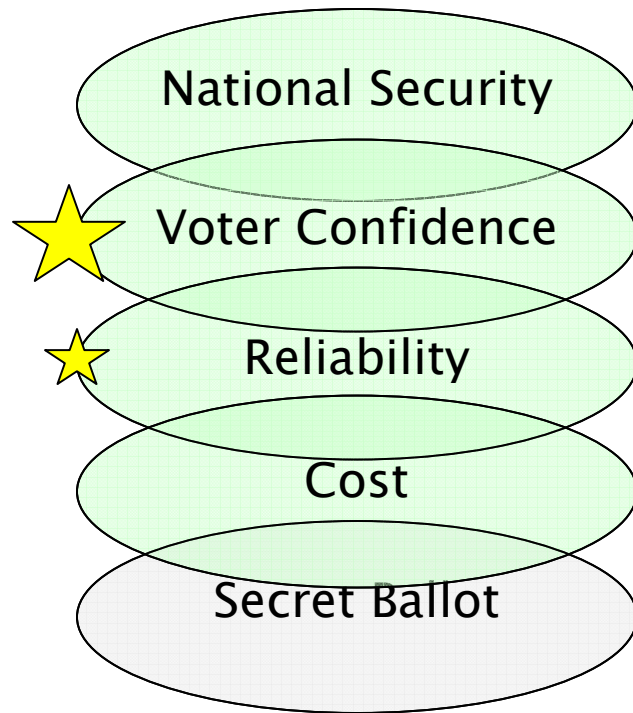
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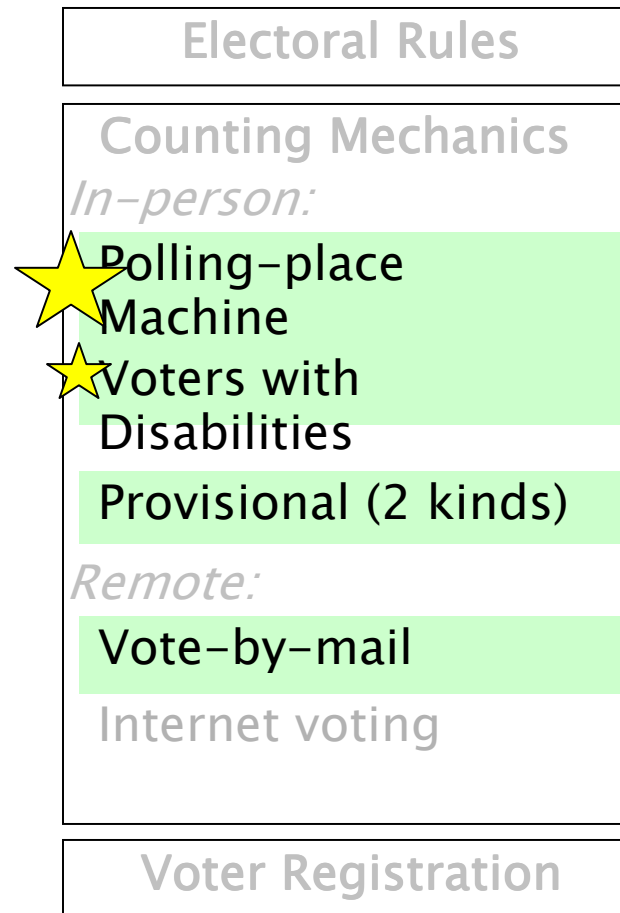
## Policy Issues



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## Technologies

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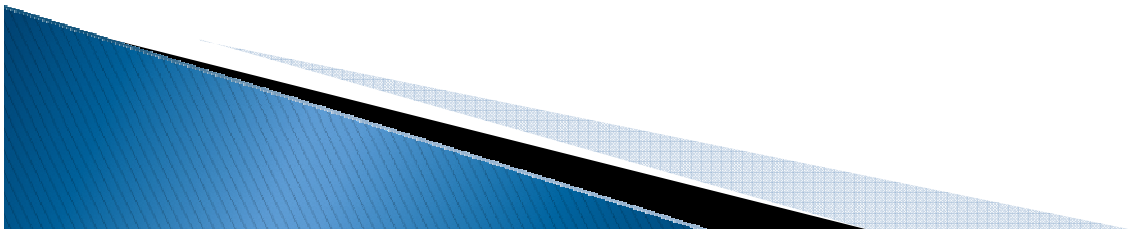
Online

