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SECURING AMERICAN ELECTIONS

How Data-Driven Election Monitoring Can Improve Our Democracy

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Abstract: The integrity of democratic elections, both in the United States and abroad, is an important problem. In this Element, we present a data-driven approach that evaluates the performance of the administration of a democratic election, before, during, and after Election Day. We show that this data-driven method can help to improve confidence in the integrity of American elections.

Keywords: election security, election audits, election fraud, voter registration, social media, survey methodology, voter confidence

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Preface

Election Integrity

The integrity of democratic elections, both in the United States and abroad, is an important problem. From a normative or philosophical perspective, it is difficult to dispute that democratic elections *should* be conducted freely, fairly, and with a high degree of integrity, so that citizens and stakeholders agree that the regime put into power by a democratic election has legitimacy. Election integrity is the foundation for a strong, resilient, and well-functioning representative democracy.

However, how do citizens, candidates, and stakeholders know that an election has been conducted with integrity? How do they know that an election has been conducted freely and fairly, so that they are confident that the ballots have been correctly counted, and that the reported results reflect a truly fair process, one that is free from fraud or administrative error?

These are the difficult questions that we consider in this manuscript. Here we lay out a comprehensive quantitative methodology that evaluates the performance of the administration of a democratic election, before, during, and after Election Day. We focus on quantitative approaches to election evaluation, and we show that a data-driven evaluation provides a variety of important and useful metrics for determining the integrity of an election. We also show how these metrics can be presented so that they can be used by election officials, candidates, the media, citizens, and stakeholders. By building tools and methods that can transparently and quickly provide these evaluative metrics to the public, we can raise awareness of the conduct of election administration, dispel rumors and innuendo, and in the end help to increase the confidence of citizens that an election was conducted with integrity.

In this Element we apply these approaches to document the integrity of American elections. Specifically, we present results from a unique series of studies conducted during the 2018 US midterm elections, in Orange County, California. In the next section, we discuss these studies in more detail, and explain why we focus specifically on the 2018 elections in Orange County. Overall, our goal in working with the Orange County Registrar of Voters

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(OCROV) was to understand from the Registrar's perspective what types of evaluative metrics would be useful to them, and to determine what types of analyses of the performance of their election technology and procedures were feasible. As we report in the sections below, we learned a great deal throughout this project. We discovered in detail how elections work in Orange County and in California, developed best practices in syncing our data requests with the OCROV's workflow, and determined which types of methodologies can quickly assess the performance of election technologies and procedures – along with lessons on what did not work as well.

Most importantly, in the highly competitive 2018 midterm elections, our evidence confirms that the election process in Orange County was conducted with integrity. A number of the most competitive US House of Representatives elections in 2018 were in Orange County, and our data-driven approach documents a small number of minor issues in these elections. Placing these minor issues into the larger context of the administration of one of the largest and most diverse election jurisdictions in the United States, we show that few voters experienced problems casting their ballots and that there is a high degree of confidence among voters about the integrity of the election. We thus offer strong evidence confirming the integrity of the administration of this election in 2018 in Orange County. All of these lessons are discussed in the sections of this Element.