"Fixing That": Lines at the Polling Place **Justin Levitt**

Introduction

"I want to thank every American who participated in this election, whether you voted for the very first time or waited in line for a very long time. [Pause.] By the way, we have to fix that."

Early in the morning of November 7, 2012, President Barack Obama addressed the nation, celebrating the electoral tally that had just confirmed his re-election and gesturing to the work of the anticipated term ahead. Much of his speech displayed the familiar cadence of public rhetoric—hurdle and aspiration, juxtaposition and contrast, short parallel phrases delivered in the distinct meter of political poetics. But after acknowledging the burdens borne by voters asked to stand for hours in snow, rain, and even gloom of night in order to exercise the franchise, Obama seemed troubled by the notion that this existing state of affairs served as mere rhythmic counterpoint in a passing gesture of gratitude, as if it were an inevitable inconvenience. His next line, a break from the carefully constructed pattern of the speech, appeared to be an ad-lib: a reflection, in the moment, on the written text. "By the way, we have to fix that."

The President has since returned to his election night exhortation. In both his Inaugural Address² and the State of the Union Address,³

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¹ Transcript: Obama's Victory Speech, WALL ST. J. WASH. WIRE, (Nov. 7, 2012, 2:41 AM), http://blogs.wsj.com/washwire/2012/11/07/transcript-obamas-victory-speech.

² Obama's Second Inaugural Speech, N.Y. TIMES, Jan. 21, 2013, http://www.nytimes.com/2013/01/21/us/politics/obamas-second-inaugural-speech.html ("Our journey is not complete until no citizen is forced to wait for hours to exercise the right to vote.").

³ State of the Union 2013: President Obama's Address to Congress (Transcript), WASH. POST, Feb. 12, 2013, http://articles.washingtonpost.com/2013-02-12/politics/37059380_1_applause-task-free-enterprise ("We must all do our part to make sure our God-given rights are protected here at home. That includes one of the most fundamental rights of a democracy, the right to vote. . . . When any American—no matter where they live or what their party—are denied that right because they can't wait for five or six or seven hours just to cast their ballot, we are betraying our ideals. . . . So, tonight, I'm

he noted the imperative to ensure that no citizen waits for many hours in order to cast a ballot. One month later, he issued an executive order establishing a commission to identify the best means to increase the efficiency of the voting process.⁴ The ad-lib has become a significant press for policy change: at least rhetorical, and possibly more.

The increased attention to excessive lines at the polls is both welcome and overdue. Three years ago, I wrote about the excessive lines of the 2008 cycle.⁵ Since then, policy changes in many states have increased, not reduced, the stress on Election Day polling operations.⁶

Excessive Election Day lines stretched to ten hours in 2004, eleven hours in 2008, and seven hours in 2012. Even when they do not prove outcome-determinative, such waits exact a real toll on real voters. Some lines become the tools of outright disenfranchisement when pollworkers unlawfully shut the doors prematurely, with

announcing a nonpartisan commission to improve the voting experience in America. And it definitely needs improvement. I'm asking two long-time experts in the field—who, by the way, recently served as the top attorneys for my campaign and for Governor Romney's campaign—to lead it. We can fix this. And we will. The American people demand it, and so does our democracy.").

⁴ Exec. Order No. 13,639, 78 Fed. Reg. 19,979 (Mar. 28, 2013). The commission's mandate is not limited to efficiency: "The Commission shall . . . make recommendations to promote the efficient administration of elections in order to ensure that all eligible voters have the opportunity to cast their ballots without undue delay, and to improve the experience of voters facing other obstacles in casting their ballots, such as members of the military, overseas voters, voters with disabilities, and voters with limited English proficiency." *Id.* at 19,979.

⁵ Justin Levitt, Long Lines at the Courthouse: Pre-Election Litigation of Election Day Burdens, 9 ELECTION L.J. 19 (2010).

⁶ See, e.g., Justin Levitt, Election Deform: The Pursuit of Unwarranted Electoral Regulation, 11 ELECTION L.J. 97, 101-02 (2012) (discussing unjustified legislation restricting counties' ability to provide early voting opportunities). That piece focused attention on restrictions to early voting in Florida. After logging the longest reported lines in the country in 2012, see Frances Robles et al., Miami-Dade Will Not Have Full Results Until Wednesday, MIAMI HERALD, Nov. 7, 2012, http://www.miamiherald.com/2012/11/06/3084088/polls-open-in-south-florida.html, the 2013 Florida legislature (to its credit) substantially expanded local flexibility to provide early voting opportunities. 2013 Fla. Laws ch. 2013-57, § 13 (amending Fl.A. STAT. § 101.657(1)(a), (d)).

In other states, unfortunately, new proposals are replicating Florida's mistake, unnecessarily limiting options by which administrators may ameliorate lines on Election Day. *See, e.g.*, S.B. 721, 2013-14 Gen. Assem., Gen. Sess. (N.C. 2013).

⁷ Michael Powell & Peter Slevin, *Several Factors Contributed to "Lost" Voters in Ohio*, WASH. POST, Dec. 15, 2004, at A1, http://www.washingtonpost.com/wp-dyn/articles/A64737-2004 Dec14.html.

⁸ Movie Star Among Voters Running Into Problems, CNN.com, (Nov. 4, 2008, 9:39 PM), http://www.cnn.com/2008/POLITICS/11/04/voting.problems/index.html.

⁹ Robles et al., *supra* note 6.

timely and eligible voters left standing in the cold. ¹⁰ Other voters are not physically able to remain on line. ¹¹ Still others must endure hours of lost wages ¹² or childcare expenses (if, indeed, childcare is available). ¹³ Sometimes, the burdens of excessive lines are sufficient to deter participation entirely. ¹⁴

Furthermore, although excessive lines have aggrieved Democrats, ¹⁵ Republicans, ¹⁶ and those in nonpartisan races, ¹⁷ this toll is not evenly shared. Seniors and individuals with medical conditions or disabilities, for example, are likely to feel the pain of lines more keenly. ¹⁸

Nor are all voters equally likely to encounter an excessive line. Though the available data are both preliminary and incomplete, ¹⁹ we

¹⁰ See id.; Report #64694, OURVOTELIVE.ORG, (Nov. 6, 2012, 10:29 PM), http://electionawareness.appspot.com/report/64694 ("Voter arrived at polling place at 6:53, got in line, and was told at 7pm that everyone outside of the door had to go home."); Report #65450, OURVOTELIVE.ORG, (Nov. 7, 2012, 5:16 PM), http://electionawareness.appspot.com/report/65450 ("Voter was in line in Indiana at 5pm, polls closed at 6, and she was not allowed to vote at 7pm.").

¹¹ See, e.g., Report #62092, OurVoteLive.org, (Nov. 6, 2012, 8:25 PM), http://electionawareness.appspot.com/report/62092 ("Voter is not able to stand for long period of times and her polling place constantly had long lines."); Report #62801, OurVoteLive.org, (Nov. 6, 2012, 8:49 PM), http://electionawareness.appspot.com/report/62801 ("Said three different people fainted at three different times in three different parts of the room. . . . I asked if the room is warm, and was told it is not overly warm, and the monitor believes that the issue is just long lines."). Indeed, some voters are told that they must remain on line without any opportunity to use the facilities in a multi-hour wait. Report #62623, OurVoteLive.org, (Nov. 6, 2012, 8:36 PM), http://electionawareness.appspot.com/report/62623 ("Voter was told by the supervising clerk at the polling location that she could not leave the line to use the restroom. She was able to successfully vote after waiting in line for more than 3 hours.").

¹² Although many states require employers to grant employees a given amount of time to vote, few grant more than two hours—and no state requires that employees be fully compensated for this time. Levitt, *supra* note 5, at 22.

¹³ *Id*.

¹⁴ R. Michael Alvarez et al., 2008 Survey of the Performance of American Elections 36 (2009), available at http://www.vote.caltech.edu/sites/default/files/Final%20report20090218.pdf (finding, in a 2008 survey, that 11% of nonvoters cited excessive lines as a "major factor" in not voting, and an additional 9% of nonvoters cited excessive lines as a "minor factor" in not voting).

¹⁵ See, e.g., Complaint, Ohio Democratic Party v. Blackwell, No. 2:04-cv-01055 (S.D. Ohio Nov. 2, 2004); Democratic Party of Guilford Cnty. v. Guilford Cnty. Bd. of Elections, 342 N.C. 856, 857 (1996).

¹⁶ See Complaint, Fleming v. Gutierrez, No. 1:13-cv-00222 (D.N.M. Mar. 7, 2013).

¹⁷ See, e.g., Stuart v. Anderson Cnty. Election Comm'n, 300 S.W.3d 683, 687 (Tenn Ct. App. 2009); Parsons v. Huffman, 2008 WL 2262314, at *1 (Tenn. Ct. App. June 3, 2008); In re Election Contest as to Watertown Special Referendum Election of October 26, 1999, 628 N.W.2d 336, 338-39 & n.1 (S.D. 2001).

Report #65404, OURVOTELIVE.ORG, (Nov. 7, 2012, 3:46 PM), http://electionawareness.appspot.com/report/65404 ("Cases of seniors waiting six hours in line and being taken to hospitals due to exhaustion.").

