Voter-identification laws ("voter ID laws") have provoked a fierce controversy in politics and public law. Supporters claim that such laws deter fraudulent votes and protect the integrity of American elections. Opponents, on the other hand, argue that such laws, like poll taxes and literacy tests before them, intentionally depress turnout by lawful voters. A vast literature, including legal scholarship and opinions by the Supreme Court, accept these two narratives. But these narratives are wrong, or at least incomplete. Voter ID laws can have many effects, including surprising ones, like this: They can exacerbate fraud. To illustrate, suppose that without a voter ID law candidates A and B would receive 13 and 10 lawful votes, respectively, and B would receive 2 fraudulent votes. Candidate A wins nonfraudulently, 13 to 12. Now suppose that with a voter ID law, candidates A and B would get 9 and 9 lawful votes, respectively (less than before because of depressed turnout), and B would get 1 fraudulent vote (less than before because of fraud deterrence). Candidate B wins fraudulently, 10 to 9. The conditions necessary for voter ID laws to have this effect are simple and may be common. This Essay captures this risk with a formula, the Election Integrity Ratio, which judges and scholars could use to determine when voter ID laws protect elections—and when they cause the very problem they purport to solve. This Essay has implications for constitutional law and public policy. It also has broad reach: Any law that deters fraudulent votes, depresses lawful votes, or does both—such as citizenship and residency requirements, which are used throughout the United States and around the world—is subject to the analysis herein.

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INTRODUCTION

American democracy has long suffered from electoral fraud. George Washington bought votes with liquor, and Boss Tweed paid "repeaters" to cast four ballots apiece in New York.\(^1\) Miami’s 1997 mayoral race included hundreds of ballots cast by "vote brokers."\(^2\) American politics has long featured another malfeasance: vote depression. For decades, intimidation and poll taxes kept African Americans from the polls. In 2012, Republican-controlled Ohio tried to grant military voters—and essentially no one else—extra time to vote.\(^3\) A federal court intervened, noting that laws like Ohio’s may "impose . . . burdens on the [noncontrolling] party’s core constituents."\(^4\)

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2. Id. at 286–91.
3. See Obama for Am. v. Husted, 697 F.3d 423, 427 (6th Cir. 2012) (reporting Ohio’s Secretary of State gave military voters “more generous deadline” for casting ballots).
4. Id. at 435 (citing Clingman v. Beaver, 544 U.S. 581, 603 (2005) (O’Connor, J., concurring)); see also id. at 436 (“The State has proposed no interest which would justify reducing the opportunity to vote by a considerable segment of the voting population.”); id. at 437 (White, J., concurring in part and dissenting in part) (noting eliminating early voting relied on by many Ohioans was "not a fluke, but rather the considered intent of a majority of Ohio’s legislators").
damental values: election integrity and the right to vote. Today those values collide in the debate over voter identification.

Voter ID laws require voters to present some type of identification before casting a ballot. In recent years, Indiana, North Carolina, and other states have adopted strict photo identification laws that require voters to present government-issued photo identification, such as a driver’s license. Proponents claim that such laws deter voter fraud; Amy cannot vote so easily in Beverly’s place if she must present ID. Thus, voter ID laws reduce illegal votes and convert would-be fraudulent elections into nonfraudulent ones. Texas Attorney General Greg Abbott expressed this view when claiming that “voter fraud abounds” in his state and that Texas needs a voter ID law to “protect its ballots.”

Opponents of voter ID laws argue that such laws depress turnout among lawful voters. Many otherwise eligible voters lack a government-issued, accurate, unexpired photo ID, and they cannot readily acquire one. So identification laws shut out some voters. Many of those voters are racial minorities who tend to vote for Democrats, drawing accusations of racism and partisanship. Senator Ben Cardin called ID requirements “the new Jim Crow laws of our times.” Attorney General Eric Holder argued that voter ID laws aim to “depress” non-Republican voters. If Holder is right, then voter ID laws convert accurate elections into inaccurate ones. Democrats should win—the accurate outcome—but, because of depressed turnout, Republicans win instead.

The debate proceeds as if these consequences exhaust the field: Voter ID laws protect elections from fraud or render them inaccurate.


7. “Lawful voters” is used here to mean voters who satisfy all requirements for voting or who satisfy all such requirements except that they lack adequate ID. The point is to capture voters who, and votes that, pose no risk of fraud.


But this is wrong. By reducing fraud, depressing turnout by lawful voters, or simultaneously doing both, voter ID laws can have many effects, including this: They can exacerbate fraud. To illustrate, suppose that without a voter ID law candidates A and B would receive 13 and 10 lawful votes, respectively, and B would receive 2 fraudulent votes. Candidate A wins, 13 to 12, and the outcome is nonfraudulent. Now suppose that with a voter ID law, candidates A and B would get 9 and 9 lawful votes, respectively (less than before because of depressed turnout), and B would get 1 fraudulent vote (less than before because of fraud deterrence). Candidate B wins fraudulently, 10 to 9.10 The voter ID law caused the problem it was meant to solve.

This example may strike some readers as implausible, but that view is mistaken. The conditions necessary for voter ID laws to worsen the risk of fraud are simple and may be common. So too are the conditions necessary for voter ID laws to have other surprising effects: They can convert accurate, nonfraudulent elections into accurate, fraudulent elections; they can convert inaccurate, fraudulent elections into accurate but still fraudulent elections; and so forth.

Working through these possibilities, and defining fraudulent and accurate elections with precision, yields several contributions. The first is a comprehensive picture of the effects of voter ID laws, one rooted in logic rather than intuition and rhetoric. The second is a formula, the Election Integrity Ratio, for determining when voter ID laws reduce the risk of fraud—and when they exacerbate it. The Ratio follows from a straightforward insight: Fraud can only turn an election if the number of fraudulent votes cast exceeds the margin of lawful votes separating the candidates. If A has 10 more lawful votes than B, 5 fraudulent votes cannot affect the election, but if A has only 2 more lawful votes than B, they can. The third—and perhaps most important—contribution lies in recognizing that voter fraud and turnout are inextricably linked. Even as voter ID laws reduce fraudulent votes, they can, by reducing turnout among lawful voters, increase the chances of fraud turning the election. A law that cuts fraudulent votes from 100 to 10 while reducing the margin of lawful votes from 500 to 5 hurts rather than helps. It follows that supporters of voter ID laws must consider the potential for vote depression, not because depression is intrinsically problematic (though many think it is) but because it is integral to the antifraud logic. The last contribution is a reconsideration of law. In Crawford v. Marion County Election Board, the Supreme Court embraced a deferential form of review for

10. This example, and others like it in Parts IV and V, assume that voter ID has large relative effects, depressing about 30% of a candidate’s lawful votes (the drop from 13 to 9) and deterring 50% of fraudulent votes (the drop from 2 to 1). These assumptions are made for clarity. Voter ID laws probably have much smaller relative effects in practice, but that does not disturb the analysis.
voter ID laws, reasoning that states have an interest in combating voter fraud and that such laws further that interest. Because voter ID laws can worsen fraud, the last link in that chain is weak.

This Essay concludes with a generalization. The problem of voter fraud, whatever its seriousness in the contemporary United States, cannot be confined to that context. Fraudulent votes must be a ubiquitous feature of democratic elections worldwide, whether those elections select heads of state, boards of directors, or leaders of student groups. Likewise, the cross-cutting effects described above cannot grow exclusively from voter ID requirements. A wide variety of policies and practices that seek to curb fraudulent voting may simultaneously depress lawful votes. All such policies and practices are subject to the analysis herein, and all of this deepens the problem of voter fraud. Fraudulent votes can distort election outcomes, but efforts to deter them can make matters worse.

I. BACKGROUND: DETERRING FRAUD, DEPRESSING VOTES

The 2000 presidential election produced more than a controversial Supreme Court opinion; it exposed flaws throughout America’s electoral system. Problems with voting technology, confusing ballots, long lines at polling stations, and outdated voter-registration rolls came to light. Congress responded by passing the Help America Vote Act of 2002. That statute required all first-time voters who had registered by mail to provide some form of identification before voting. A few years later, the bipartisan Carter–Baker Commission took another look at election administration and issued a report endorsing voter ID laws. The report concluded that “[t]he electoral system cannot inspire public confidence

11. See 553 U.S. 181, 191, 194–97, 203–04 (2008) (plurality opinion) (stating Indiana’s voter ID law “must be justified by relevant and legitimate state interests” and holding combating voter fraud is such an interest).
15. See Overton, supra note 14, at 639 (describing identification requirement in HAVA).
if no safeguards exist to deter or detect fraud.” So began the modern controversy.

Thirty-four states have passed voter ID laws. In many states, the requirement is lenient. In Alaska, for example, voters can satisfy the law with a utility bill, bank statement, or even a fishing license. Seven states, however, have a strict photo ID law. That number has grown precipitously; before 2011, only two states, Indiana and Georgia, had strict requirements. Strict photo ID laws require voters to present photo identification, typically unexpired, government-issued photo identification such as a driver’s license or passport. A voter who fails to produce such identification can cast a provisional ballot, which will be counted if he or she returns to a specified location with ID in a certain period. In Tennessee, for example, provisional voters have two days.