Vote  
Confirmation  
Number



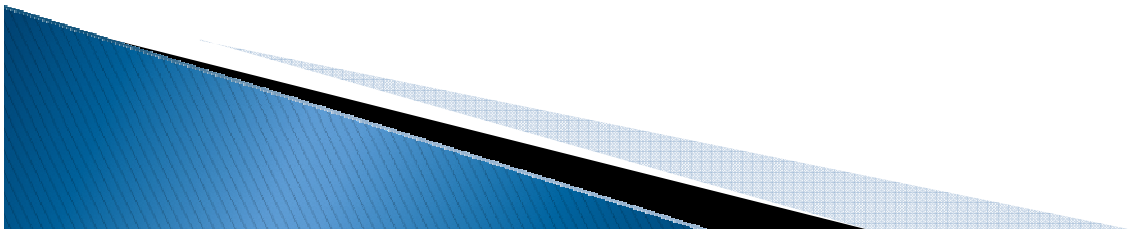
# Transparency and Privacy

- ▶ End-to-end
  - Recorded as Cast
    - Voter checks “confirmation number”
  - Counted as Recorded
    - Anyone audits “confirmation numbers”
- ▶ Software independence
  - Error in voting system software cannot change outcome



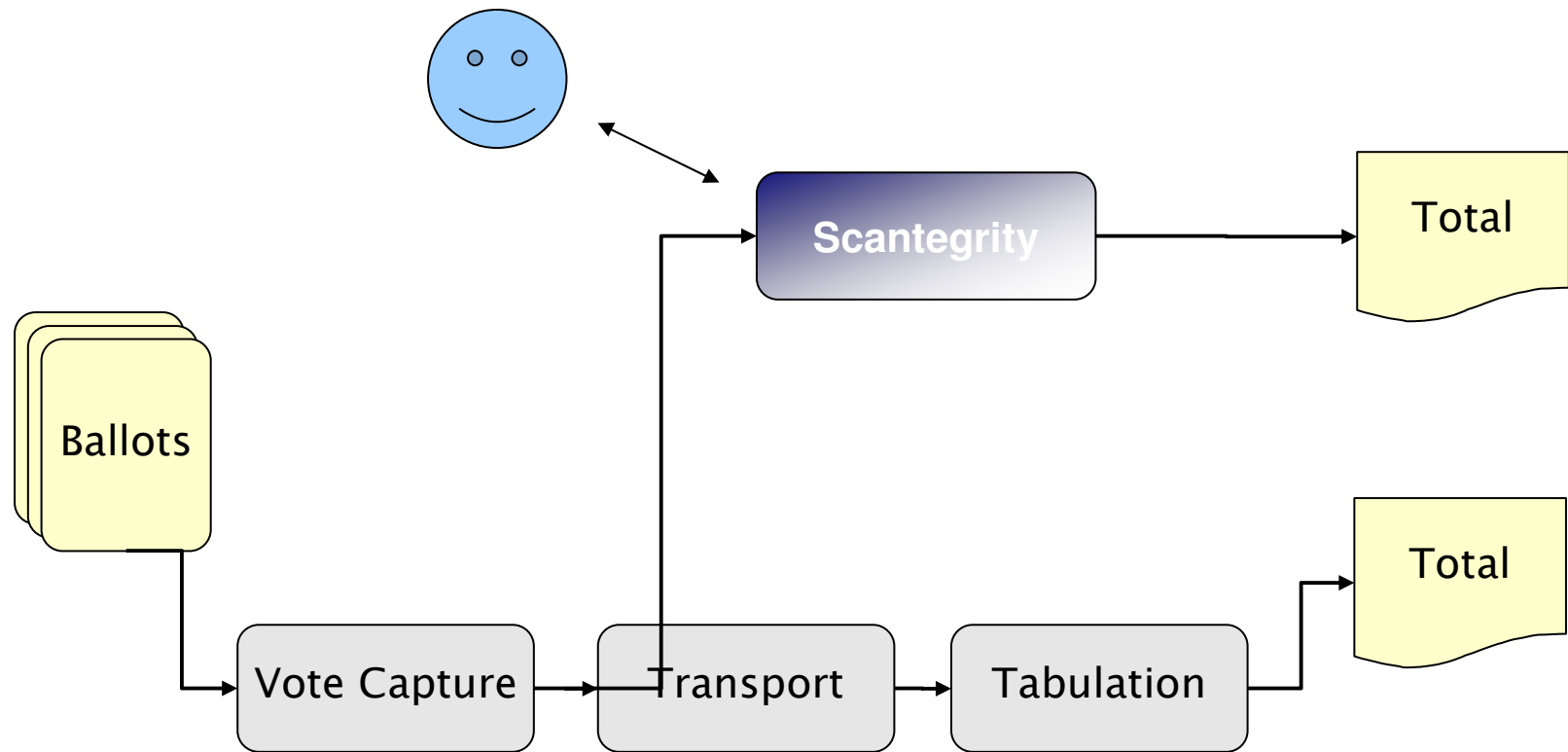
# Simple adoption

- ▶ Optical scan is most widely used platform
- ▶ Secures existing optical scan and tabulation equipment
- ▶ Maintains established election procedures
- ▶ Value added features are opt-in