¹⁹ The vast majority of jurisdictions neither collect nor report reliable estimates of their own wait times, and so researchers must turn to proxies to gauge the incidence of excessive lines.

know that lines vary widely by jurisdiction, and often by precinct.²⁰ And it appears that excessive lines arise disproportionately in larger, more urban populations²¹ and have a greater impact on minority citizens.²²

One such proxy is the time of the last vote in the precinct: many jurisdictions have the capacity to collect (but do not consistently report) the time that the last voter in line cast his or her ballot. This proxy yields the floor for an estimate of wait time: it establishes the wait of a voter assumed to arrive at the last legal moment, but will not reveal the total wait of a voter who arrives at any point before the legal closing time, including the wait in a precinct where lines are longest in the morning.

Another proxy is the length of the wait reported by voters in surveys, which may reflect self-assessment error; it is not clear how accurate voters are in estimating the amount of time that they have spent waiting in line. Furthermore, not all analyses of survey data distinguish wait times during the early vote period from lines on Election Day.

Still another proxy is the percentage of nonvoters who report in surveys that they were not able to vote because of the length of lines at the polls; these responses indicate the citizens' perceptions of lengthy lines, which may or may not accurately reflect conditions in the local jurisdiction.

²⁰ See Alvarez et al., supra note 14, at 67-68 (reporting variance among states in a 2008 survey, from 5.2% of Kansas nonvoters citing long lines as a factor to 49.6% of Ohio nonvoters citing long lines as a factor); MICHAEL C. HERRON & DANIEL A. SMITH, ADVANCEMENT PROJECT, CONGESTION AT THE POLLS: A STUDY OF FLORIDA PRECINCTS IN THE 2012 GENERAL ELECTION 18 (2013), available at http://b.3cdn.net/advancement/88f591c5cdad8054fd_evm6vt2b8.pdf (reporting wide variance in Election Day poll site closing times in Florida, both among counties and within counties).

²¹ See, e.g., Charles Stewart III, Waiting to Vote in 2012, 28 J. L. & Pol. 439, 456-57 & 457 tbl. 2 (finding, in a 2012 survey, that the most urban voters reported waiting more than twice as long as the least urban voters); David C. Kimball, Why Are Voting Lines Longer for Urban Voters? 1, 11-12 & tbls. 2-3, 5 (Mar. 29, 2013) (unpublished manuscript) available at http://ssrn.com/abstract=2255009 (finding that the proportion of voters waiting more than 30 minutes to vote increases with the size of the jurisdiction and that wait generally increases with the number of ballots cast in the jurisdiction).

²² See, e.g., Levitt, supra note 5, at 23; Stewart, supra note 21, at 457-58 (reporting that in a national survey of the 2012 election, African-Americans reported waiting twice as long, on average, as white voters); Alvarez et al., supra note 14, at 42 (reporting that in a national survey of the 2008 election, 27% of African-American respondents reported waiting at least half an hour to vote, compared to 11% of white voters and 13% of Hispanic voters); id. at 81 (reporting that in a national survey of the 2008 election, 61% of Asians not voting cited long lines as a reason, compared to 38.3% of nonvoting blacks, 34.7% of nonvoting Hispanics, and 18.5% of nonvoting whites); HERRON & SMITH, supra note 20, at 50 (finding that precincts with greater portions of minorities had later closing times, at least in some counties); Stephen Pettigrew, Time Tax: Which Groups Wait in the Longest Lines on Election Day? 14-17 (March 22, 2013) available at http://scholar.harvard.edu/files/pettigrew/ files/waiting_times_to_vote_paper.pdf (finding, in national surveys of the 2008 and 2012 election, a substantially larger wait time for African-American and Hispanic voters than white voters); Jon C. Rogowski & Cathy J. Cohen, Black and Latino Youth Disproportionately Affected by Voter Identification Laws in the 2012 Election 4 (2013), http://research.blackyouthproject.com/files/2013/03/ voter-ID-laws-feb28.pdf (reporting that in a survey of respondents ages 18-29 in the 2012 election, 8.5% of blacks not voting claimed that they did not vote because of overly lengthy lines, compared to 2.3% of nonvoting whites and 1.7% of nonvoting Latinos); cf. Michael C. Herron & Daniel A. Smith, Early Voting in Florida in the Aftermath of House Bill 1355, at 13, 17-18, 21-22, 38-39 (Apr. 15, 2013) (working paper), available at http://www.dartmouth.edu/~herron/HerronSmithFloridaEarly2012.pdf (noting that in 2012 in Florida, the proportion of minority voters increased on early voting days with the longest reported hours).

Given the concentration of racial and ethnic minorities in urban areas, it would be easy to conclude that the impact on minorities simply reflects the impact on densely populated urban areas. But some data indicate that even *within* densely populated areas, minority voters may experience longer lines than their non-minority counterparts. In the 2004 election in Columbus, Ohio, for example, "the 25

The vast majority of Americans, fortunately, do not experience these extended waits. Surveys indicate that most voters perceive that they experience lines of 15 minutes or less on Election Day. These sporadic minor delays are inevitable and of minimal concern. But when problems do arise, they become quite severe. Of those voters who reported waiting for more than an hour in 2012, they waited on *average* for nearly two hours—which includes a "tail" of up to seven hours. The comparative speed of most voters' experience mitigates neither the burden on those Americans who are forced to wait for hours nor the collective responsibility of all within the relevant jurisdiction to ensure equitable access to the electoral process. 25

Moreover, even apart from the incremental instrumental harm to those voters forced to wait, the persistence of multi-hour lines amounts to a national embarrassment—or, rather, should amount to a national embarrassment. We should expect that a baseline attribute of responsible government is the capacity to accommodate its own

most heavily black precincts (averaging over 89% black voting age population) stayed open one hour and 15 minutes longer than the polls in the 25 most heavily white precincts (averaging over 99% white voting age population)." Letter from John Tanner, Chief, Voting Section, Civil Rights Div., U.S. Dep't of Justice, to Nick A. Soulas, Jr., Asst. Prosecuting Attorney, Civil Div., Franklin County, Ohio (June 29, 2005), available at http://www.npr.org/documents/2005/oct/doj_docs/doj_franklin_oh.pdf. And in a study of a 2008 national survey, Prof. David Kimball found a statistically significant correlation of lines with minority race and ethnicity, even controlling for the volume of ballots cast in the jurisdiction. See Kimball, supra note 21, at tbl. 5.

²³ See Stewart, supra note 21, at 450 tbl. 1 (finding, in a survey of 2012 voters, an average wait nationwide of 12 minutes on Election Day); Pew Charitable Trusts, New Data on Lines at the Polls, Dec. 10, 2012, http://www.pewstates.org/research/analysis/new-data-on-lines-at-the-polls-85899435524 (reporting an average wait in 2012 of 13 minutes on Election Day, and an average wait in 2008 of 15 minutes on Election Day); cf. Alvarez et al., supra note 14, at 17 (finding, in a survey of 2008 voters, that only 4% of voters on Election Day reported waiting at least an hour).

See *supra* note 19 for a more extended discussion of the data currently available. In the absence of reliable third-party measurements, surveys presently constitute the most reliable assessment of lines nationwide. That said, one significant limitation of current surveys is that most present national averages or the average experience state-by-state; it may be that the sample size of such surveys is too small to permit reliable comparisons among smaller jurisdictions. In a large state, an unremarkable statewide average may well mask egregious lines in a particular county or precinct. Stewart, *supra* note 21, at 454. For example, a 2012 survey concluded that the average wait in Florida was approximately 39 minutes long, despite reports that some voters waited seven hours to vote. *Id.* at 474-76; Robles et al., *supra* note 6. And a 2008 survey concluded that the average wait in Pennsylvania was approximately sixteen minutes long, despite reports that some voters waited eleven *hours* to vote. *See* Alvarez et al., *supra* note 14, at 73; *Movie Star Among Voters Running Into Problems, supra* note 8.

²⁴ See Stewart, supra note 21, at 439, 450-51.

²⁵ Although comparatively few areas in any given election suffer from truly excessive lines, the list is not merely a catalog of repeat offenders. Addressing these few recidivist jurisdictions will help, but not solve, the overall problem.

public's desire to participate in its foundational constituent moment. It is inspiring that so many have the fortitude to wait for so long to exercise a basic responsibility of citizenship. It is appalling that we require ourselves to do so.²⁶

We need not wait any longer to ensure that we need not wait any longer. In commercial settings, scientists and analysts have developed a sophisticated understanding of lines, with interventions tailored to the bottleneck or bottlenecks in any given context. "Queueing theory" is the name given to this study of lines and wait times: similar problems show up in managing vehicular and telecommunications traffic, in product assembly lines, and in lines to procure or purchase services (like the DMV) or goods (like the latest iPhone).²⁷ The basic contours apply to lines at the polls just as they do to these other queues: the more people or items arriving for a given transaction within a given window of time, the fewer points of service, and the longer each transaction, the longer the line.²⁸

This means that there are three basic levers to reduce peak wait times: reduce the number of people arriving at any one time, increase the points of service, or decrease the length of the transactions. Particularly with respect to points of service or transaction length, these levers may also be more or less relevant at different stages of the voting experience: sometimes lines form as voters wait to check in to the polling place, sometimes lines form as voters wait to complete their ballots after they have checked in, and—particularly

²⁶ This piece largely concerns lines to vote on Election Day, not during an early voting period, though many of the policy levers mentioned below have the potential to address lines forming during early voting as well. Lines during early voting have a different normative valence, given the voter's opportunity to leave the line and return on Election Day.

²⁷ See, e.g., Donald Gross et al., Fundamentals of Queueing Theory (4th Ed. 2008); G.F. Newell, Applications of Queueing Theory (2d ed. 1982).