The target (or some would say “alleged” target) of strict voter ID laws is voter fraud. Some individuals forbidden from voting—noncitizens, felons, nonresidents, or others—may nevertheless cast a ballot. Likewise, some eligible but unscrupulous voters may vote multiple times, once for themselves and again for a relative or someone else who may or may not consent to the scheme. In all cases, voter fraud occurs: Votes get cast and counted that should not be cast or counted, and, in the right circumstance, they could distort an election. Voter ID requirements

17. Id. at 18.

18. Underhill, supra note 5 (summarizing states’ voter ID laws). Because of court challenges and other delays, only a subset of these laws have taken effect. See id. (discussing laws passed in Pennsylvania, North Carolina, and Wisconsin that have since been struck down or are not yet in effect).

19. Alaska’s law is classified as a nonstrict, nonphoto voter ID law. Id. (discussing Alaska’s voter ID requirement). Of course, Alaskans can also present a driver’s license in order to vote. Id.

20. Id. (identifying Georgia, Indiana, Kansas, Mississippi, Tennessee, Texas, and Virginia as states with strict photo ID laws).


22. Underhill, supra note 5 (summarizing strict voter ID requirements).

23. See id. (summarizing provisional-ballot procedures associated with strict voter ID laws).

24. See id. (summarizing Tennessee’s provisional-ballot procedure).

25. See infra notes 50–51 and accompanying text (explaining some believe voter ID laws target lawful liberal votes).

26. See Hans A. von Spakovsky, Protecting the Integrity of the Election Process, 11 Election L.J. 90, 91 (2012) (asserting voter ID laws prevent and deter “impersonation fraud at the polls,” “voting under fictitious voter registrations,” “double voting by individuals registered in more than one state or locality,” and “voting by illegal aliens, or even legal aliens who are still not entitled to vote”).

27. See id. (identifying potential types of fraudulent voters).

28. See id. at 92 (stating fraud could affect outcome of close election).
should mitigate the problem. A New Yorker cannot vote so easily in a California election, and Allen cannot vote so easily in Bill’s place, if both must present photo ID.\textsuperscript{29}

Voter ID laws target only one form of voter fraud: in-person impersonation fraud. They cannot prevent fraud perpetrated through absentee (i.e., mail-in) ballots, as the casting of such ballots does not involve in-person interactions with an official.\textsuperscript{30} They cannot prevent double voting by a person who votes in her own name, as that does not involve impersonation.\textsuperscript{31} Finally, they cannot prevent tampering with already-cast ballots, voting machines, or counting methods.\textsuperscript{32} The claim, then, is not that ID requirements \textit{eliminate} fraud, just that they reduce it.

Is in-person impersonation fraud common? Proponents of voter ID laws think so, and anecdotes abound.\textsuperscript{33} However, many of those anecdotes shrivel under scrutiny. Lorraine Minnite conducted a study and concluded that “almost no one knowingly and willfully casts an illegal vote in the United States today” and “[v]oter fraud is a politically constructed myth.”\textsuperscript{34} Logic supports her position, as such fraud comes with great risk. Fraudsters will be subject to criminal penalties if caught, and detection is especially likely with face-to-face interactions.\textsuperscript{35} Few would accept that risk in exchange for an extra vote for their candidate.

Many elections do not turn on a handful of votes; they turn on thousands or millions. For in-person impersonation fraud to make a difference in such cases, it must be widespread. Consummating widespread fraud may require coordination—think of a corrupt operator paying people to cast fraudulent votes. Such an operator would face great chal-

\textsuperscript{29} See id. at 91 (stating voter ID laws prevent impersonation fraud).
\textsuperscript{30} See Levitt, supra note 21, at 110–11 (identifying methods of fraudulent voting that voter ID laws do not deter).
\textsuperscript{31} See id. at 110 (noting, among other types of fraud that do not involve impersonation, occasional reports of double voting in own name). Double voting by the same individual can be eliminated by tracking who has already cast a ballot—by, for example, crossing out names on voter-registration lists. Voter ID is unnecessary for such tracking. Similarly, voter ID laws cannot prevent voting by a person whose registration is invalid, as long as that person votes in her name. See id. at 111. Such laws help election officials match would-be voters with names on a registration list, but they do not ensure the correctness of registration lists.
\textsuperscript{32} See id. at 110 (identifying methods of fraudulent voting that voter ID laws do not deter).
\textsuperscript{33} See, e.g., von Spakovsky, supra note 26, at 91–92 (arguing fraudulent voting is sufficiently common to prioritize ID requirements); see also John Fund, Stealing Elections: How Voter Fraud Threatens Our Democracy 195–98 (rev. ed. 2008) (same).
\textsuperscript{34} Lorraine C. Minnite, The Myth of Voter Fraud 6 (2010); see also Hasen, supra note 12, at 41–73 (showing alleged instances of voter fraud did not actually involve fraud or involved method of fraud that voter ID laws would not stop); Levitt, supra note 21, at 110–15 (same).
\textsuperscript{35} For a discussion of the illogic of in-person impersonation fraud, see Hasen, supra note 12, at 58–64; Minnite, supra note 34, at 80–85.
lenges. He could pay people to cast votes, and they could disappear into polling stations, but he could not confirm for whom they voted or whether they voted at all.\textsuperscript{36}

In sum, theory and evidence suggest that in-person impersonation fraud rarely occurs.\textsuperscript{37} But that does not defeat the case for voter ID requirements, as proponents still have two defenses. First, they claim—correctly—that the failure to observe fraud does not mean that no fraud takes place.\textsuperscript{38} Successful fraud would never come to light, and so it is not certain that in-person impersonation fraud is so rare. Second, this kind of fraud, even if rare, violates law and could turn an election in just the right circumstance. Better to have less fraud than more.\textsuperscript{39}

\textsuperscript{36} Richard Hasen has described this “exceedingly dumb strategy” in this way:
If I wanted to steal an election using voter impersonation fraud, I’d have to recruit a bunch of people to vote at the polling station using fake names. But they might not follow my directions. They might go into the polling place and not vote, they might vote under their own names, or they might vote for someone other than the candidate I paid them to vote for.

Hasen, supra note 12, at 61.

Technology might allow corrupt operators to solve this problem. They can require their paid fraudulent voters to prove for whom they voted by photographing their ballot with a mobile phone. See H. Appelt et al., Threat of Voter Fraud Haunts EU Vote in Romania, Bulgaria and Croatia, EU Observer (Mar. 18, 2014, 9:30 AM), http://euobserver.com/eu-elections/123485 (on file with the Columbia Law Review).


\textsuperscript{38} Judge Richard Posner made an argument like this, stating that the “absence of prosecutions” for voter fraud is explained in part by “the extreme difficulty of apprehending a voter impersonator,” that such impersonators are “almost impossible to catch” without a voter ID requirement, and that the dearth of voter-fraud reports in Indiana is a “lacuna [that] may reflect nothing more than the vagaries of journalists’ and other investigators’ choice of scandals to investigate.” Crawford v. Marion Cnty. Election Bd., 472 F.3d 949, 955 (7th Cir. 2007), aff’d, 553 U.S. 181 (2008). Notwithstanding these arguments, Judge Posner later admitted Crawford had been incorrectly decided and voiced his opposition to voter ID laws. See John Schwartz, Judge in Landmark Case Disavows Support for Voter ID, N.Y. Times (Oct. 15, 2013), http://www.nytimes.com/2013/10/16/us/politics/judge-in-landmark-case-disavows-support-for-voter-id.html (on file with the Columbia Law Review) (reporting Judge Posner stated voter ID requirements are “type of law now widely regarded as a means of voter depression rather than of fraud prevention” and he regretted his decision to uphold Indiana’s strict voter ID law (quoting Richard A. Posner, Reflections on Judging 84–85 (2013)) (internal quotation marks omitted)).

\textsuperscript{39} See, e.g., von Spakovsky, supra note 26, at 92 (“[T]here is a real risk that voter fraud could affect the outcome of a close election. There are enough incidents and
If voter ID laws carried no downside, then those arguments would have great force. But they do have a downside. Many otherwise eligible voters lack government-issued identification. Some voters do not drive and do not possess a driver’s license. Others drive but misplace their license or let it expire. Or they fail to correct a mismatch between their license and voter registration. Acquiring new, accurate photo ID requires time and often money: travel to the relevant government office, long lines and (for some) complicated forms, copies of birth certificates and other documents that can be costly to acquire, and so forth. All of this depresses lawful votes. When the cost of voting goes up, turnout goes down.


41. See, e.g., Levitt, supra note 21, at 106–07 (summarizing surveys showing meaningful percentage of registered voters lack driver’s license or other acceptable form of identification).

42. See, e.g., id. at 109 (recounting how registered voter with expired license was disenfranchised).

43. See, e.g., Martha T. Moore, State Voter ID Laws Snare Women with Name Changes, USA Today (Oct. 30, 2013, 7:05 PM), http://www.usatoday.com/story/news/politics/2013/10/30/voter-id-laws-name-changes/3315971/ (on file with the Columbia Law Review) (explaining voter ID laws impose burdens on women who change their names following marriage or divorce and whose identification then differs from what is listed on registration rolls).

