



# Executive Summary

**Independent Investigation of Election System  
Anomalies in Los Angeles County on June 5, 2018**



IBM Security Services

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## **Summary of Findings**

IBM was engaged by the Los Angeles County Counsel to perform an in-depth investigation and root cause analysis regarding two anomalous events that occurred in Los Angeles County during the California Primary Election on June 5, 2018.

This summary is being made public by the County to provide voters and other stakeholders with information about the major findings and recommendations.

The two events investigated were:

- 118,509 registered voters were excluded from the printed Voter Rosters for 1,000 precincts; and
- A disruption of the LAVote.net website that started at 11:20 p.m. and was restored by 11:41 p.m.

During the period of June 18, 2018 through July 18, 2018, IBM performed an evaluation of the County of Los Angeles' Voter Information Management System (VIMS), as well as a security forensics and assessment of the LAVote.net system. The evaluation involved three workstreams performing incident investigations, security assessments, and application assessments to assess the occurrences that took place during the California Primary Election.

Our findings include the following:

(1) There is no evidence that a security breach contributed to the LAVote.net or the printed Voter Roster issue.

(2) Our analysis of LA County's environment hosting the suite of applications determined that hardening of security controls could be improved, but had no contribution to the incident.

(3) An analysis of the application procedural workflow was performed. IBM recreated the issue that led to 118,509 registered voters being excluded from the voter rosters, in two separate scenarios. A definitive answer on which scenario actually took place for the June 5 Primary is impossible to determine due to a lack of audit logging available within the specific voter software system. IBM also found that the Official Voter List format provided by the State was incompatible with the election system software.

(4) During numerous testing scenarios, IBM was able to replicate the error that occurred when a job was started to create the voter extract file using the State Official voter list, then stopped before it completed. A subsequent process was started with the County Local Voter election database, causing a combination of information from two databases, one without birthdates (the first 118,509 records) and one with correct birthdates. The system then removed voters without birthdates from the voter rosters.

It is our opinion that a number of factors led to 118,509 registered voters being left off the printed voter roster in error. These include:

1. A file format change made to the Official Voter List provided by the State
2. VIMS' inability to intake this new format to the Official Voter List
3. The system not resetting after an earlier job was stopped and a second job completed the remaining Voter Extract File process.

Based on these findings, IBM recommends that the following actions be considered by the County:

1. Correct existing VIMS application functional deficiencies that can lead to errors in creating the printed voter roster
2. Redesign or replace the VIMS application
3. Until the data problem is resolved, the Registrar-Recorder/County Clerk staff should continue to run the voter roster for upcoming elections from the Local Voter database
4. Change the LAVOTE.net website distribution method to detect the performance load on each server before routing the request
5. Subscribe to an Incident Response Service that can quickly deploy resources in the event of a future security or performance incident