²⁸ A few scholars have attempted to apply queueing theory to lines at the polls. See, e.g., Theodore Allen & Mikhail Bernshteyn, Mitigating Voter Waiting Times, CHANCE, Fall 2006, at 25; Ugbebor O. Olabisi & Nwonye Chukwunoso, Modeling and Analysis of the Queue Dynamics in the Nigerian Voting System, 6 OPEN OPERATIONAL RES. J. 9 (2012); William A. Edelstein & Arthur D. Edelstein, Queuing and Elections: Long Lines, DREs and Paper Ballots, PROC. OF THE 2010 ELEC. VOTING TECH. WORKSHOP/WORKSHOP TRUSTWORTHY ELECTIONS (2010),ON https://www.usenix.org/legacy/event/evtwote10/tech/full_papers/Edelstein.pdf; Muer Yang et al., Are All Voting Queues Created Equal?, PROC. OF THE 2009 WINTER SIMULATION CONFERENCE 3140 (2009), available at http://www.informs-sim.org/wsc09papers/305.pdf. I am aware of only one piece that has attempted to consolidate general principles primarily for a legal or policy audience. See Floyd H. Grant III, Reducing Voter Waiting Time, INTERFACES, Oct. 1980, at 19; cf. Douglas M. Spencer & Zachary S. Markovits, Long Lines at Polling Stations? Observations from an Election Day Field Study, 9 ELECTION L.J. 3, 5-6 (2010) (briefly reviewing the basics).

where paper ballots are used—sometimes lines form as voters wait to scan or otherwise submit ballots that have been completed.²⁹

The opportunities to mitigate lines by relieving these pressure points span the breadth of the "election ecosystem," from voter registration to pollworker training. In any particular jurisdiction, certain policies will be more likely to contribute to bottlenecks than others; certain interventions will therefore bear more immediate fruit than others in different places. ³¹

The remainder of this piece offers a brief overview of the possible means to adjust the three primary causes of excessive bottlenecks. Scholars and advocates have elsewhere described most of these options individually in far greater detail: the point here is not comprehensive description. Moreover, I do not intend in this piece to endorse any particular measure. Though some limited steps are both inexpensive and easily implemented, many of these specific interventions cost money, involve nontrivial policy tradeoffs, or both. Some will be well worth the trade. Some will not. And some will be worth the trade in some jurisdictions but not others, depending on local context.

Some of the interventions below will be worthwhile solely for their potential to mitigate lines. But many may well also have positive externalities in correcting longstanding problems that unnecessarily impair equity and efficiency even beyond wait times. Severe lines are like severe fevers. They can be dangerous in themselves. But they are also often symptoms of broader (and potentially even more nefarious) underlying concerns. Lines may bog down when voters' names cannot easily be found on the pollbook—which may indicate a systematic registration problem causing outright disenfranchisement. Lines may bog down when pollworkers are inadequately trained—which may also augur dangerous lapses in security. By targeting the fever and aiming to inoculate against its underlying causes, administrators will likely promote the broader health of the system as a whole.

²⁹ I am indebted to Charles Stewart for this refinement. Stewart, *supra* note 21, at 445.

³⁰ The phrase, developed by faculty at the Moritz School of Law, is an apt description of the interconnected sphere of election regulation. STEVEN F. HUEFNER ET AL., FROM REGISTRATION TO RECOUNTS: THE ELECTION ECOSYSTEMS OF FIVE MIDWESTERN STATES 11-18 (2007).

³¹ Indeed, most of the interventions will work best in combination.

This short piece is not intended as a blueprint for a comprehensive health regime. Instead, it offers the ready elaboration of a policy menu for reducing wait time (and, along the way, potentially addressing other longstanding concerns), structured through the lens of the queueing theory deployed successfully in other contexts. The theory brings structure to the decision process: rather than a morass of undifferentiated policy suggestions, policymakers can identify the most appropriate means to address each of the significant levers contributing to lines in their areas. Some combination of some of the elements below should be deployed in jurisdictions that have suffered excessive lines in the past, and should likely be adopted prophylactically in those that have not but may be at risk. A modern republic should be able to ensure that its constituent citizens are able to express their preferences for political leadership without standing for eleven hours.

I. REDUCING ARRIVAL CLUSTERS

One of the basic levers to reduce wait times is policy that reduces the number of people who arrive at the polls at any one time. I take as a basic presumption that the electorate will continue to grow, and that candidates will at various times find it in their interest to increase the raw volume of turnout by engaging eligible members of the electorate who may not have participated regularly in the past. I also take as a normative presumption that a principal goal of the election system is to accommodate eligible voters who wish to participate. The trick, therefore, is to manage ever-increasing numbers of eligible electors while ensuring that they do not all arrive at the polls at the same time.

Increased opportunities to vote by mail. When more individuals vote absentee, there are fewer people in the pool of voters who may be forced to wait at the polls. Beyond its ability to reduce lines, there are both benefits and risks to expanded voting by mail. Access to absentee ballots may increase turnout in low-salience, off-cycle

³² I have discussed this presumption at greater length before. *See* Justin Levitt, *Resolving Election Error: The Dynamic Assessment of Materiality*, 54 WM. & MARY L. REV. 83, 95-97, 101 n.73 (2012).

elections³³—particularly if absentee ballots are delivered automatically—and may offer voters the opportunity to consider their ballot choices at greater length.³⁴ On the other hand, there are valid concerns about the security of absentee ballots,³⁵ about the enhanced possibility of coercion in voting beyond the polling place,³⁶ about the potential for voter or official error and the reduced ability to resolve that error successfully,³⁷ about problems with mail delivery,³⁸ about late-breaking news arriving after absentee ballots

³³ See Robert M. Stein & Greg Vonnahme, Early, Absentee, and Mail-In Voting, in The Oxford Handbook of American Elections and Political Behavior 182, 185-86 (Jan E. Leighley ed., 2010).

³⁴ See Priscilla L. Southwell, *Voting Behavior in Vote-By-Mail Elections*, 10 ANALYSES OF SOC. ISSUES & PUB. POL'Y 106, 107 (2010).

³⁵ See, e.g., Marks v. Stinson, 19 F.3d 873, 877 (3d Cir. 1994); Information, United States v. Smith, No. 1:12-cr-10389 (D. Mass. Dec. 20, 2012); In re The Matter of the Protest of Election Returns and Absentee Ballots in the November 4, 1997 Election for the City of Miami, 707 So.2d 1170, 1171-72 (Fla. Dist. Ct. App. 1998); Marc Caputo & Patricia Mazzei, Online Ballot Fraud Marks the 'e-boletera era of Miami politics', MIAMI HERALD, June 15, 2013, http://www.miamiherald.com/2013/06/15/3453770/online-ballot-fraud-marks-the.html; Adam Liptak, Error and Fraud at Issue as Absentee Voting Rises, N.Y. TIMES, Oct. 6, 2012, http://www.ntimes.com/2012/10/07/us/politics/as-more-vote-by-mail-faulty-ballots-could-impact-elections.html; Chris Megerian, Campaign Worker Faces Charges of Vote Forgery, NEWARK STAR-LEDGER, Mar. 24, 2009, http://www.nj.com/news/ledger/essex/index.ssf?/base/news-5/1237868185174890.xml&coll=1.

³⁶ See, e.g., Jessica A. Fay, Note, Elderly Electors Go Postal, 13 ELDER L.J. 453, 454, 464-65 (2005).

³⁷ See, e.g., LAWRENCE NORDEN, BRENNAN CENTER FOR JUSTICE, THE MACHINERY OF DEMOCRACY 103–04 (2006), available at http://www.brennancenter.org/sites/default/files/publications/Machinery_Democracy.pdf; Levitt, supra note 32, at 90; Liptak, supra note 35; Bob von Sternberg, A Nasty Bug Emerges in the State Election System, STAR TRIB., Dec. 15, 2008, http://www.startribune.com/politics/statelocal/36145339.html; Nick Werner, Some Absentee Voters Wonder, 'Why Bother?', STAR PRESS (Muncie, Ind.), Dec. 21, 2007, http://www.thestarpress.com/article/20071221/NEWS01/712210338/Some-absentee-voters-wonder-why-bother-.

A national study of the 2008 election estimated that absentee ballots were deemed invalid at a rate twice as large as the rate for in-person votes. See Alvarez et al., supra note 14, at 59-60. Reporters have occasionally compiled individual anecdotal accounts of absentee ballots that were invalidated despite being properly completed and cast by eligible voters (for example, when signatures on ballot envelopes were deemed not to match signatures on ballot requests or registration records). See, e.g., Scott Powers & David Damron, 1,400 Absentee Ballots Rejected for Bad Signatures in Central Florida, ORLANDO SENTINEL, Dec. 11, 2012, http://articles.orlandosentinel.com/2012-12-11/news/os-absentee-ballots-thrown-out-20121211_1_absentee-ballots-signatures-seminole-county-supervisor. Still, systematic studies of the error rates in such invalidations are extremely rare; it is not clear how many absentee ballots that are deemed invalid are actually invalid (and of those that are actually invalid, how many are cast by ineligible voters).