44. See, e.g., Levitt, supra note 21, at 107–08 (describing costs and challenges of acquiring ID).

45. See Hershey, supra note 40, at 87 (“A great deal of research shows that voter turnout declines as the costs of voting increase, and that even small increases in cost may make a real difference in turnout rates.”).
If the depressive potential of voter ID laws cut evenly across society, then such laws may elicit fewer complaints. But many doubt an even effect. Critics argue that ID requirements disproportionately harm poor voters, including the homeless; racial minorities, who may be disproportionately poor; disabled and elderly voters, many of whom do not drive; and students, many of whom frequently change addresses. Voter ID laws may also have a disparate impact on women, many of whom change their names following marriage or divorce, raising the likelihood of mismatches between ID and registration. All of this has prompted a firestorm of criticism. Some call voter ID laws “the next front in the war on women” and an effort to “turn[] the clock back to the days of Jim Crow.”

Accusations of partisanship fly as well. The groups on whom voter ID laws impose the heaviest burden tend to vote for Democrats, or so the argument goes. Consequently, depressing their votes advantages Republicans. This explains why some believe the real target of voter ID laws is lawful, liberal votes. That Republicans have voted overwhelmingly in favor of voter ID laws, and Democrats against, adds fuel to the fire. So do quotes like this one from Pennsylvania’s House Republican

46. E.g., Sobel & Smith, Voter-ID Laws, supra note 40, at 107 (cataloging classes of voters for whom ID laws impede voting).
47. E.g., id. (arguing ID laws have disproportionate effect on women voters).
50. Recall, for example, Attorney General Holder’s statement that voter ID laws aim to “depress” non-Republican voters.” Johnson, supra note 9; see also Hasen, supra note 12, at 41–73 (arguing voter ID laws are often intended to benefit Republican candidates); Keith G. Bentele & Erin E. O’Brien, Jim Crow 2.0? Why States Consider and Adopt Restrictive Voter Access Policies, 11 Persp. on Pol. 1088, 1088 (2013) (characterizing, based on empirical evidence, “proposal and passage” of recent election-related laws, including voter ID laws, as “highly partisan, strategic, and racialized affairs”).
51. See Weiser & Norden, supra note 5, at 9–14 (describing partisan split in support of voter ID laws). A five-year study on the passage of restrictive voter legislation found: [P]artisan control and state racial composition are overwhelmingly the two most influential factors associated with the passage of restrictive [voting] legislation in this year . . . . [O]ver the 2006–2011 period, states that increased their share of Republican legislators, elected a Republican governor, or became more competitive in the electoral college in the presence of a Republican majority in the state house were more likely to pass restrictive voter legislation.

Bentele & O’Brien, supra note 50, at 1103.
Leader in 2012: “Voter ID . . . is gonna allow Governor Romney to win the state of Pennsylvania . . . .”

Voter ID laws can depress lawful votes in theory, but do they depress such votes in practice? Some studies suggest the answer is no, finding little or no effect on voter turnout. That may make sense: People burdened by ID requirements may tend to be people who could not or would not vote anyway. Other studies suggest voter ID laws do depress votes. Still other studies find that voter ID laws increase voter turnout.


54. See Mycoff, Wagner & Wilson, supra note 53, at 122 (“[V]oters who are interested enough to register and turn out to vote . . . also understand and secure the necessary form of identification . . . .”).


These conflicting messages grow in part from the complexity of the problem.\textsuperscript{57} Gathering relevant data and designing conclusive tests presents many challenges.\textsuperscript{58} A recent review concluded that “there is some support . . . for the notion that photo voter identification laws may have a depressive effect on turnout,” but “findings in this area must be treated with great caution,” and this line of inquiry is “fraught” with challenges.\textsuperscript{59}

\section*{II. \textit{Crawford}: The Constitutionality of Voter ID Laws}

The policy debate about voter ID laws is often partisan and complex, with advocates, politicians, and empiricists all weighing in. The legal debate, on the other hand, is much simpler, at least conceptually. In cases challenging the constitutionality of voter ID laws, the Supreme Court has narrowed the universe of relevant questions to two: Do ID laws combat voter fraud, and do they depress turnout by lawful voters? The Court pinpointed and confronted these questions in \textit{Crawford v. Marion County Election Board,}\textsuperscript{60} the key case on voter ID laws. \textit{Crawford} was decided in 2008, before many of the articles cited in Part I were published, but the arguments in the case followed (and helped develop) the script above.

Indiana enacted a strict identification requirement in 2005.\textsuperscript{61} The vote in the state legislature followed partisan lines: all Republicans in favor, all Democrats against.\textsuperscript{62} After the law took effect, Democrats challenged it in federal court, claiming that it substantially burdened the right to vote, and would therefore depress lawful votes, in violation of the Fourteenth Amendment.\textsuperscript{63} The lead plurality in \textit{Crawford} followed the logic, stating, “A photo identification requirement imposes some burdens on voters . . . [and] a somewhat heavier burden may be placed

\begin{itemize}
\item \textsuperscript{57} They also grow in part, perhaps in whole, from the different methods scholars have employed in their studies. Some methods are careful, and others are not. The points made in this Essay do not depend in any way on existing empirical scholarship, and thus the strengths and weaknesses of particular studies are not discussed.
\item \textsuperscript{60} 553 U.S. 181 (2008).
\item \textsuperscript{61} See id. at 185–86 (plurality opinion) (describing Indiana voter-identification statute).
\item \textsuperscript{62} Id. at 203.
\item \textsuperscript{63} Id. at 186–87; see also id. at 197–99 (discussing burden placed on lawful voters by Indiana statute).
\end{itemize}
The plurality mentioned elderly persons born out of state, individuals who have trouble assembling the documents necessary to get photo ID, the homeless, and those who object to being photographed for religious reasons. However, Democrats could not support their position with hard facts. The plurality found the evidence regarding the number of registered voters without photo ID to be “utterly incredible and unreliable.” The Democrats’ anecdotes—one plaintiff attempted but failed to obtain a birth certificate from Tennessee, one homeless woman was denied photo ID because she did not have an address—seemed unconvincing.

The state, meanwhile, argued that it had an interest in preventing voter fraud. The plurality on the Court agreed, stating, “There is no question about the legitimacy or importance of the State’s interest in counting only the votes of eligible voters.” The state failed to support its position with evidence, however: “The record contains no evidence of any [in-person impersonation] fraud actually occurring in Indiana at any time in its history.” Nevertheless, the plurality cited examples of fraud in other places and times—including 1868—and concluded that “not only is the risk of voter fraud real . . . it could affect the outcome of a close election.” The state contended that it had another interest as well: protecting public confidence in its election system. The plurality agreed, stating “public confidence in the integrity of the electoral process has independent significance, because it encourages citizen participation in the democratic process.”

The Court upheld Indiana’s photo ID law, with the plurality stating, “The state interests . . . are both neutral and sufficiently strong . . . . The application of the statute to the vast majority of Indiana voters is amply justified by the valid interest in protecting the integrity and reliability of the electoral process.” In reaching this decision, the Justices embraced

64. Id. at 197, 199. The “lead plurality” consisted of Justice Stevens, who authored the opinion, Chief Justice Roberts, and Justice Kennedy. That plurality delivered the judgment in the case.
65. Id. at 199.
66. Id. at 200 (quoting Ind. Democratic Party v. Rokita, 458 F. Supp. 2d 775, 803 (S.D. Ind. 2006), aff’d sub nom. Crawford v. Marion Cnty. Election Bd., 472 F.3d 949 (7th Cir. 2007), aff’d, 553 U.S. 181) (internal quotation marks omitted).
67. Id. at 200–03.
68. Id. at 196.
69. Id. at 196.
70. Id. at 194.
71. Id. at 196.
72. Id. at 197.
73. Id.
74. Id. at 204 (quoting Anderson v. Celebrezze, 460 U.S. 780, 788 n.9 (1982)) (internal quotation marks omitted).
a relatively deferential standard of review.\textsuperscript{75} Under this approach, if those challenging a voter ID law cannot demonstrate much of a burden on voting rights, as in \textit{Crawford}, then the state need not produce a particularly strong or convincing interest to defend the law.\textsuperscript{76} This helps explain the recent proliferation of voter ID laws: The Court gave states a green light.\textsuperscript{77}

The legal and policy debate over voter ID has produced two narratives, one common but naïve and the other rare but more sophisticated. The common narrative is that voter ID laws either deter fraud or depress lawful votes. That narrative is probably wrong because voter ID laws probably do both: They deter some fraud, however little, and they simultaneously depress some lawful votes, however few. The sophisticated narrative is that voter ID laws have both effects, meaning there is a tradeoff. Is preventing 1 fraudulent vote worth 10 lawful votes? What about 1,000 or 10,000 lawful votes?\textsuperscript{78} This careful framing raises two hard

\textsuperscript{75} The exact standard is hard to pin down. The lead plurality embraced a balancing test, stating “a court evaluating a constitutional challenge to an election regulation [must] weigh the asserted injury to the right to vote against the precise interests put forward by the State as justifications for the burden imposed by its rule.”\textsuperscript{\textit{Id. at 190}} (quoting \textit{Burdick v. Takushi}, 504 U.S. 428, 434 (1992)) (internal quotation marks omitted). Concurring in the judgment, Justices Scalia, Thomas, and Alito called for the “application of a deferential important regulatory interests standard.”\textsuperscript{\textit{Id. at 204}} (Scalia, J., concurring in the judgment) (quoting \textit{Burdick}, 504 U.S. at 428) (internal quotation marks omitted). Writing in dissent, Justice Souter, joined by Justice Ginsburg, supported balancing tests.\textsuperscript{\textit{Id. at 209–11}} (Souter, J., dissenting). Many observers believe the Court should have embraced a more demanding standard. See, e.g., Schultz, supra note 40, at 525 (arguing courts should review voter ID laws with greater scrutiny); Robert Ellis Smith & Richard Sobel, Demands for Voter Identification Require a Constitutional Standard of Reasonable Suspicion of Illegal Activity, 42 PS: Pol. Sci. & Pol. 103, 103 (2009) (same); Mary Jo Lang, Note, The Importance of Being Narrowly Tailored: A Call for Strict Scrutiny for a Fundamental Right in \textit{Crawford v. Marion County Election Board}, 128 S. Ct. 1610 (2008), 88 Neb. L. Rev. 582, 598 (2010) (same).

