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Registrar of Voters
Baking Integrity Into Election Operations
Challenges

- Rapid spread of disinformation
- Groups questioning validity of election Results
- Individuals questioning accuracy of voter registration databases
Analyzing My Role

What more can Election Officials do to affirm the integrity of the elections process?

• Can integrity of elections be quantified, analyzed?
• What methodologies or tools exist that could be employed?
Caltech Partnership
Caltech Forensic Audit

- Launched 2018 in Orange County
- Examined Primary & General of 2018
- Built a tool set for evaluating election integrity
- Evidence based findings
- Results disseminated quick & transparent manner
Areas of Focus

• Audit of Voter Registration Database
• Monitoring of Social Media
• In-Person Observation
• Analysis of Precinct Turnout Data
• Examination OCROV Poll Worker Surveys
Audit of Voter Database

- Caltech built software application that scans
- Application takes daily voter file “Snapshots” of duplicates, deletions, additions, or changes to records
- Establishes metrics and thresholds of normal change
- Detects when daily rate of change to voter database goes beyond expected normal limits
Audit of Voter Database

- If anomaly found, OCROV alerted for further examination
- Caltech Pilot Study notes they did “not detected any unusual or anomalous events” during time that OCROV voter database was being evaluated
Monitoring of Social Media

• Caltech team collected tweets that contained one or more tracked election related keywords

• Was able to provide a public analysis of the conversations

• Found that “volume of discussion about election issues in the county was lower than it was for California or the nation.”
In-Person Observation

- Caltech deployed teams of observers to OC voting locations
- Observers collected information on quality of voting locations
  - Parking availability
  - Ease of access
  - Placement of signage
- Study found that voters had good 2018 voting experiences and very few issues given large size of jurisdiction
Precinct Turnout Analysis

- Prior research shows that percentage turnout across precincts is expected to display as bell curve with normal distribution.
Precinct Turnout Analysis

- Caltech’s review of OCROV turnout reports consistently found normal distributions across this data.
- This trend in forensic evidence indicates very few anomalies.
Split-Ticket Analysis

- Questions raised about split-ticket voting in the competitive 2018 U.S. House elections in OC
- Forensic analyses of the post-election “Statement of Votes (SOV)”
- Examined split-ticket patterns and SOV data from Orange County vs LA County
- Forensic studies showed no unusual anomalies: Ticket splitting data in OC mirrored that of neighboring counties
Poll Worker Surveys

- Caltech sent out two large-scale post-election voter experience surveys
  - 6,948 survey responses received November 2018
  - 87% confident their vote was counted as intended
  - 86% confident that votes in Orange County were counted as intended
  - Nearly all respondents reported positive voting experience
Conclusion

• Study produced evidence that administration of 2018 Primary and General Elections in Orange County had high degree of integrity.

• Showed strong confidence in the integrity of election administration in Orange County.
THANK YOU!