³⁸ See, e.g., Dug Begley, Protests Planned Because of Uncounted RivCo Election Ballots, RIVERSIDE PRESS-ENTERPRISE, June 16, 2010; Pat Gillespie, Absentee Ballots Returned to Sender, NEWS-PRESS (Ft. Myers, Fla.), Aug. 11, 2010; cf. Dayna L. Cunningham, Who Are To Be the Electors? A Reflection on the History of Voter Registration in the United States, 9 YALE L. & POL'Y REV. 370, 393-94 & nn.134-35 (1991) (discussing racial and economic differences in the rates of receiving census forms by mail).

are cast, ³⁹ and about the administrative costs of processing and tallying absentee ballots after Election Day.

For jurisdictions that nevertheless wish to expand the use of absentee ballots as a means to reduce the potential for lines, there are several ways to do so. For example, though most states permit no-excuse absentee voting, 21 states allow only certain voters to vote absentee. Allowing any eligible voter to cast an absentee ballot would encourage more voting by mail.

It is also possible to smooth the absentee application process. Rather than ask voters to apply for an absentee ballot in each cycle, allowing voters to request "permanent" absentee status⁴¹ will encourage voting by mail. The process could be made smoother still by allowing such a request on the same form as an application for voter registration, much like the single registration-and-absentee form for military and overseas citizens. ⁴²

Some states have been even more proactive. In 2012, Ohio officials sent all eligible electors an application for an absentee ballot. As Note that many states currently restrict the circumstances under which a voter may vote in person after receiving an absentee ballot; if states begin proactively sending absentee ballot applications—or, even more aggressively, absentee ballots—to all, these statutes may need revision in order to preserve voters' ability to choose to vote at the polling place instead if they choose to do so.

Increased opportunities to vote early, in person. More individuals voting before Election Day also means fewer people in the pool of voters who may be forced to wait at the polls on Election Day. When

³⁹ See, e.g., Tim Jones, Hand Count Latest Wrinkle in Close, Bizarre, and Vital Race, CHI. TRIB., Nov. 6, 2002, http://articles.chicagotribune.com/2002-11-06/news/0211060356_1_absentee-ballots-voter-turnout-senate-race; Scott Martelle, Early-Bird Voters Can Get Burned, L.A. TIMES, Feb. 5, 2008, http://articles.latimes.com/2008/feb/05/nation/na-earlyvote5.

⁴⁰ National Conference of State Legislatures, Absentee and Early Voting, http://www.ncsl.org/legislatures-elections/elections/absentee-and-early-voting.aspx.

⁴¹ Seven states and the District of Columbia currently offer voters the opportunity to become "permanent" absentee voters. *Id*.

⁴² Federal Post Card Application (FPCA) Voter Registration and Absentee Ballot Request, available at http://www.fvap.gov/resources/media/fpca.pdf; see also 42 U.S.C. § 1973ff(b)(2) (2012) (setting forth the legal requirement for a single combined form).

⁴³ Press Release, Ohio Sec'y of State, Secretary of State Husted: Ohio Voters to Receive Statewide Absentee Ballot Applications Just After Labor Day (Aug. 30, 2012) http://www.sos.state.oh.us/mediaCenter/2012/2012-08-30.aspx.

Florida reduced the available days for early voting in 2011, it headed in precisely the wrong direction with respect to anticipated lines at the polls; when it restored that capacity in 2013, it restored at least one meaningful tool for administrators to combat long lines on Election Day. 44 Because early voting essentially mimics the Election Day experience, albeit in consolidated polling centers, it raises few of the security and usability concerns with respect to absentee ballots (although also few of the benefits unrelated to Election Day capacity). 45 The primary downside of expanding opportunities to vote early appears to be cost.

Online voting. Like voting by mail and voting early, voting online would relieve Election Day congestion by diverting traffic from the Election Day polling place. Some jurisdictions have experimented with trials of limited uses of online technology to receive voted ballots, ⁴⁶ particularly for voters overseas or displaced by natural disasters, including faxing or emailing images of physical ballots. ⁴⁷ However, even these limited uses of online technology involve serious security concerns. ⁴⁸ And online voting more generally is not (and should not be) considered a viable option given present technology. Beyond the substantial potential to compromise the secrecy of the ballot, there is ample opportunity for online voting to be compromised by wholesale fraud without an adequate possibility to detect (much less prevent) the fraudulent manipulation, even in a post-election forensic analysis. ⁴⁹

⁴⁴ See supra note 6.

⁴⁵ See supra text accompanying notes 33-34.

⁴⁶ There are many ways to use online technology that do not involve receiving ballots online, including the provision of voter information, the use of online registration systems, and even the online distribution of ballots to voters.

⁴⁷ See, e.g., King County Elections, Overseas and Service Voters, http://www.kingcounty.gov/elections/voting/overseas.aspx (last visited July 10, 2013); N.J. Sec'y of State Kim Guadagno, Directive Regarding Email Voting and Mail-in Ballots for Displaced Voters (Nov. 3, 2012), http://www.njelections.org/2012-results/directive-email-voting.pdf; Joel Schectman, Critics Say Ballots Cast By Email Are Vulnerable to Tampering, WALL ST. J. CIO J. (Oct. 31, 2012, 5:06 PM), http://blogs.wsj.com/cio/2012/10/31/critics-say-ballots-cast-by-email-are-vulnerable-to-tampering/.

⁴⁸ See Schectman, supra note 47.

⁴⁹ See David Jefferson, If I Can Shop and Bank Online, Why Can't I Vote Online?, VERIFIED VOTING (Nov. 2, 2011), https://www.verifiedvoting.org/wp-content/uploads/2013/02/Jefferson_IV_Revised.pdf.

Efficient allocation of precincts. The above policies speak to the aggregate number of voters in the jurisdiction seeking to vote on Election Day. But lines may mount even with a relatively small number of aggregate voters if precincts are misallocated. Some counties have, in the past, demonstrated dramatic disparities in the number of voters they expect to serve at similarly sized and similarly resourced precincts. 50 A more equitable distribution of precincts helps to limit the chances that an extreme number of voters will seek to vote in the same place at the same time.

Election Day as a holiday. Time may matter as much as location. Lines generally (though not exclusively) swell most at the beginning of the day and the end of the day, in part because many voters try to vote before or after work.⁵¹ If voters need not work on the day of the election, they may more naturally spread out their arrival time. With an Election Day holiday (or holidays), it may also be possible to suggest that certain groups of voters vote within a certain window, much like some amusement parks do for popular rides. 52 to nudge the electorate toward a dispersed arrival time. Furthermore, government offices that are closed on the holiday may free up potential polling sites and pollworkers to offer more points of service for the voting public. 53 The major caveat to the suggestion to make Election Day a holiday is that most holidays are, typically, not truly holidays for a substantial portion of the eligible electorate — if those on holiday can buy goods or services on the holiday, the sellers and providers are working. If an Election Day holiday were not meaningfully enjoyed by all, equally, it would not only yield little incremental benefit in smoothing the arrival times of voters, but might also create the prospect of a distinct electoral skew.

⁵⁰ See, e.g., Amy Sherman, Counties Reorganize Precincts to Help Reduce Voting Lines, MIAMI HERALD, July 14, 2013, http://www.miamiherald.com/2013/07/14/3499848/counties-reorganizeprecincts.html (reporting that one Miami precinct had three times the number of voters as the purported limit per precinct).

See Spencer & Markovits, supra note 28, at 9-10.

⁵² See, e.g., DISNEY FASTPASS SERVICE, http://disneyland.disney.go.com/plan/guestservices/fastpass/ (last visited July 6, 2013).

³ U.S. ELECTION ASSISTANCE COMM'N, ALTERNATIVE VOTING METHODS 11, 15 (2008), available at http://www.eac.gov/assets/1/workflow_staging/Page/54.PDF; but see id. at 13 (reflecting Illinois election officials' experience that these benefits did not necessarily result from their state Election Day holiday).

Real-time line information. Even when voters do not have the day off, some of them may have at least limited flexibility in their schedules. A jurisdiction that is able to provide online localized information about real-time line length may be able to nudge some voters toward arriving to vote during a comparative lull (assuming, of course, that one appears). Think of the idea as a Google Maps traffic indicator for voting lines: if a jurisdiction can indicate—say, by means of a red/yellow/green signal—the relative severity of the wait at a given precinct, voters with some flexibility may choose to wait out the worst lines rather than arriving at peak times to exacerbate the problem. This may be particularly effective in jurisdictions where the lines are worst early in the morning or at lunch.

II. INCREASING POINTS OF SERVICE

The second basic lever to reduce wait times is policy that increases the functional points of service for the voters who do arrive, to process more voters in parallel. The trickiest issue here is the need to preserve efficiency: undercapacity causes the lines, overcapacity wastes money, and some precincts may be over capacity at some points of the day and under capacity at others. That said, with the will to spend—or better allocate—resources, there are several opportunities to increase the points of service for the voters arriving.

Increased numbers of polling places. In an era of cost squeezes, it is unsurprising to find interest in consolidating polling place operations as an attempt to promote cost-effectiveness. ⁵⁴ However, consolidated polling places mean that more people are arriving in the same place, and potentially sorting through different ballot styles corresponding to different precincts. The more polling places there are, the fewer voters each location will serve, and the shorter the

⁵⁴ See Raymond H. Scheele et al., *Improving Election Administration with Vote Centers: Toward a National Model* 2-4, 14-24 (paper prepared for delivery at W. Pol. Sci. Ass'n, Mar. 19, 2009), http://cardinalscholar.bsu.edu/bitstream/123456789/194945/1/wpsa09VancouverPaper.pdf.

lines confronting any given individual. On the other hand, increasing the number of polling locations as a means to greater efficiency assumes that voters find their correct polling place (rather than arriving at a visible location that appears convenient), assumes that the additional polling places are suitable locations, and assumes an adequate supply of adequately trained pollworkers to staff each site; in any given jurisdiction, any of these assumptions may not hold.