\textsuperscript{76} Cf. \textit{Crawford}, 553 U.S. at 191 (plurality opinion) (“However slight that burden [on voting rights] may appear . . . it must be justified by relevant and legitimate state interests sufficiently weighty to justify the limitation.”\textsuperscript{\textit{(quoting Norman v. Reed}, 502 U.S. 279, 288–89 (1992))} (internal quotation marks omitted))). The Court left open the possibility of an as-applied challenge based on a thicker evidentiary record, but some doubt such challenges can succeed. See Julien Kern, As-Applied Constitutional Challenges, Class Actions, and Other Strategies: Potential Solutions to Challenging Voter Identification Laws After \textit{Crawford v. Marion County Election Board}, 42 Loy. L. Rev. 629, 645–51 (2009) (expressing skepticism about as-applied challenges to voter ID laws).


\textsuperscript{78} See Levitt, supra note 21, at 115 (“Even if only 1.2% of registered voters do not have the required identification, burdening 1.2% of the voters in order to address a
problems. On the descriptive side, it is unknown exactly how many fraudulent and lawful votes ID requirements deter. On the normative side, there is a lack of consensus on the social costs of depressed turnout and the benefits of fraud prevention.79

Alas, the issue is even more complicated than it seems.

III. CHARACTERIZING ELECTION OUTCOMES

Fraud and turnout can affect election outcomes. Fewer than 1,000 fraudulent votes would have given Al Gore a victory in 2000,80 and depressing enough lawful votes in swing states would have given Mitt Romney a win in 2012. It follows that voter ID laws, by reducing fraud and depressing lawful votes, can affect outcomes as well. This Essay focuses there, on the relationship between voter ID and election outcomes. Relationships between voter ID laws and other things—confidence in the electoral system,81 the history of disenfranchisement in the United States,82 and so forth—merit attention too, but they lie outside the present scope.83 This Essay concentrates on election outcomes because they are tangible and important. They also occupy center stage in the legal and policy debate.84

0.000002% fraud rate betrays an alarming devotion to disproportion.”); Overton, supra note 14, at 648 (“One cannot assess a photo-identification requirement’s true cost without determining whether, for every ten cases of voter fraud, a photo-identification requirement would deter from voting one, one hundred, or ten thousand legitimate voters.”).

79. See generally Chad Flanders, How to Think About Voter Fraud (and Why), 41 Creighton L. Rev. 93, 96 (2007) (considering role of values in debate over voter ID laws and stating “proper voter fraud debate requires discussion of both numbers and norms”).


82. See, e.g., Ellis, supra note 40, at 1036–66 (discussing parallels between voter ID laws and historical efforts to disenfranchise certain groups); Schultz, supra note 40, at 485–86 (same).

83. For a brief discussion of the issue of public confidence, see infra notes 111–112 and accompanying text.

84. See, e.g., Crawford v. Marion Cnty. Election Bd., 553 U.S. 181, 196 (2008) (plurality opinion) (crediting state’s interest in combating fraud, in part because fraud "could affect the outcome of a close election"); Overton, supra note 14, at 648 (noting "photo-identification requirement could erroneously skew election outcomes to a greater extent than would a lack of such a requirement" by depressing votes); von Spakovsky, supra note 26, at 92 ("[T]here is a real risk that voter fraud could affect the outcome of a close election.").
Election outcomes are accurate when the candidate who should win does win. The candidate who “should” win is the candidate who, after counting all relevant, lawful votes, defeats the other candidates according to the rules of the election. Elections that fail to produce such an outcome are inaccurate. Election outcomes are fraudulent when they depend on fraudulent votes. If an election does not depend on such votes—if taking the fraudulent votes out of the tallies would not change the outcome—then it is nonfraudulent. The following paragraphs clarify these ideas.

A. Election Outcomes Without a Voter ID Law

Imagine an election with two candidates, A and B. A gets some number of lawful votes, \( A_L \), and B gets the rest of the lawful votes, \( B_L \). Suppose \( A_L > B_L \), meaning A should win. If A does win, then the outcome is accurate; otherwise, it is inaccurate.

Will A win? The answer turns on more than lawful votes—it also depends on fraud. Whether A and B welcome them or not, they each get fraudulent votes totaling \( A_F \) and \( B_F \), respectively. If \( A_L > B_L \) and \( A_F > B_F \), then A gets more lawful votes and more fraudulent votes than B. A wins, and therefore the election is accurate: A should win because she leads in lawful votes (\( A_L > B_L \)). Likewise, the election is nonfraudulent because fraud does not determine the outcome. A wins whether the fraudulent votes get included in the vote totals (\( A_L + A_F > B_L + B_F \)) or not (\( A_L > B_L \)). Fraud makes A’s margin of victory deceptively large, but the outcome is accurate and nonfraudulent.

Now suppose \( A_L > B_L \) but \( A_F < B_F \), meaning A gets more lawful votes but fewer fraudulent votes. A should win, but whether that happens depends on the specific vote totals. As \( A_L \) gets larger relative to \( B_L \), A’s lead in lawful votes grows, and B needs a sizeable lead in fraudulent votes to win. Conversely, if A’s lead in lawful votes is slight, then B does not need many more fraudulent votes than A to overcome the deficit. If A wins, then the election is accurate—again, A leads in lawful votes—and nonfraudulent. If B wins, then the election is inaccurate—B trails in lawful votes—and also fraudulent. B’s lead in fraudulent votes must be decisive.

Figure 1 summarizes these ideas. The horizontal axis represents the margin of lawful votes separating the candidates. By assumption, A gets

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85. For reasons explained below, “relevant, lawful votes” include those that would have been cast but for the depressive effects of a voter ID law.

86. In saying that A “should” win, it is assumed that the election proceeds under a principle of plurality rule, meaning participants agree (and the relevant law states) that whoever gets the most votes wins.
more lawful votes than \( B \) \((A_L > B_L)\), and moving right from the origin increases \( A \)'s lead in lawful votes. The vertical axis represents the margin of fraudulent votes separating the candidates. At the origin, \( A \) and \( B \) have the same number of fraudulent votes. Above the origin, \( A \) leads in fraud, and below the origin \( B \) leads in fraud.

**Figure 1: Election Outcomes Without a Voter ID Law**

\[
A_L > B_L
\]

Note: The horizontal axis reflects the difference between the number of lawful votes for \( A \) and the number of lawful votes for \( B \). By assumption, \( A \) receives more lawful votes than \( B \). The vertical axis reflects the difference between the number of fraudulent votes for \( A \) and the number of fraudulent votes for \( B \).

The point \( X \) represents an election in which \( A \) leads in both lawful and fraudulent votes. The point \( Y \) represents an election in which \( A \) leads

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87. One could draw an analogous figure, and run the same analysis, under the assumption that \( A \) gets fewer lawful votes than \( B \).
in lawful votes, $B$ leads in fraudulent votes, but $B$'s lead in fraud does not exceed $A$'s lead in lawful votes. Both of these election outcomes, and all others in the shaded area, are accurate and nonfraudulent: $A$ wins, $A$ should win, and the outcome does not depend on fraud. The point $Z$ represents an election in which $A$ leads in lawful votes, $B$ leads in fraudulent votes, and $B$'s lead in fraud exceeds $A$'s margin in lawful votes. That outcome, and every other one in the white triangle, is inaccurate and fraudulent: $A$ should win, $B$ actually wins, and $B$ wins because of fraud.

B. Election Outcomes with a Voter ID Law

So far inaccuracy and fraudulence have run together, but that need not be the case. Envision two contests between $A$ and $B$: an imaginary, baseline election without an ID law and a real election with an ID law. The baseline election would proceed in the usual way and produce some number of lawful and fraudulent votes for $A$, now denoted as $A_L^{ID}$ and $A_F^{ID}$, and likewise for $B$. The real election proceeds in the same way with the important exception noted above: A voter ID law applies. That law reduces fraudulent votes and also depresses some lawful votes. In the real election, then, $A$ gets a different number of lawful votes than she would have without an ID law, $A_L^{ID}$ instead of $A_L^{lID}$, and a different number of fraudulent votes than she would have, $A_F^{ID}$ instead of $A_F^{lID}$. Because of depressed turnout, $A_L^{ID} < A_L^{lID}$, and because of fraud prevention, $A_F^{ID} < A_F^{lID}$. $B$'s votes in the real election can be expressed the same way, $B_L^{ID}$ and $B_F^{ID}$.

This Essay takes no position on the magnitude or symmetry of these effects. The voter ID law may depress many lawful votes or only a few. It may deter thousands of fraudulent votes or only a handful. It may cost $A$ hundreds of votes overall while costing $B$ only a dozen. The analysis generalizes across all possibilities.

