## Now what?

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# Pilot Risk-Limiting Audits

- 17 pilot audits in CA, CO, and OH; another 13 planned.
- EAC funding for pilots in CA and CO and Cuyahoga County, OH
- CO has law; CA has pilot law
- simple measures, super-majority, multi-candidate, vote-for-
- multiple contests audited simultaneously with one sample
- contest sizes: 200 ballots to 121,000 ballots
- counting burden: 16 ballots to 7,000 ballots
- cost per audited ballot: nil to about \$0.55
- several jurisdictions have audited on their own—no statistician required

# What hasn't been tried?

- Cross-jurisdictional contests
- IRV/RCV

"Data! Data! Data!" he cried impatiently. "I can't make bricks without clay."

-The Adventure of the Copper Beeches, Sir Arthur Conan Doyle

- data plumbing
- integrity of the audit trail

#### Now what?

- Demand convincing evidence that outcomes are right
- But don't poison the well of LEO goodwill
- Mandate auditable systems (paper for now)
- Mandate/regulate ballot accounting, ballot manifests, security, chain of custody
- Mandate compliance audits
- As voting systems retire, replace with more-easily audited systems
- Re-vamp current certification regime; add conditions of use
- Build no-vendor systems: stop the money-pump
- Mandate ballot-polling risk-limiting audits for large contests until voting systems make comparison risk-limiting audits easier
- Don't allow IRV/RCV until it can be audited

### Legislation, Regulation

- White paper on risk-limiting audits
- Still hope to draft model legislation
- Colorado, California
- Risky legislation. Florida?
- RLA as a "brand"
- Interaction with recount laws
- Federal and state certification of equipment

### Which really matters?

- 1. Under laboratory conditions, can the vote tabulation system—as delivered from the manufacturer—count votes with a specified level of accuracy?
- 2. As maintained, deployed, and used in the current election, did the vote tabulation system find the true winners?

Certification can cost millions and take years. Addresses Q 1. Audits address Q 2.

## Role and consequences of certification

Current certified systems make audits more expensive and less transparent than necessary.

Maintenance costs high; systems not agile; stupefying inertia.

Certification still useful for some things, e.g., to ensure accessibility and creation of durable audit trail.

Need to push for easily auditable systems using COTS components and free/open/cheap software.

Travis County TX and Los Angeles County CA are leaders.

### **Evidence-based Elections**

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{\sf Evidence} = {\sf Auditability} + {\sf Auditing}
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- (potentially) strongly software-independent voting system
- compliance audit to check integrity of audit trail: is system still SSI?
- risk-limiting audit to check outcomes
- puts incentives in the right place: better procedures and equipment mean less work for LEOs