Larger polling places with more space. Though larger, consolidated "vote centers" may attempt to serve more voters at the same time, they do tend to be located in larger physical spaces, which allows for a flexible polling place layout that can be better tailored to efficient voter service. Acknowledging that election officials rarely have their pick of optimal locations on Election Day, careful site selection even outside of the vote center context may help mitigate the constraints that a smaller space imposes. When a polling place is sited in a small building—or part of a building, like a citizen's garage—there may be limited space for multiple voting machines or booths to fill out ballots, which decreases the ability to have multiple electors voting at once. Larger polling places avoid that problem (and, as public buildings or commercial sites, may also be more likely to be ADA-compliant).

However, if these larger sites are to realize significant gains in efficiency, they must be equipped to quickly and accurately accommodate any eligible voter at any available station. Most jurisdictions require that a voter cast a ballot only in the single precinct to which he or she has been assigned; if multiple precincts are consolidated in a single polling place, ⁵⁵ and voters are therefore required to locate only one proper table or station out of several

⁵⁵ In 2010, 28 states other than Oregon and Washington (which conduct elections by mail) reported an average of more than one precinct per polling place, indicating that at least some polling places contained multiple precincts. In 2008, 32 states other than Oregon and Washington reported an average of more than one precinct per polling place. It is also possible that some states not reporting information, or reporting an average of less than one precinct per polling place, also have some polling places with multiple precincts. *See* U.S. ELECTION ASSISTANCE COMM'N, 2010 ELECTION ADMINISTRATION AND VOTING SURVEY 86-87 (2011), http://www.eac.gov/assets/1/Documents/990-281_EAC_EAVS_508_revised.pdf [hereinafter 2010 EAVS]; U.S. ELECTION ASSISTANCE COMM'N, 2008 ELECTION ADMINISTRATION AND VOTING SURVEY 71-72 (2009), http://www.eac.gov/assets/1/Documents/2008%20Election%20Administration%20and%20Voting%20Survey%20EAVS%20Report.pdf [hereinafter 2008 EAVS].

voting areas within their assigned building, the resulting disarray may detract from any increased efficiency. Voters forced to find a single assigned check-in point within a building serving multiple precincts will often end up at a table corresponding to the wrong precinct, and will not be found in the incorrect precinct's registry of voters. The resulting attempt to resolve the disconnect can not only lead to disenfranchisement of the voter, ⁵⁶ but lines that grow as extra time is consumed by the check-in confusion. This "right church, wrong pew" problem is a serious side effect when several precincts are consolidated at discrete locations within a single building. ⁵⁷

More pollworkers. The shortage of qualified and reliable pollworkers is a perennial complaint, for good reason. ⁵⁸ One of the recurring opportunities for a bottleneck is in the process for checking voters into the polling place. In the 2012 election, several counties were identified by international observers as having difficulty recruiting a sufficient number of pollworkers to facilitate check-in; ⁵⁹ it is likely that many more shared difficulty recruiting qualified staff. Nebraska allows counties to require pollworker service, much like

⁵⁶ When a voter presents herself to vote but is not found in the appropriate pollbook, the pollworker will often offer a provisional ballot. *Cf.* 42 U.S.C. § 15482(a) (2012) (providing a right to a provisional ballot in federal elections if "the name of the individual does not appear on the official list of eligible voters for the polling place or an election official asserts that the individual is not eligible to vote"). In many states, provisional ballots cast at the incorrect precinct are invalid and therefore not counted. *See* Sandusky Cnty. Democratic Party v. Blackwell, 387 F.3d 565, 568 & n.1 (6th Cir. 2004) (noting that as of 2004, at least 27 states will not count a ballot as valid if cast in the incorrect precinct); *cf.* Ne. Ohio Coal. for the Homeless v. Husted, 696 F.3d 580, 593, 595-99 (6th Cir. 2012) (invalidating such a rule when state law required poll workers to direct voters to the correct precinct).

⁵⁷ It is possible to combine multiple precincts within one polling place, while still accommodating any eligible voter at any station. Electronic pollbooks, see infra text accompanying note 65, will often contain the registry for the entire jurisdiction, with the capacity to check in any registered voter. Similarly, voting systems that can supply ballots on demand—either electronic voting systems or ballot-on-demand printers for optically-scanned or other paper ballots—can offer the correct ballot to any registered voter. (Indeed, it would theoretically be possible to do the same with traditional paper ballots, if jurisdictions provided ample copies of each ballot style to every large polling place; cost and the likelihood of pollworker confusion render such efforts impractical in the normal course.) Jurisdictions that offer early voting often deploy some combination of the two during the early voting period, to accommodate any voter arriving at a consolidated early voting location.

⁵⁸ In 2010, thirty percent of all local election officials said that it was "somewhat difficult" or "very difficult" to recruit sufficient pollworkers; in 2008, the number was thirty-three percent. 2010 EAVS, *supra* note 55, at 75-76; 2008 EAVS, *supra* note 55, at 68-69.

⁵⁹ Organization for Security and Co-operation in Europe Office for Democratic Institutions and Human Rights, United States of America – General Elections, 6 November 2012: Statement of Preliminary Findings and Conclusions 4 & n.7 (2012), http://www.osce.org/odihr/96960.

jury service;⁶⁰ Ohio recently considered the idea.⁶¹ Such proposals might go a long way toward increasing the salience of elections more generally, particularly for off-cycle elections or primaries. Short of requiring pollworker service, there are multiple other ways to facilitate recruitment, including better pay, shorter shifts, course credit for students, or—counterintuitively—allowing pollworkers to forego payment, to avoid any possibility that service might interfere with volunteers' pensions.⁶²

Efficient allocation of pollworkers. Even with an ample number of pollworkers for a given polling place, excessive lines may develop if the officials are allocated inefficiently. Pollworkers fulfill many different functions: maintaining order at the site, directing voters to the appropriate location, checking voters in, guiding voters to voting systems and delivering ballots, receiving ballots, calling central election headquarters to resolve unusual situations, providing and receiving provisional ballots, and in some states, facilitating onsite registration or registration updates. In smaller precincts, one or two individuals may serve all of these functions (and more); larger precincts may have more pollworkers available, 63 some of whom may be tasked to different functions. Depending on the idiosyncracies of the jurisdiction, it may be more efficient to task more pollworkers to check-in than to delivering ballots, or vice versa; it may ultimately prove more efficient to have a few individuals specialize in "unusual situations" in order to better serve those voters and speed the regular flow. Attention to the allocation of pollworkers within a polling place may help distribute points of service to the functions most in need. Similarly, attention to the allocation of pollworkers among polling places is also important; particularly in communities with large numbers of eligible voters of limited English proficiency, attention to the recruitment and

⁶⁰ NEB. REV. STAT. § 32-221(2) (2012).

⁶¹ Alex Grout, Solving the Epidemic of Disappearing Poll Workers – Part 2: A Poll Worker Draft?, STATE OF ELECTIONS.COM (Apr. 21, 2010) http://electls.blogs.wm.edu/2010/04/21/solving-the-epidemic-of-disappearing-poll-workers—part-2-a-poll-worker-draft/.

⁶² National Conference of State Legislatures, Poll Workers: Everybody's Concern, THE CANVASS (May 2012), http://www.ncsl.org/legislatures-elections/elections/the-canvass-may-2012.aspx.

⁶³ In 2010, for example, both New York and South Dakota reported a mean of 18 pollworkers per polling place. 2010 EAVS, *supra* note 55, at 87.

deployment of pollworkers with appropriate language skills will increase the effective points of service for the relevant population.

Tailored pollbooks. It is standard operating procedure in many precincts to equip one check-in station with a single printed pollbook containing all of the voters in the precinct. By deploying multiple pollbooks or splitting the pollbook (e.g., last names A-I, J-Q, R-Z), it may be possible to create several lines moving at the same time, instead of just one. One downside of split pollbooks is the potential for visibly inequitable lines within the precinct: A-I happens to be backed up, while J-Q is moving smoothly. Another limitation is that it may be substantially more difficult to locate a name variation: if Gabriel Garcia Marquez is listed under "Garcia," rather than "Marquez," he may be in a different pollbook—and when he arrives at the front of the wrong line, it will not be immediately apparent that the problem is the listing of his name and (therefore) his choice of line, rather than a more fundamental registration flaw.

Electronic pollbooks can mitigate both issues: each of several linked stations contains the full pollbook, and allows for splitting the lines just as if multiple print pollbooks were involved. And in an improvement over print, the electronic pollbooks can often be centrally networked, avoiding any potential for multiple check-in. However, if the electronic pollbooks fail—temporarily or permanently, as some county systems did in 2012—it may be even more difficult to continue processing voters with a smooth and secure check-in operation; when electronic pollbooks fail, it is more difficult to stop lines from growing. And either a split pollbook or several electronic pollbooks will require additional pollworkers to staff them.

⁶⁴ Using multiple non-split pollbooks at, for example, the same check-in table does pose a potential risk that someone will attempt to check in using the pollbook in one line and then attempt to vote a second ballot using the pollbook in another line. Such a scheme seems unlikely, given the risk that a neighboring pollworker would notice a repeat customer—but a more empirical assessment of the prevalence of such problems is difficult to conduct given existing aggregate data records.