Suppose $A_L^{ID} > B_L^{ID}$ and $A_F^{ID} > B_F^{ID}$. Then $A$ should win the real election. If $A$ does win, then that outcome is accurate. But what if $A_L^{ID} > B_L^{ID}$ and $A_L^{ID} < B_L^{lID}$? Now $A$ trails in lawful votes. By assumption, the real election is identical to the imaginary one with a single exception: implementation of the voter ID law. That means the change from $A$ leading in

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88. The voter ID law may depress lawful votes through the direct channel—some wish to vote but lack ID—or through other, indirect channels. For example, it may cause some voters to become disillusioned with democracy and choose not to vote. Of course, the same law may give others confidence in democracy and cause them to vote. Some or all of these effects could operate at the same time. As long as the net effect is to dampen turnout, then the analysis holds. If the net effect is to increase turnout, then the basic analytical structure depicted in Figures 1 to 3 remains relevant, but some election outcomes merit new labels. If $A$ would win without an ID law, if $B$ would win with an ID law, and if $B$'s victory would grow from a surge in lawful votes caused by a confidence-boosting voter ID law, then $B$ probably should win the election with the voter ID law. That would be the accurate outcome.
lawful votes to A trailing must have been caused by the law: The ID requirement depressed more of A's lawful votes than B's. Because of this, A should win the real election, even though she trails in lawful votes. To conclude otherwise would reward candidates who, by chance or design, depress turnout for their opponent. It would mean squelching votes for one's competitor and winning votes with good ideas are equally valid electoral strategies.

Many others would conclude that A should win in this scenario. The debate over voter ID assumes that candidates should not benefit from depressed lawful votes. This is the view of opponents of such laws, who worry that depressing turnout will “erroneously skew” election outcomes. It is also the view of supporters, who agree that states must “ensure that every eligible individual is able to vote” and maintain that ID requirements do not reduce turnout. Courts have gotten into the act, too. Expressing skepticism toward strict voter ID laws, Judge Diane Wood of the Seventh Circuit stated, “[D]isenfranchising even a tiny percentage of voters can be enough to swing election outcomes.” Her concern is not with swinging outcomes per se but with swinging them by depressing lawful votes.

Because observers agree that candidates should not benefit from depressed votes, it is unnecessary to push the point further. The aim is not to make normative claims but rather to accept the conventions in this debate—ID laws have certain effects, some of them good and others bad—and show how those conventions, when combined and carefully analyzed, can lead to surprising results. That candidates should not profit from depressed lawful votes is a conventional view.

To connect these ideas with the definitions above, recall that an election outcome is accurate if, after counting all relevant, lawful votes, the candidate who should win does win. The category of “relevant, lawful votes” includes those that would have been cast but for the depressive effects of the voter ID law. So the candidate with more lawful votes in the imaginary election should win the real election, and if she does, the real election is accurate.

Now the concepts of inaccuracy and fraudulence can be separated. Suppose again that \( A_l^{ID} > B_l^{ID} \) and \( A_l^{ID} < B_l^{ID} \), meaning A gets more lawful votes in the imaginary election but, because of dampened turnout, fewer lawful votes in the real election. If A wins the real election, that

89. Overton, supra note 14, at 648; see also Levitt, supra note 21, at 115 (stating “photo identification rule could prove outcome-determinative in a close election” and “it is substantially more likely” particular Indiana election “was resolved by unnecessarily excluding an eligible voter, and not by preventing a would-be fraudulent ballot”).

90. Von Spakovsky, supra note 26, at 92.

91. Crawford v. Marion Cnty. Election Bd., 484 F.3d 436, 438 (7th Cir. 2007) (Wood, J., dissenting from denial of rehearing en banc).
outcome is accurate. But if \( A \) wins, it must be because she got enough fraudulent votes to overcome \( B \)'s lead in lawful votes. So if \( A \) wins, the election is accurate \textit{and fraudulent}. \( A \) should win, \( A \) does win, and \( A \) wins because of fraud.

Suppose instead that \( A \) loses. Then the election is inaccurate; \( A \) only trails in lawful votes because of dampened turnout. But the election is also nonfraudulent. \( B \) leads in lawful votes, and \( A \)'s fraudulent votes are insufficient to close the gap. Fraud does not affect the outcome.

Figure 2 summarizes these possibilities. By assumption, \( A \) should win \((A_L^{ID} > B_L^{ID})\). If in the real election \( A \) trails in lawful votes and either trails in fraud or leads in fraud, but not by enough to overcome the margin in lawful votes, then \( B \) wins. That outcome falls in the darker shaded area (Region III) and is inaccurate and nonfraudulent. If in the real election \( A \) trails in lawful votes but has a decisive lead in fraud, then \( A \) wins. That outcome falls in the white triangle on the top-left (Region II) and is accurate and fraudulent. The remaining possibilities mimic those from Figure 1. If \( A \) leads in lawful votes and either leads in fraud or trails in fraud, but not by enough to overcome her margin in lawful votes, then \( A \) wins. That outcome falls in the light shaded area (Region I) and is accurate and nonfraudulent. If \( A \) leads in lawful votes but trails, and trails by a larger amount, in fraudulent votes, then \( B \) wins. That outcome falls in the white triangle on the bottom-right (Region IV) and is inaccurate and fraudulent.

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92. One could draw an analogous figure, and run the same analysis, under the assumption that \( A_L^{ID} < B_L^{ID} \) and therefore \( B \) should win.
IV. CONSEQUENCES OF VOTER ID LAWS

Now consider the effects of imposing a voter ID requirement. Without a voter ID law, all elections fall in Regions I and IV in Figure 2. With a voter ID law, Regions II and III open up. This allows for a visualization of the existing arguments in the debate. Supporters of voter ID imagine that such laws move elections from Region IV to Region I: What would have been a fraudulent victory for one candidate becomes a nonfraudulent victory for the other. Opponents of voter ID, on the other hand, argue that ID requirements depress lawful votes. They fear that imposing
such a law moves elections from Region I to Region III: What would have been an accurate election outcome becomes, as a consequence of dampened turnout, an inaccurate outcome. In the right set of circumstances, either story (but not both) could be correct.

Critically, this does not exhaust the possibilities. A voter ID law could move an election from one of the starting scenarios, Region I or IV, to any Region—II, III, or IV—depicted in Figure 2. That means imposing a voter ID law will lead to one of eight possible outcomes. Two of those outcomes have just been examined: Voter ID makes fraudulent elections nonfraudulent (move from IV to I), like proponents claim, and voter ID makes accurate elections inaccurate (move from I to III), like opponents claim. Two of the remaining outcomes are uninteresting: Voter ID does not change the status quo. An election that would have been in Region I stays in Region I (accurate and nonfraudulent), and an election that would have been in Region IV stays in Region IV (inaccurate and fraudulent). That leaves four outcomes to explore.

A. Voter ID Makes Accurate, Nonfraudulent Elections Inaccurate and Fraudulent

Suppose an election would fall in Region I: A would win accurately and nonfraudulently. However, a voter ID law is imposed and depresses lawful votes, so the number of votes A actually gets, $A_L^{ID}$, is less than the number she would have gotten, $A_L^{ID}$. A still leads in lawful votes, $A_L^{ID} > B_L^{ID}$. At the same time, the voter ID law deters some, but not all, fraudulent votes. It may mostly or only deter fraudulent votes for A. Or it may deter only fraudulent votes for B, but not so many that B’s lead in fraudulent votes disappears. In any case, with the voter ID law in place, B leads in fraudulent votes—and leads by enough to overcome A’s margin in lawful votes.

This is a generalization of the situation this Essay started with. Without voter ID, A would receive 13 lawful votes and B would receive 10 lawful votes and 2 fraudulent votes. A would win accurately and nonfraudulently, 13 to 12. With voter ID, A gets 9 lawful votes and B gets the same plus 1 fraudulent vote. B wins inaccurately and fraudulently, 10 to 9.

This example assumes that the voter ID law depresses some lawful votes, but that is not necessary. The law need only shift the candidates’ fraudulent votes. Suppose that without the voter ID law, A would get 4 fraudulent votes, and B would get 6. With the law, A would get 1 fraudulent vote, and B would get 5. Even if the law did not depress turnout, so A and B kept their 13 and 10 lawful votes, it would still give B an inaccurate, fraudulent victory, 15 to 14.

The ID requirement moved the election from Region I to Region IV. Rather than protecting the accurate, nonfraudulent election, it transformed it into an inaccurate, fraudulent election. By making fraud
pivotal—and pivotal in favor of the candidate who should not win—voter ID caused the very problem it aimed to solve.

A voter ID law will have this effect when three conditions are satisfied. First, the election must, without a voter ID law in place, yield an accurate, nonfraudulent result. That condition is not demanding. Many people assume that most elections, including in states without ID requirements, yield accurate, nonfraudulent results. Second, the candidate who should win must, with the voter ID law in place, maintain a lead in lawful votes. That condition is not demanding, either. Voter ID laws may routinely shrink the margin of lawful votes separating candidates without changing who gets the most. Third, the candidate who trails in lawful votes must lead in fraudulent votes and lead by enough to win the election. That condition may not be stringent. The debate assumes that, at least some of the time, one candidate’s fraudulent votes exceed the other’s and exceed them by enough to turn the election. The debate accepts that voter ID does not eliminate fraud, so even with the law in place one candidate will have more fraudulent votes than the other. In the narrow universe in which voter ID laws can change election outcomes, this scenario is plausible.