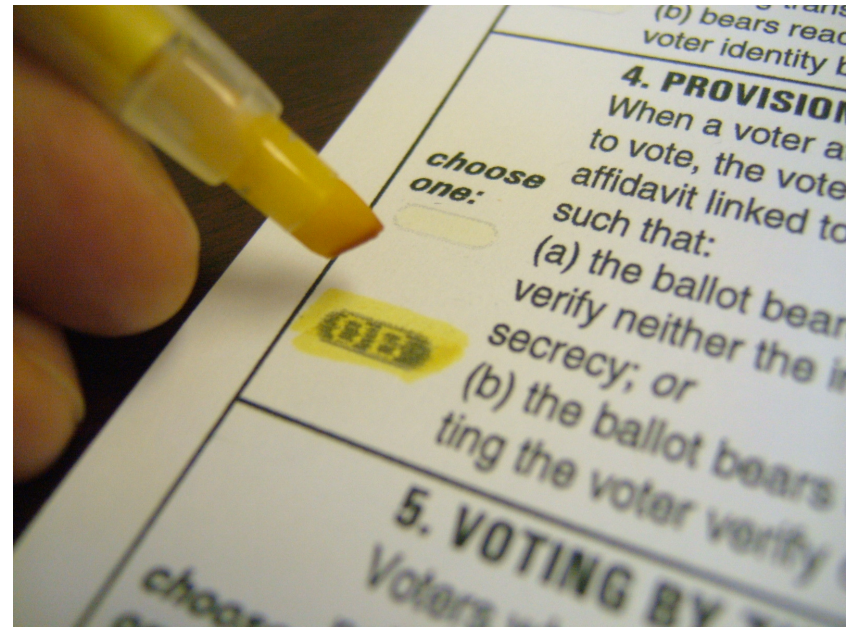
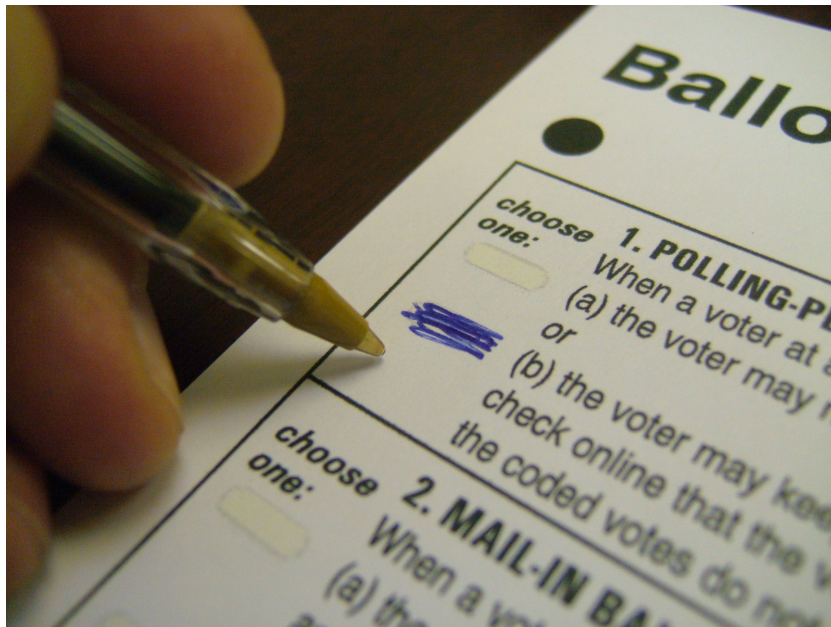