⁶⁵ In 2010, 696 counties across 26 states reported using electronic pollbooks in at least some precincts to check voters in at the polls; some of the use may have been during an early voting period rather than on Election Day, but it is not clear how much. *See* 2010 EAVS, *supra* note 55, at 60-63.

More, or better allocated, machines/voting stations/scanners. Sometimes the check-in process is smooth, but a bottleneck forms in the process of casting a ballot. In some polling places, there are simply too few voting machines, or privacy stations for paper ballots, or optical scanners to scan those paper ballots. Lines develop as voters wait for an available machine or voting station. ⁶⁶ If the physical space exists within the polling station, more voting stations (or scanning machines to process the ballots) will help move more voters through at one time. It should be noted that the lack of resources at a given polling place sometimes reflects a lack of resources in the jurisdiction as a whole. But sometimes, the resources are simply poorly allocated; a dearth in one location belies a surplus elsewhere. ⁶⁷

Improved voting system maintenance. On occasion, polling places are allocated adequate numbers of voting machines or scanners—and then those systems jam or break (or are left unplugged). In every cycle, there are many reports of machine failures on Election Day: sometimes the failures are temporary and sometimes they linger all day; sometimes they affect just one machine and sometimes several. When the machines are down, lines get longer. Investing in proper maintenance may help keep machines operational. But it is also important to minimize user error: better pollworker training—or selecting machines with simple design resistant to pollworker mistakes—may help keep machines running.

Paper ballots as alternative to machines. When electronic pollbooks break down, it can be cumbersome to transition to paper pollbooks (particularly because it is difficult to account for those voters who have already been checked in using the machines). But

⁶⁷ Cf. Stewart, supra note 21, at 461 (noting that the resources allocated among early vote locations in Miami-Dade in 2012 were not correlated to the number of voters voting at each site). To be fair, it is difficult to project the likely turnout for any given day at any given location in an early vote period, particularly if voters may vote at any of several locations within the jurisdiction.

⁶⁶ See Edelstein & Edelstein, supra note 28.

⁶⁸ See, e.g., ELECTION PROTECTION, OUR BROKEN VOTING SYSTEM AND HOW TO REPAIR IT 38-39 (2013), http://www.866ourvote.org/newsroom/publications/document/EP-2012-Full-Report.pdf; Search Reports: Voting Equipment Problem, OUR VOTELIVE.ORG, http://bit.ly/YgQNzV (last visited July 6, 2013) (collecting reports of voting machine failures).

when voting machines break down, paper ballots can serve as a ready alternative to keep voters moving through the polls at a convenient clip. ⁶⁹ And when scanners break down, the paper ballots that have already been completed can simply be stored for later scanning. Technological solutions may well be superior when the technology is functioning — but there is little downside to being legally and logistically prepared to use older technology as a backup for when the technology fails.

More ballots. Finally, sometimes the resource constraint at the point of service is itself paper. Several polling stations in 2012 simply ran out of either regular ballots, or provisional ballots, or both—or the pens to mark them. To This is not a new problem. And it is not excusable. When there are no more ballots or pens, voters must wait in line until more supplies are procured, and when voters continue to arrive during the wait, lines grow ever larger. The marginal cost of the incremental paper or pens to serve the jurisdiction is surely a cost that an advanced democracy can afford. Or, if extra paper supplies are a concern, particularly at centralized polling sites with many different ballot styles for many consolidated precincts, it may be worth investing in ballot-on-demand printers: printers that can print the appropriate ballot right at the moment, for any given precinct configuration given the voter's street address.

⁶⁹ See NAACP State Conference v. Cortes, 591 F. Supp. 2d 757, 766 (E.D. Pa. 2008) (issuing an injunction requiring the use of paper ballots when half of a precinct's voting machines fail); William Edelstein et al., SAVE Our Votes, How Can We Prevent Long Lines from Disenfranchising Voters in this Year's Election? (July 21, 2008), http://voteraction.org/files/7-23-emergencyballots-sov.pdf.

⁷⁰ See, e.g., Karen Herzog, Racine Ran Out of Ballots at Several Locations, Poll Observers Report, MILWAUKEE J. SENTINEL ALL POLITICS BLOG, Nov. 6, 2012, http://www.jsonline.com/blogs/news/177564901.html; Mary Vorsino & Gregg K. Kakesako, Ballot Shortages Turn Voters Away From Polls, HONOLULU STAR-ADVERTISER, Nov. 7, 2012, http://www.staradvertiser.com/electionspremium/2012/20121107_Ballot_shortages_turn_voters_away_from_polls.html; Report #57256, OURVOTELIVE.ORG, (Nov. 6, 2012, 6:34 PM), http://electionawareness.appspot.com/report/57256 ("Polling place is out of ballots for the past 3 hours."); Report #50492, OURVOTELIVE.ORG, (Nov. 6, 2012, 4:29 PM), http://electionawareness.appspot.com/report/50492 ("no provisional ballots in all of E Palo Alto, started running out at 10 am"); Report #36011, OURVOTELIVE.ORG, (Nov. 6, 2012, 3:26 PM), http://electionawareness.appspot.com/report/36011 ("Long lines due to running out of ballots . . . "); Report #38849, OURVOTELIVE.ORG, (Nov. 6, 2012, 12:30 PM), http://electionawareness.appspot.com/report/38849 ("They ran out of ballots at 9 AM. The line is out the door. Almost two hours long.").

III. DECREASING THE TIME REQUIRED FOR EACH TRANSACTION

The third basic lever to reduce wait times is policy reducing the amount of time that each voter spends at the polls. The longer each transaction, the more the lines grow. Some of the opportunities here can be addressed at the polls themselves, but some of them are opportunities existing far upstream.

Better information for voters. One of the most common calls that nonpartisan election protection hotlines receive is a simple informational call from a voter wanting to know where her polling place is or whether she is registered. Many of the voters who do not call the hotline arrive at their local polling place with similar questions, and find that they are not registered, or that they have come to the wrong precinct. When pollworkers do not immediately see a voter on the pollbook and have to work to resolve the problem, that encounter takes time. Existing means to inform voters about the prerequisites for voting and election logistics are spotty at best. Better information for voters—ensuring that people knew readily how to get registered, whether they are registered at their current address, and where their local polling place is located—would help save substantial time for each voter arriving.

A modernized voter registration system. In many ways, the problems above can be attributed to an antiquated, nineteenth-century system of voter registration that depends primarily on repeated private efforts to get registered and stay registered despite data-entry and other mistakes. Every registration lapse or mistake leads to an extended interaction at the polls, as pollworkers with partial information attempt a limited forensic investigation into the

⁷¹ See, e.g., Search Reports: Polling Place Inquiry, OURVOTELIVE.ORG, http://bit.ly/ZWwhYY (last visited July 6, 2013).

⁷² Other voters arrive at a polling place with multiple consolidated precincts, and do not know how to find their own precinct (or are guided to the incorrect precinct). *See supra* text accompanying notes 55-57.

⁷³ Pew Charitable Trusts, Being Online Is Still Not Enough, Dec. 6, 2011, http://www.pewstates.org/research/reports/being-online-is-still-not-enough-85899376525.

source of the problem. As they scramble, lines grow.⁷⁴ We have the means, instead, to modernize the voter registration system, tying citizens' individual interactions with government more closely to the rolls, so that people can be registered easily and accurately whenever they interact with public systems, stay registered when they move, and be removed from the registry if they become ineligible (and restored if eligibility returns).⁷⁵ Such modernized systems keep the rolls more up to date, minimizing opportunities for fraud, and are significantly cheaper than the cumbersome and error-laden system in place in most jurisdictions today. And when they work well, citizens go to the polls and quickly find themselves correctly registered, which cuts down on the time that they spend checking in.

While a fully modernized registration system provides the most return on investment, states are finding that even partial measures provide dividends. Portable registration systems to transfer the registration of eligible citizens when they move help prevent both fraud and disenfranchisement. Automatic registration smooths the registration curve over time, limiting the need for a last-minute frenzy that is both expensive and error-prone. Online registration, reducing the need for data entry and thereby the incidence of typographical errors, improves accuracy and substantially reduces cost. And each system improves the likelihood that an eligible

⁷⁴ See Kimball, supra note 21, at tbl. 5 (finding, in a 2008 survey, a statistically significant relationship between registration problems and waiting times, three times larger than the relationship between race and lines or jurisdiction size and lines).

⁷⁵ See, e.g., Voter Empowerment Act of 2012, H.R. 5799/S. 3608, 112th Cong., Title I, available at http://www.gpo.gov/fdsys/pkg/BILLS-112s3608is/pdf/BILLS-112s3608is.pdf (proposing such an upgrade); WENDY WEISER, BRENNAN CENTER FOR JUSTICE, COMPONENTS OF A BILL TO MODERNIZE THE VOTER REGISTRATION SYSTEM (2010), http://www.brennancenter.org/sites/default/files/legacy/Democracy/VRMModelBill.pdf; see generally Brennan Center for Justice, Voter Registration Modernization, http://www.brennancenter.org/content/pages/voter_registration_modernization (same).

⁷⁶ CHRISTOPHER PONOROFF, VOTER REGISTRATION IN A DIGITAL AGE (Wendy Weiser ed., 2010), http://www.brennancenter.org/page/-/Democracy/Paperless_Registration_FINAL.pdf; Brennan Center for Justice, Voter Registration Modernization in the States, http://www.brennancenter.org/analysis/voter-registration-modernization-states.