B. Voter ID Makes Accurate, Nonfraudulent Elections Accurate but Fraudulent

Suppose an election would fall in Region I: A would win accurately and nonfraudulently. However, a voter ID law gets imposed, and it depresses lawful votes disproportionately in B’s favor. Consequently, \( A_{L-ID} > B_{L-ID} \) but \( A_{L+ID} < B_{L+ID} \). A should win—she only trails in lawful votes because of depressed turnout—and A will win if she gets enough fraudulent votes to cover the difference. The ID requirement may deter more fraudulent votes for B than for A, or it may deter more fraudulent votes for A but not quite enough. As long as A’s lead in fraudulent votes exceeds B’s lead in lawful ones, A will win the election.

To clarify with an example, suppose that without a voter ID law A would get 12 lawful votes and 3 fraudulent votes, and B would get 10 lawful votes. A would win accurately and fraudulently, 15 to 10. With voter ID, A gets 8 lawful votes and 3 fraudulent votes, and B gets 9 lawful votes. A wins accurately and fraudulently, 11 to 9. This example assumes that the voter ID law does not deter any fraudulent votes, but the same result could be obtained even if it did. If the law deterred 1 of A’s fraudulent votes, she would still win accurately and fraudulently, 10 to 9.

In this case, voter ID moves the election from Region I to Region II. The law exacerbates voter fraud by making it determinative. But this outcome is in a sense satisfactory. Voter ID converts a nonfraudulent, accurate election into a fraudulent but still accurate election.

A voter ID law will have this effect when three conditions are satisfied. First, the election must, without a voter ID law in place, yield an accurate, nonfraudulent result. Second, the voter ID law must depress
the lawful votes of the candidate who should win so that, with the law in place, she trails in lawful votes. This condition does not seem demanding, as many believe voter ID laws have exactly this effect: They depress votes so the Democrats who should win fall behind.\footnote{See supra notes 50–52 and accompanying text (explaining many believe Republicans have promoted ID laws to harm Democrats’ electoral prospects).} Third, the candidate who trails in lawful votes must lead in fraudulent votes and lead by enough to win. Again, this does not seem demanding. The candidate whose lawful votes get depressed (possibly by enough to satisfy the second condition above) may enjoy, even after a voter ID law gets implemented, a pivotal lead in fraudulent votes. This is especially likely if that candidate’s fraudulent votes come from absentee ballots, which voter ID requirements do not target.

C. Voter ID Makes Inaccurate, Fraudulent Elections Inaccurate but Nonfraudulent

Suppose an election would fall in Region IV: \( B \) would win inaccurately and fraudulently. However, a voter ID law gets imposed, and it depresses lawful votes disproportionately in \( B \)'s favor. Consequently, \( A_{L-ID} > B_{L-ID} \) but \( A_{L-ID} < B_{L-ID} \). \( B \) should not win—he only leads in lawful votes because of depressed turnout—but \( B \) will win as long as \( A \) does not get enough fraudulent votes. Perhaps \( A \) continues to trail in fraudulent votes after the voter ID law gets implemented. Or perhaps the voter ID law deterred more fraudulent votes for \( B \), so that \( A \) now leads in fraud but not by enough. In any event, \( A \) lacks the fraudulent votes necessary to overcome \( B \)'s lead in lawful votes.

Again, an example may help. Without voter ID, \( B \) would get 12 lawful votes and 2 fraudulent votes, and \( A \) would get 13 lawful votes. \( B \) would win inaccurately and fraudulently, 14 to 13. With voter ID, \( B \) gets 11 lawful votes and 1 fraudulent vote, and \( A \) gets 10 lawful votes. \( B \) wins inaccurately and nonfraudulently, 12 to 10. This example assumes that the voter ID law deters some fraud, but that is not necessary. If \( B \) kept both of his fraudulent votes, he would still win inaccurately and nonfraudulently, 13 to 10.

In this case, voter ID moves the election from Region IV to Region III. The law mitigates voter fraud by making it irrelevant to the outcome, but this is unsatisfactory. Voter ID converts a fraudulent, inaccurate election into a nonfraudulent but still inaccurate election. By eliminating the role of fraud, the law lends a patina of respectability to an election that deserves little respect.

A voter ID law will have this effect when three conditions are satisfied. First, the election must, without a voter ID law in place, yield an inaccurate, fraudulent result. Participants in this debate, especially sup-
porters of ID requirements, believe this can happen. Second, the voter ID law must depress the lawful votes of the candidate who should win so that, with the law in place, she trails in lawful votes. Third, the candidate who should win must, with the law in place, have too few fraudulent votes to overcome her deficit in lawful votes. This condition does not seem demanding, especially if one believes that voter ID laws can depress many lawful votes while having little effect on fraud.

D. Voter ID Makes Inaccurate, Fraudulent Elections Accurate but Fraudulent

Suppose an election would fall in Region IV: \( B \) would win inaccurately and fraudulently. This implies that \( A_L^{\text{id}} > B_L^{\text{id}} \) and \( A_F^{\text{id}} < B_F^{\text{id}} \), meaning \( B \) trails in lawful votes but has a large enough lead in fraudulent votes to win. Suppose a voter ID law gets enacted, and it depresses more lawful votes for \( A \) than for \( B \). As a result, \( B \) leads in lawful votes, \( A_L^{\text{id}} < B_L^{\text{id}} \). At the same time, the law deters more fraudulent votes for \( B \) than for \( A \), so that \( A \) now leads in fraudulent votes, \( A_F^{\text{id}} > B_F^{\text{id}} \). If \( A \)'s lead in fraudulent votes is sufficiently large, she will win the election.

As an example, suppose that without voter ID, \( B \) would get 10 lawful votes and 5 fraudulent votes, and \( A \) would get 11 lawful votes and 3 fraudulent votes. \( B \) would win inaccurately and fraudulently, 15 to 14. With voter ID, \( B \) gets 9 lawful votes and 0 fraudulent votes, and \( A \) gets 8 lawful votes and 2 fraudulent votes. \( A \) wins accurately and fraudulently, 10 to 9.

In this case, voter ID moves the election from Region IV to Region II. The law fails to mitigate voter fraud; illegal votes still determine the outcome. But this is in a sense satisfactory. Voter ID converts a fraudulent, inaccurate election into a fraudulent but accurate election.

A voter ID law will have this effect when four conditions are satisfied. First, the election must, without a voter ID law in place, yield an inaccurate, fraudulent result. Second, the voter ID law must depress lawful votes unevenly so that the candidate who would lead in lawful votes without the voter ID law trails in lawful votes with the voter ID law. Third, the voter ID law must deter fraud unevenly so that the candidate who should win, and who would trail in fraudulent votes without the voter ID law in
place, leads in fraudulent votes with the law in place. This could happen if, for example, one candidate benefited from in-person impersonation fraud and the other benefited from absentee-ballot fraud, which voter ID laws do not deter. Fourth, the candidate who should win must, with the voter ID law in place, have enough fraudulent votes to overcome her deficit in lawful votes.

E. Probabilities

The conditions necessary for a voter ID law to produce the outcomes uncovered above have now been described. One might argue that some of those conditions will not arise in the United States. Consider the move from Region I to Region IV: Voter ID laws convert accurate, nonfraudulent elections into inaccurate, fraudulent ones.\(^{96}\) If a Republican would win the accurate, nonfraudulent election, then Republicans—the driving force behind ID requirements\(^{97}\)—would not impose the voter ID law. It would cost them the election. If a Democrat would win the accurate, nonfraudulent election, Republicans still may not impose the law. Republicans may promote these laws in hopes of depressing lawful liberal votes, but they probably do not intentionally use them to generate a lead in fraudulent votes.\(^ {98}\)

That assumes Republicans understand and can predict the effects of ID requirements in particular circumstances. If they can, this Essay still has value, as the analysis is not limited to the contemporary American political setting. But they likely cannot. If social scientists using large datasets and statistical models cannot (yet) measure the effects of voter ID laws with certainty,\(^ {99}\) how could Republicans or anyone else intuit them? Successful fraud cannot generally be observed, so one cannot tell whether and to what degree voter ID laws deter it. Even if voter ID laws had reasonably foreseeable effects in the short term, that would change in the long term, as political alignments and strategies shift. An ID requirement in place for thirty years, accepted as an uncontroversial part of voting, may silently distort elections.

Given these complications, the probability of a voter ID law yielding the outcomes discussed above cannot readily be estimated. One can, however, generate intuitions. Consider Figure 3. If voter ID laws deter fraudulent votes without depressing lawful votes, then such laws move election outcomes vertically on the figure. To illustrate, point \(X\) reflects a baseline election (no voter ID law) in which \(A\) leads in both lawful and

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96. See supra Part IV.A (illustrating this scenario).
97. See supra notes 50–52 and accompanying text (explaining partisan split in support for voter ID laws).
98. Cynics may disagree.
99. See supra Part I (describing difficulties of conducting empirical studies on ID laws).
fraudulent votes. If voter ID laws only affect fraudulent votes, then imposing such a law would produce an election in the vertical line surrounding \( X \).\(^{100}\) If the law deterred more of \( B \)'s fraudulent votes than \( A \)'s, then \( A \)'s lead in fraud would grow, and the election outcome would move toward the top of the line. Now suppose voter ID laws depress turnout of lawful voters but do not affect fraud. In this scenario, voter ID laws move election outcomes horizontally. The line around point \( Y \) captures this possibility. If a voter ID law would depress more of \( A \)'s lawful votes than \( B \)'s, then imposing it would move the election from \( Y \) toward the left end of the line. Finally, if voter ID laws affect both fraud and turnout by lawful voters, then they can move elections horizontally and vertically. The election outcome depicted at point \( Z \) could, after imposition of an ID law, move anywhere in the surrounding circle.