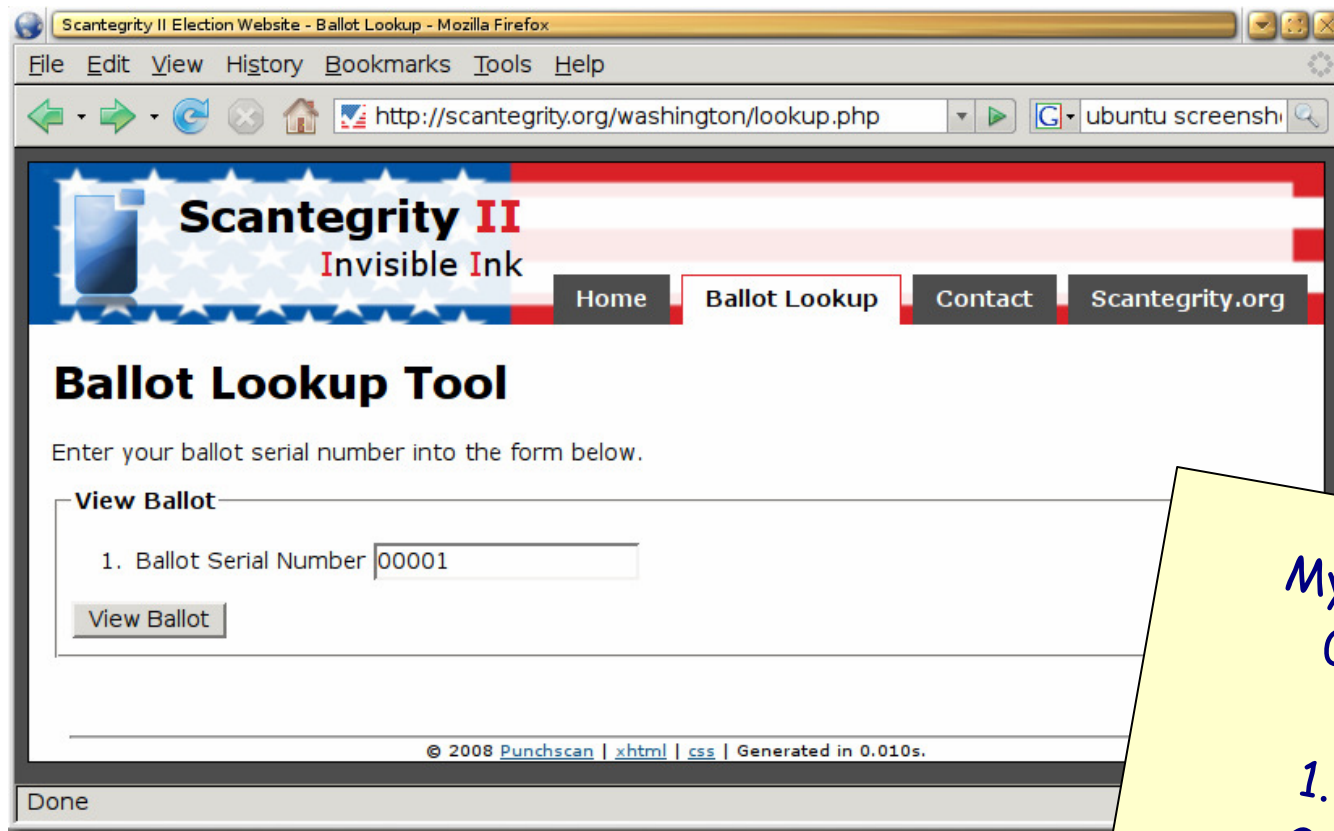
# Scantegrity II

## The process is the same



# Confirmation with Invisible Ink





My ballot  
0001

1. CX
2. CF
3. YN

Scantegrity II Election Website - Ballot Lookup - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://scantegrity.org/washington/lookup.php Google

**Scantegrity II**  
Invisible Ink

Home Ballot Lookup Contact Scantegrity.org

## Ballot Lookup Tool

Options  
Refresh [View Another Ballot](#)

**Ballot Number: 00001**

Question	Confirmation Number
Polling Place Vote Verification	CX
Mail-In Ballot Vote Verification	CF
Mail-In Ballot Vote Secrecy	YN

Done

My ballot  
0001

1. CX
2. CF
3. YN



# Readiness

- ▶ Fully implemented, ready to use
- ▶ Previous versions:
  - PunchScan – grand prize, NSF VoComp 2007
    - Used in binding elections (uOttawa, CPSR)
- ▶ Open Source
- ▶ First jurisdiction to adopt – free in perpetuity

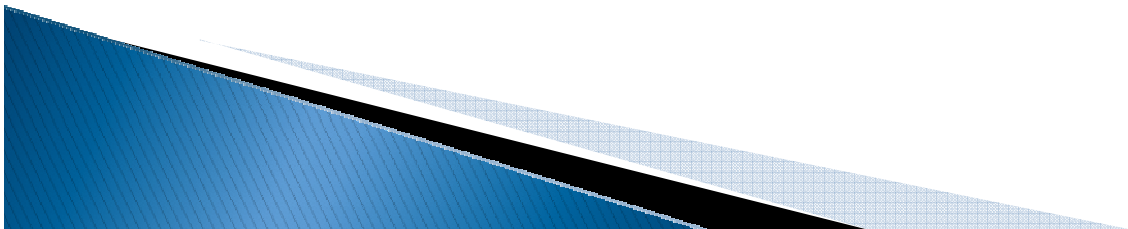


Punchscan



# Concluding Remarks

- ▶ For voters
  - See their votes count
  - Greater confidence and increased satisfaction
- ▶ For election officials
  - End-to-end verification at low cost
  - Reduces reliance on chain of custody







**scantegrity.org**