ADAM SKAGGS & JONATHAN BLITZER, PERMANENT VOTER REGISTRATION (2009), http://www.brennancenter.org/page/-/Democracy/Permanent%20Registration.pdf; *cf.* Michael P. McDonald, *Portable Voter Registration*, 30 POL. BEHAV. 491 (2008) (describing a system for voters to transfer registration within a state at the polls on Election Day).

⁷⁸ See PONOROFF, supra note 76; Heather K. Gerken, Make it Easy: The Case for Automatic Registration, DEMOCRACY: A JOURNAL OF IDEAS, Spring 2013, at 17.

⁷⁹ See Matt A. Barreto et al., Washington Institute of the Study of Ethnicity and Race & Election Administration Research Center, Online Voter Registration (OLVR) Systems in Arizona and Washington: Evaluating Usage, Public Confidence and

voter will find herself on the polls as expected and without error, reducing the duration of each check-in transaction.

Electronic pollbooks with smart search. Without fixing the registration system, the rolls will contain errors—and when "John Smith" is listed in an alphabetized pollbook as "John Wmith" or "John Smoth," it can be very difficult (and time-consuming) to find the right place to sign in. Electronic pollbooks can be designed with "smart searches," to pull up the correct name corresponding to the correct address, with signature or other verification to ensure that the voter is the right person. These smart search technologies—most readily seen in engines like Google, which compensates for minor typographical errors—can cut down on time and confusion. The downside: as mentioned above, ⁸⁰ if the electronic pollbooks fail, substitute check-in systems may actually take *more* time.

Election-day registration. Election-day registration is a sort of failsafe procedure for the registration system: it never supplants regular registration, but it does offer a procedure for correcting problems without a last-minute scramble. Jurisdictions that are set up for election-day registration usually have a separate check-in station for voters that need to register anew or correct their registration information. This provides, without meaningful loss of security or jeopardy to the franchise, a distinct, valid track for the relatively few eligible citizens whose registration has been snagged in some way and will require the most time for check-in. And as a result, it speeds the voting process for everyone else in line.

Pollworker training. Pollworkers are the backbone of the American electoral system: without the volunteer or quasi-volunteer efforts of these citizens, elections simply would not function. But the vast majority of pollworkers do not live and breathe the election

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IMPLEMENTATION PROCESSES, April 1, 2010, http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/online_voter_reg.pdf; PONOROFF, *supra* note 76; Michelle Kanter Cohen, *Online Voter Registration*, PROJECTVOTE.ORG ISSUES IN ELECTION ADMIN., July 2013, http://www.projectvote.org/images/publications/Online%20Voter%20Registration/Policy-Paper-Online-Registration-May-2013.pdf.

⁸⁰ See supra pp. 503-04.

code, and are brought in for just a few hours of training before any given election. When unusual situations arise, many pollworkers are not sufficiently trained to handle the situation with accuracy. Disputes with voters or observers about the proper application of the law take time, holding up the voting process for all. The better trained that pollworkers are, the better they will be able to address—accurately—unusual concerns that may arise.

Accessibility. Pollworkers are likely to be less familiar with less standardized interactions, including service for eligible voters with disabilities or limited English proficiency. As a result, ensuring that these citizens are able to vote smoothly may end up requiring extra time to the extent that pollworkers do not have alternative procedures top of mind. The more effort dedicated, before an election, to designing poll sites so that they most efficiently accommodate persons with disabilities, or providing bilingual pollworkers or readily accessible translated materials—via paper or electronically—in areas with significant populations of voters with limited English proficiency, the smoother these procedures are likely to be on Election Day. And far more generally, the more user-friendly the election systems and procedures, the less time that each voter will need in the polls.

Simplified poll site procedural design. Even the best training could use an assist from election procedures that are better designed to promote simplicity without sacrificing any other electoral value. Some "extra" steps are not extra at all: they improve security or promote flexibility so that ineligible persons are excluded and eligible voters are not unnecessarily shut out of the process. But some procedures are unduly complex, without any good reason. Professionals have devoted a great deal of attention to physical design characteristics that improve both accuracy and speed for filling out registration forms and ballots, but these principles are still too seldom adopted. 81 And most jurisdictions have only just begun,

⁸¹ See, e.g., Marcia Lausen, Design for Democracy: Ballot + Election Design (2007); Lawrence Norden, Brennan Center for Justice, Better Design, Better Elections (2012), available at http://www.brennancenter.org/sites/default/files/legacy/Democracy/VRE/Better_Design_Better_Elections.pdf; Lawrence Norden et al., Brennan Center for Justice,

for example, to experiment with cues like color-coding to help pollworkers manage the flow of procedural paper. Far more could be done to make the process at the polls easier—and therefore quicker—for both voters and pollworkers alike.

Access to supervisors. Some problems—blocking one, several, or all of the voters in a precinct—will stump even the best-trained pollworkers. In such circumstances, the most senior official at the polling place is often instructed to contact a centralized location within the jurisdiction, such as a county registrar's primary office, for further troubleshooting. Too frequently, however, the official lines are clogged, and the precinct calls cannot get through. Ensuring adequate communications capacity to respond to calls both from precinct officials and from the public should be an uncontroversial baseline to keep operations running smoothly.

Sample ballots. Ballots vary tremendously in length and complexity; in some of the Florida precincts where voters waited longest on Election Day in 2012, the ballots were many pages long. 82 Voters who examine the ballots for the first time in the voting booth may, understandably, take a long time to decide on their choices, particularly if the ballot includes lengthy initiatives. It may be possible to limit the overall length of the ballot, by reducing the length or number of initiatives or holding elections for some offices at different times—though these policies, obviously, entail their own tradeoffs. Even without reducing the ballot's overall length, providing voters with sample ballots, and encouraging voters to mark those ballots ahead of time and bring their sample ballots to the polling place as a guide, may help speed the voting process and compensate for the length of the ballot in extreme circumstances.

BETTER BALLOTS (2008), available at http://www.brennancenter.org/sites/default/files/legacy/Democracy/Better% 20Ballots.pdf.

⁸² See, e.g., Miami-Dade County Elections Department, Official Sample Ballot, General Election, Nov. 6, 2012, available at http://www.miamidade.gov/elections/s_ballots/11-6-12_sb.pdf.

IV. THE STRUCTURE OF POLICY CHANGE

It is unlikely that a one-size-fits-all solution to the problem of excessive lines will be appropriately tailored to every jurisdiction, from the smallest rural Wisconsin municipality to the 7.4 million voting-age citizens of Los Angeles County. Many combinations of the above ideas will help relieve congestion at the polls, but some combinations will be more suited to certain jurisdictions than others. A variety of legal structures can encourage jurisdictions to determine the appropriate mix for themselves, allowing flexibility and local variation to be an engine of positive change.

Data. One of the precursors to understanding the relative utility of any of the levers above in any given jurisdiction is an ability to understand where and how problems arise—and how large those problems are. Local officials may know when their last precinct closed on Election Day, but many do not know how long the lines were at that precinct during the course of the day, or whether that precinct was also among those experiencing the longest lines in earlier cycles. Furthermore, many election administrators do not currently collect or track the data necessary to diagnose—and repair—the potential points of concern that may be contributing to lines, or even to compare one jurisdiction's experience and performance with another. Rowledge about voter arrival patterns, poll site layouts, transaction durations, the distribution of registration errors, machine reliability, and pollworker competence is sporadic at best

Some of the limited data base is due to time and budget: election administrators have many responsibilities (including, for many, responsibilities like tax collection, licensing, or recordkeeping well beyond the elections process) and sharply limited resources to run primary, general, and special elections for local, state, and federal

⁸³ Even jurisdictions that use e-pollbooks or electronic voting machines, which have the capacity to produce time-stamped reports of each transaction, only occasionally use this information to assess the rate at which voters are checking in to the polls or casting ballots, or the time between checking in and casting a ballot. For one of the rare exceptions, see KIMBALL BRACE, PRINCE WILLIAM COUNTY, VA: ANALYSIS OF VOTING DATA FROM NOVEMBER, 2012 (TO DATE) (2013), http://www.pwcgov.org/government/bocs/Documents/PWC%20Analysis%20of%20Voting%20Data%20Presentation.pdf.

office on an unforgiving and inflexible schedule. Under these conditions, it is understandable that prophylactic examination and retroactive evaluation may be displaced by more immediate priorities. Resources devoted to systematically collecting and analyzing election data would raise the profile and appeal of the diagnostic process. In this respect, recent efforts to abolish entirely the one federal agency devoted to collection and analysis of election data seem unfortunate indeed.⁸⁴

But there are also means to improve the collection of basic data that do *not* depend on substantial resources. In traveling to speak to a conference of state election administrators about the topic of lines at the polls, I encountered a security line at the airport. (The line was approximately twenty minutes long: imagine the revolt that would accompany a seven-hour airport security line.) At the beginning of the line, someone gave me (and five fellow travelers) an index card; the time was noted at the beginning of the line, the podium used to check tickets and identification, and the end of the X-ray conveyor. I presume that similar cards were collected periodically throughout the day, and that data was later logged to learn how quickly the lines were moving through which procedures at what times. 85 For the cost of a few index cards and a few moments of pollworker time, jurisdictions could have far better information about the length of the lines they oversee, and the speed of various components of the election process.

Contingency planning. Few lines are truly unforeseeable—and that which can be foreseen may be able to be avoided. Consequently, jurisdictions that develop written contingency plans will be better equipped to stave off lines before they reach excessive levels. Jurisdictions forced, before an election, to think about concrete responses to high turnout levels, broken machines, absent pollworkers, and even natural disasters will find themselves better positioned to respond in the event that wait times begin to climb.