\(^{100}\) The sizes, but not the shapes, of the lines and circle in Figure 3 are arbitrary. They would grow or shrink with the magnitudes of the effects of the voter ID law.
Figure 3: Possible Effects of a Voter ID Law

\[ A_{L}^{ID} > B_{L}^{ID} \]

\[ A_{F}^{ID} - B_{F}^{ID} \]

<table>
<thead>
<tr>
<th>Accurate, Fraudulent (II)</th>
<th>Accurate, Nonfraudulent (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>Z</td>
</tr>
</tbody>
</table>

Inaccurate, Nonfraudulent (III)  \hspace{1cm} Inaccurate, Fraudulent (IV)

Note: The horizontal axis reflects the difference between the number of lawful votes for \( A \) and the number of lawful votes for \( B \) with an ID law in place. By assumption, \( A \) receives more lawful votes than \( B \) without an ID law in place. The vertical axis reflects the difference between the number of fraudulent votes for \( A \) and the number of fraudulent votes for \( B \) with an ID law in place.

Now intuitions about the probability of voter ID laws yielding the outcomes described above can be sharpened. And now, at least in the abstract, prescriptions for when to adopt such laws can be developed.

Consider Figure 4. By assumption, \( A \) leads \( B \) in lawful votes in the election without a voter ID law, so the baseline election can be plotted with a point somewhere in Regions I or IV. If that point is in the center of either Region, and thus distant from any regional border, then imposing a voter ID law will not, unless the law has dramatic effects, change the election outcome. That holds whether the law deters fraud (vertical line around the point), depresses turnout (horizontal line), or does both (cir-
Because this Essay focuses on the relationship between voter ID and election outcomes, this scenario can be ignored.

FIGURE 4: WHEN TO IMPOSE A VOTER ID LAW

\[ A_L^{ID} > B_L^{ID} \]

Note: The horizontal axis reflects the difference between the number of lawful votes for A and the number of lawful votes for B with an ID law in place. By assumption, A receives more lawful votes than B without an ID law in place. The vertical axis reflects the difference between the number of fraudulent votes for A and the number of fraudulent votes for B with an ID law in place.

Focus instead on the solid points arranged vertically along the border of Regions I and II. Each represents a plausible outcome for the baseline election and, in each case, imposing a voter ID law would constitute bad policy—at least insofar as election outcomes are concerned. To the extent the law depressed lawful votes, it would drive the outcome to the right or left, maintaining the status quo in Region I or pushing into
Region II and making the election fraudulent. To the extent the law only deterred fraud, it would drive the outcome up or down, maintaining the status quo or, if the baseline point approached the origin, pushing into Region IV and making the election inaccurate and fraudulent.

Now focus on the solid points arranged above the dotted border of Regions I and IV. If one of these represented the baseline election, then imposing a voter ID law would once again constitute bad policy. The law would either maintain the status quo in Region I or push the election into Region IV, making it inaccurate and fraudulent.

Consider the solid points arranged vertically along the border of Regions III and IV. All represent baseline elections that produce inaccurate, fraudulent outcomes, and all capture scenarios where imposing a voter ID law arguably constitutes bad policy. Such a law would either maintain the status quo or push the election into Region III, yielding the same winner but, by making fraud nondeterminative, giving the election a veneer of legitimacy.

Next, consider the point in Region IV near the origin and shaded gray. If that represented the baseline election, then imposing a voter ID law would come with potential risks and rewards. The law might push the election into Region I or II, either of which would be an improvement. (In the case of Region II, at least the right candidate would win.) Alternatively, the law might push the election into Region III, which plausibly constitutes an inferior outcome.

Is there any scenario in which a voter ID law unquestionably makes sense? Yes, one. Consider the hollow points arranged below the dotted border of Regions I and IV. If one of these represented the baseline election, then the state should impose a voter ID law. The law would either maintain the status quo, in which case it does no harm, or push the election into Region I, making it accurate and nonfraudulent.

The common theme in this discussion is that voter ID laws can only affect outcomes in close races—that is, when elections fall close to the regional borders in the figure. That is consistent with conventional wisdom, and it does not undermine the analysis. The entire voter ID debate focuses on narrow circumstances, close races in which fraud could make a difference. In exactly those circumstances, ID laws can yield surprising results.

V. Election Integrity Ratios

The most interesting finding above is that voter ID laws can exacerbate fraud by making it determinative. This Part leaves the figures behind and develops a simple formula for understanding and assessing that risk. It grows from a straightforward observation: Fraud can turn an election only if the number of fraudulent votes cast exceeds the margin of lawful votes separating the candidates. If \( A \) has 10 more lawful votes than \( B \), and if a total of 5 fraudulent votes get cast, it does not matter for whom they
get cast. A wins nonfraudently. If A has only 2 more lawful votes than B, then those 5 fraudulent votes could make a difference.

The Election Integrity Ratio captures this idea:

$$\frac{|A_L - B_L|}{F}$$

The numerator represents the margin of lawful votes separating the candidates. The denominator, $F$, represents the total number of fraudulent votes cast in the election, regardless of which candidate they benefit. When the margin of lawful votes exceeds the total number of fraudulent votes, fraud cannot turn the election, and the Ratio has a value greater than 1. When the margin of lawful votes is smaller than the number of fraudulent votes, fraud can turn the election, and the Ratio has a value below 1. When the candidates are tied in lawful votes, fraud almost certainly will determine the election,101 and the Ratio has a value of 0. The larger the Ratio, the greater the integrity of the election, and vice versa.

For any given election, there is not one Election Integrity Ratio but two: the Ratio for the baseline election without a voter ID law, and the Ratio for the real election with a voter ID law. If the second Ratio is smaller than the first, the voter ID law has reduced the integrity of the election. When will the second Ratio be smaller—that is, when will a voter ID law exacerbate the risk of fraud? When the law, by depressing turnout, narrows the margin of lawful votes separating the candidates without decreasing the number of fraudulent votes by a proportionate amount. A voter ID law that slashes fraudulent votes from 100 to 10 while cutting the margin of lawful votes from 500 to 5 hurts rather than helps.

This leads to a critical point. The integrity of an election does not depend solely on fraudulent votes. It depends on the interaction between fraudulent and lawful votes. Even if it were a certainty that an ID requirement would reduce voter fraud, one could not, without more, conclude that imposing such a requirement would make elections safer. One would also have to know that the requirement would not narrow the margin of lawful votes by too much. It follows that supporters of voter ID laws, or at least those who support them on election-integrity grounds, must consider the potential for such laws to depress lawful votes. This is not because depressed votes are intrinsically important (though many believe they are) but because they are integral to the antifraud logic.

The Election Integrity Ratio cannot show that fraud will turn an election. Suppose only 2 lawful votes separate the candidates, and suppose 100 fraudulent votes get cast, 50 for each candidate. The Election Integrity Ratio will be very small, but the election will be nonfraudulent. The Ratio just illuminates the risk of fraud turning an election. For that

101. Fraud will not determine the election if the candidates have the same number of fraudulent votes. The election will be a tie.
reason, call the above Ratio the “simple” Election Integrity Ratio. This ratio can be improved by shifting focus from $F$, the total number of fraudulent votes cast, to the margin of fraudulent votes separating the candidates. This would require more detailed information about votes, but if such information is available (or can sensibly be estimated), then a “sophisticated” Election Integrity Ratio can be expressed as follows:

\[
\frac{A_L - B_L}{A_F - B_F}
\]

This Ratio will have a positive value when the same candidate, whether $A$ or $B$, leads in lawful and fraudulent votes. In such cases, the election is nonfraudulent. This Ratio will have a negative value when the candidate who leads in lawful votes trails in fraudulent votes. That circumstance can generate fraudulent outcomes. Fraud will turn an election when the margin of fraudulent votes favoring one candidate exceeds the margin of lawful votes favoring the other. In such cases, the Ratio will take on a value between -1 and 0.\textsuperscript{102} If imposing a voter ID law moves the Ratio closer to the -1 to 0 range, then the law worsens the integrity of the election. If the law moves the Ratio into that range, then it destroys the integrity of the election. It converts a nonfraudulent election into a fraudulent one.

This leads to another important point. Antifraud measures work best when they deter fraud symmetrically—i.e., when they take illegal votes away from candidates in equal measure. When they do otherwise, they can reduce the total number of fraudulent votes but simultaneously increase the fraud margin. That heightens the risk. A law that converts an election with 100 fraudulent votes, 50 for each candidate, into an election with 10 fraudulent votes, 10 for one candidate and 0 for the other, makes matters worse. To put this in paradoxical terms, a person concerned about fraud turning an election should always prefer a law that narrows the margin of fraudulent votes separating the candidates—even if it increases the number of fraudulent votes cast.

\textbf{VI. IMPLICATIONS FOR POLICY AND LAW}

This Essay focuses exclusively on the relationship between voter ID laws and election outcomes. Election outcomes are critically important, of course, but they do not exhaust the field of factors relevant to an
assessment of voter ID laws. One could make a principled case for voter ID laws on the ground that fraudulent votes are inherently wrong and should be deterred at nearly any cost. One could make a case against such laws on the ground that the cost of voting should be minimized or that laws motivated largely by partisanship (as some voter ID laws appear to be103) should be scuttled. Addressing these kinds of arguments, and weighing them against the concerns about election outcomes raised above, would require many more pages and a host of normative judgments, many of them contestable. That work would distract from this project’s core contributions. The following paragraphs develop implications of this analysis, but because of the challenges just mentioned, make no effort to pass final judgment on voter ID laws.

Most obviously, the analysis suggests that voter ID laws raise many more complications than commonly supposed. Even as they reduce the number of fraudulent votes cast, they can make fraud determinative. Even as they depress lawful votes, they can make inaccurate elections accurate. Voter ID laws can backfire on their partisan supporters by converting elections their opponents would win fraudulently into elections those opponents win lawfully. Given this, participants in this debate should reexamine their assumptions. Without a good sense of where elections would tend to fall with and without ID laws—that is, without a good sense of Figures 3 and 4 above—one cannot sustain a claim about voter ID laws and their effects on elections.

One might respond that this information cannot be collected. The effects of voter ID laws can never be known with much certainty, in a particular election or systematically, and so there are no numbers to plug into the figures in formulaic style.104 That makes the analysis above more valuable rather than less. If intuitions are the only guide, then those intuitions should be sharpened as much as possible.105 This is true for the general policy debate and the legal debate, too. The constitutionality of voter ID laws, like many legal issues, turns largely on presumptions and burdens of proof.106 Those presumptions and burdens grow from judges’ intuitions, and this analysis could change those intuitions.

103. See supra notes 50–52 and accompanying text (explaining many believe Republicans have promoted ID laws to harm Democrats’ electoral prospects).
104. See supra Part I (describing difficulties of conducting empirical studies on voter ID laws).
105. The Hand Rule for determining negligence in torts does not provide a clean answer to most disputes, yet jurists have long celebrated it for clarifying concepts and sharpening intuitions. See United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947) (propounding Hand rule). This work comes in the same spirit. Before providing answers about the constitutionality of voter ID laws, the relevant questions must be pinpointed.
106. See supra Part II (describing doctrine with respect to constitutionality of voter ID laws).
In *Crawford*, the Supreme Court adopted a deferential posture toward voter ID laws, reasoning that states have an interest in protecting the integrity of elections and that voter ID laws, by reducing fraudulent votes, further that interest. But that is wrong, at least in some circumstances. This realization could affect the weight courts place on states’ interests. Perhaps judges should not presume that voter ID laws further the asserted goal of preventing fraud from turning an election. Perhaps they should presume (correctly) that a voter ID law might further that goal and then require the state to produce evidence that it will: proof, or at least a reasonable belief, that the law will deter fraud more or less symmetrically and thus decrease the margin of fraudulent votes separating the candidates.

Reducing the margin of fraudulent votes may not by itself reduce the risk of fraud driving an election. The risk also depends on the margin of lawful votes, and that implicates the question of turnout. Right now courts treat turnout as a question for challengers to voter ID laws alone: Can they show that the law depresses many lawful votes? If not, the law does not impose much constitutional harm, and so the state can easily defend it. But turnout matters to more than the question of harm; it affects the antifraud defense. If a voter ID law depresses turnout in a way that narrows the margin of lawful votes, then it can increase the risk of fraud. This has interesting implications for jurisprudence. A challenger who can show a small effect on turnout that narrows the margin of lawful votes may have a stronger case than a challenger who can show a large effect on turnout. The former cannot show as much constitutional harm but may be able to weaken substantially the state’s defense.

What if a challenger cannot show that a voter ID law reduces turnout? Without constitutional harm, the claim fails. But a failure to prove harm—even the genuine absence of this kind of harm—does not imply that voter ID laws make good sense. By deterring fraudulent votes asymmetrically, voter ID laws can increase the margin of fraudulent votes separating the candidates and increase the likelihood of fraud turning the election. This is true even if the voter ID laws do not depress a single


108. A voter ID law that increases the margin of fraudulent votes separating the candidates cannot decrease the probability of fraud turning the election unless it also increases the margin of lawful votes separating the candidates by a larger amount. That requires the law to affect turnout of lawful voters.

109. See supra notes 75–77 and accompanying text (discussing deferential approach of Supreme Court to voter ID laws).

110. See supra Part V (showing voter ID laws, by reducing fraudulent votes for one candidate but not another, can increase margin of fraudulent votes separating candidates and thus increase likelihood of fraud determining election).
lawful vote. This is true even if the voter ID laws, by engendering greater confidence in elections, increase lawful votes.

This leads to the issue of baselines. Recall that imposing an ID requirement unequivocally improves election outcomes in only one circumstance: when the baseline election is inaccurate and fraudulent but could plausibly be made accurate and nonfraudulent—that is, when the baseline lies in Region IV in Figure 4, just below the border with Region I. If a state defending a voter ID law cannot produce much evidence that its elections have that character, then perhaps the state’s interest in improving and protecting the integrity of its elections does not deserve much weight.

The preceding paragraphs can be summarized in short order: Judges should use the Election Integrity Ratio, ideally the sophisticated version, in their deliberations. They should use the Ratio to determine if fraud actually poses a threat, and they should use it to determine if a voter ID law would actually improve election integrity. This is not to suggest the Ratio should drive judges’ decisions. As discussed, many factors are relevant to decisionmaking in this area, and judges generally will not have precise numbers to plug into the formulas. But the Ratio could sharpen their intuitions. The principal purpose of voter ID laws is to improve election integrity, and the Ratio provides a simple tool for contemplating and assessing that causal relationship.

One final legal wrinkle merits attention. Recall that the Court in Crawford upheld Indiana’s voter ID law in part because of concerns over public confidence. States have an interest in promoting confidence in the integrity of the electoral process, the Court reasoned, because such confidence encourages citizens to participate in their democracy. One could imagine an extension of this argument: Confidence in their democracy prompts citizens to take it more seriously, to accept election outcomes, and to abide by the laws and policies they produce. Voter ID laws, with their promise to combat fraud, may boost public confidence as the Court suggests. At the same time, those requirements may worsen the problem of fraud and make election outcomes inaccurate. This leads to a paradox: Voter ID laws may improve perceptions of integrity at the expense of actual integrity.

111. Crawford, 553 U.S. at 197.
112. But see Ansolabehere & Persily, supra note 81, at 1759 (finding voter ID laws do not improve confidence in elections).
CONCLUSION: A GENERALIZATION OF THE PROBLEM

Fraudulent votes, whether common or rare, are not confined to the contemporary United States. National elections in Afghanistan\textsuperscript{113} and Turkey\textsuperscript{114} supranational elections in the European Union,\textsuperscript{115} and student-council elections in California,\textsuperscript{116} to name a few, have suffered from allegations of voter fraud in recent years. Fraud may arise in countless other electoral settings as well: corporate boards, mayoral and judicial races, contests to determine award recipients such as most valuable players in professional sports, and so forth. Likewise, voter ID requirements do not exhaust efforts to combat voter fraud. For decades, American states have required would-be voters to prove that they have resided for a sufficient amount of time in the jurisdiction where they wish to vote.\textsuperscript{117} Arizona and Kansas attempted to require proof of citizenship before permitting people to register to vote.\textsuperscript{118} Ohio has tried to cut back early (pre-election day) voting.\textsuperscript{119} In India and elsewhere, laws require voters to dip a finger in indelible ink.\textsuperscript{120}

All of these laws and others like them aim to reduce fraudulent votes, and they probably succeed to varying degrees. At the same time, these laws and others may depress lawful votes. Otherwise qualified voters who cannot readily prove their residency or citizenship may be discour-


\textsuperscript{114} See Daniel Dombey & Funja Guler, Turkey Election Fraud Claims Emerge as Twitter Ban is Dropped, Fin. Times (Apr. 3, 2014), http://www.ft.com/cms/s/0/d4184afa-bb37-11e3-b2b7-00144feabdc0.html (on file with the Columbia Law Review) (discussing fraud in Turkish election).

\textsuperscript{115} See Appelt et al., supra note 36 (discussing fraud in E.U. elections).


\textsuperscript{118} Those efforts were recently invalidated. See Kobach v. U.S. Election Assistance Comm’n, 772 F.3d 1183, 1188 (10th Cir. 2014) (finding EAC acted validly under traditional APA review in denying states’ request to add instructions it deemed unnecessary to federal voting form).


aged from voting. People who cannot vote early may not vote at all. Some people may resist dipping their fingers in ink and refrain from voting as a consequence.121

Voter ID requirements, then, are not the only laws that can deter fraudulent votes and also depress lawful votes. Many laws in many settings may have one or both of these effects. All such laws are subject to the analysis above. This generalizes the insights, and it demonstrates that the problem of voter fraud runs deep—deep because fraudulent votes are inherently wrong and can tilt elections, and deep because a wide variety of efforts to deter those votes can make the fraud problem worse.