⁸⁴ See H.R. 260, 113th Cong. (2013), available at http://www.gpo.gov/fdsys/pkg/BILLS-113hr260ih/pdf/BILLS-113hr260ih.pdf.

⁸⁵ Similarly, officials might give a colored index card to the last person in line at defined intervals (say, every half-hour), collecting the card (and noting the time) when that individual reaches the front of the line.

Carrots. Though vanishingly few jurisdictions currently enjoy ample budget surplus, ten-hour lines to cast a ballot ought to be beyond the pale even in lean times. Local, state, or federal legislators might offer strapped administrators increased up-front budget allocations for resources like machines or ballots, roomier polling places, or pollworker recruiting and training, or they might offer cash incentives for meeting predetermined thresholds like a set number of machines per hundred voters. Jurisdictions with particular foresight might even be persuaded to invest in some of the changes that require more significant upfront outlays for more significant downstream returns, like modernizing the voter registration system. This mirrors the approach of the federal Help America Vote Act, which provided resources for local jurisdictions to purchase voting systems replacing punchcard ballots, and to upgrade paper registration files to statewide registration databases; 86 the FAST Voting Act, proposed in late 2012 and reintroduced in January, would similarly provide funds for programs expediting voting at the polls.87

Sticks. Another model of policy change relies on legal requirements, with or without dedicated resources. Some jurisdictions purport to require minimum resource thresholds.⁸⁸

⁸⁶ Pub. L. No. 107–252, 116 Stat. 1666 (2002) (codified at 42 U.S.C. §§ 15301 et seq.).

⁸⁷ S. 85, 113th Cong. (2013), available at http://www.gpo.gov/fdsys/pkg/BILLS-113s85is/pdf/BILLS-113s85is.pdf.

⁸⁸ Some jurisdictions set guidelines for the maximum voters per precinct. See CAL. ELEC. CODE § 12223 (West 2013); 10 ILL. COMP. STAT. 5/11-2, -3 (West 2013); IND. CODE ANN. § 3-11-1.5-3 (West 2013); KY. REV. STAT. ANN § 117.055 (West 2012); LA. REV. STAT. ANN §18:532 (2012); NEB. REV. STAT. § 32-903 (2012); NEV. REV. STAT. ANN § 293.207 (2011); 25 PA. STAT. ANN. § 2702 (2013); TEX. ELEC. CODE ANN. § 42.006 (West 2013); VA. CODE ANN. § 24.2-307 (2013); WASH. REV. CODE ANN. § 29A.16.040 (West 2013); W. VA. CODE ANN. § 3-1-5 (West 2013). Others set guidelines for the number of voters per machine, see ALA. CODE § 17-6-3 (2013); ARIZ. REV. STAT. ANN § 16-430 (2013); Del. Code Ann. tit. 15, § 5004 (2013); Ga. Code Ann. § 21-2-323 (West 2013); 10 Ill. Comp. STAT. 5/24-1, -6 (West 2013); IOWA CODE ANN. § 49.25 (West 2013); LA. REV. STAT. ANN. §18:1363 (2012); ME. REV. STAT. tit. 21-A, § 811 (2013); MICH. COMP. LAWS ANN. §§ 168.661, 168.796A (West 2013); NEB. REV. STAT. § 32-903 (2012); N.J. STAT. ANN. § 19:4-12 (West 2013); N.M. STAT. ANN. § 1-9-5 (West 2013); N.Y. ELEC. LAW § 7-203 (McKinney 2013); OHIO REV. CODE ANN. § 3506.22 (West 2013); 25 PA. STAT. ANN. §§ 2730, 3031.5(B) (West 2013); S.C. CODE ANN. § 7-13-1680 (2012); TENN. CODE ANN. § 2-3-104 (West 2013); VA. CODE ANN. § 24.2-627 (2013); the number of voters per privacy booth, see ME. REV. STAT. tit. 21-A, § 629 (2013); NEB. REV. STAT. § 32-906 (2012); N.Y. COMP. CODES R. & REGS. tit. 9, § 6210.19(b)(2)(ii) (2009); or the minimum numbers of ballots, see ARK. CODE ANN. § 7-5-602(a) (2013); CAL. ELEC. CODE § 14102 (West 2013); IND. CODE ANN. § 3-11-

Others provide procedures, like no-excuse absentee voting or early voting, designed to draw demand away from Election Day in order to reduce lines. The proposed Count Every Vote Act of 2007⁸⁹ and the proposed Value Our Time Elections Act of 2013 adopt a blend of both approaches; the proposed LINE Act adopts the former approach, and the proposed SIMPLE Voting Act adopts the latter. 92

Performance-based incentives. The most intriguing concept is one not yet seen in practice. ⁹³ Rather than (or in addition to) regulating particular procedures, some jurisdictions purport to regulate the outcome, requiring that lines be no longer than a prescribed amount of time. ⁹⁴ These goals remain largely aspirational. A jurisdiction might attempt to give the objective teeth by coupling new resources with a means to realign local incentives: a private cause of action, with liquidated damages, for every voter forced to wait more than a certain amount of time. ⁹⁵ Imagine, for example, a cause of action affording a predetermined amount of money per hour of wait time (on, perhaps, a scale escalating with increasing line times) to every eligible citizen casting a ballot who was forced to wait for more than an hour on Election Day. Such damages would partially compensate for the financial and physical harm of an excessive wait, but would

^{3-1 (}West 2013); OKLA. STAT ANN.. tit. 26, § 6-104 (West 2013); S.C. CODE ANN. § 7-13-430 (2012); Tex. Elec. Code Ann. § 51.005 (West 2013).

 $^{^{89}}$ S. 804, 110th Cong. (2007), available at http://www.gpo.gov/fdsys/pkg/BILLS-110s804is/pdf/BILLS-110s804is.pdf.

 $^{^{90}}$ H.R. 289, 113th Cong. (2013), available at http://www.gpo.gov/fdsys/pkg/BILLS-113hr289ih/pdf/BILLS-113hr289ih.pdf.

⁹¹ S. 58, 113th Cong. (2013), available at http://www.gpo.gov/fdsys/pkg/BILLS-113s58is/pdf/BILLS-113s58is.pdf.

 $^{^{92}}$ H.R. 50, 113th Cong. (2013), available at http://www.gpo.gov/fdsys/pkg/BILLS-113hr50ih/pdf/BILLS-113hr50ih.pdf.

⁹³ Scholars have reviewed the basic theory behind performance-based incentives before, though not in the context of a cause of action with liquidated damages for noncompliance. *See, e.g.*, Cary Coglianese et al., *Performance-Based Regulation: Prospects and Limitations in Health, Safety, and Environmental Protection*, 55 ADMIN. L. REV. 705, 706, 709 (2003).

⁹⁴ See, e.g., N.Y. COMP. CODES R. & REGS. tit. 9, § 6210.19(c)(1) (2009) ("County boards shall deploy sufficient voting equipment, election workers and other resources so that voter waiting time at a poll site does not exceed 30 minutes."). See also S. 58 (requiring remedial plans for jurisdictions with lines exceeding 90 minutes); H.R. 289 (same).

⁹⁵ Cf. H.R. 50 (requiring states to provide resources so that wait time does not exceed one hour, and providing potential fines for a violation, but not tailoring the fines to the degree of wait time or the number of voters affected).

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function even more strongly as an incentive for jurisdictions to ensure adequate service. 96

The most substantial objection to such a proposal is the difficulty of aligning incentives with the proper level of control. In our election system, federal and state laws, state and local administrative practices, and local budgets all impact the election experience, and all may contribute to the existence or absence of excessive lines. Furthermore, some lines may result from truly unforeseeable happenstance. As a defense to liability for excessive lines, then, jurisdictions might offer evidence that they had provided a threshold amount of resources, equitably distributed. Such a defense responds to factors directly within a jurisdiction's control, avoiding liability for officials caught not only unawares but with no reasonable ability to foresee or forestall an excessive line.

Most jurisdictions—the many areas where wait time is regularly minimal ⁹⁷—would have nothing to fear from such a proposal. But it would create a natural and rather firm incentive for every jurisdiction to at least think creatively about their resources and procedures, in order to avoid a direct fiscal hit when lines reached excessive levels. And it would allow jurisdictions to experiment with whichever policies *they* thought best able to avoid lines at the end of the day, in order to achieve the final objective.

CONCLUSION

In many ways, excessive lines at the polls are symptoms of greater electoral dysfunction; as Professor Charles Stewart suggests, they often serve as "canaries in the coal mine." Excessive lines may grow out of far broader problems with voter registration or check-in procedures, faulty or inadequate information provided to electors, or poor logistical planning and execution. In some cases, excessive lines will be the most visible manifestation of other lurking problems that risk jeopardizing the basic integrity of an election. But when voters are forced to wait on line for hours in order to participate in

⁹⁶ Such an award is properly conceived as compensation for harm rather than incentive to vote: if a jurisdiction properly accommodates its constituents, as most will in the normal course, the damages action would provide no recovery.

⁹⁷ See supra text accompanying note 23.

our most fundamental civic rite, that is also a problem in its own right. There are available solutions to this issue, at many different points in the election ecosystem, and there is at least political attention to the problem that may well yield actual political will. With respect to eliminating the most excessive of lines, we have already waited more than long enough.