

The University of Chicago

**Securing the Ballot and Voters' Trust: County-Level Responses to 2016 U.S.**

**Election Insecurity in Florida and New York**

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## Abstract

This study evaluates county-level responses to decreased voter confidence in election security after the 2016 U.S. presidential election. This study relies on analysis of the compiled data on annual adopted budgets for county elections offices in Florida and New York. The voter turnout per population percentage is then compared to three potential factors of confidence in election integrity — (1) engagement with the community (calculated via compiled county elections office Facebook page follower counts), (2) designated security rate of the voting machine type used in the 2020 Presidential election, and (3) each county’s adopted 2020 election budget. Semi-structured interviews with New York county Election Commissioners, Florida county Election Supervisors, and voters from each state helped inform the factors that should be evaluated as a part of this study as well as how to address sources of low confidence in election security and integrity. Findings establish that after 2016, most counties in either state did not significantly change their outreach methods to increase public knowledge of the county’s elections process aside from occasionally updating social media outreach. While federal security support from in both Florida and New York increase between 2016 and 2020, county budgets in New York and Florida increased variably. Additionally, counties rarely consulted security assistance outside of what the state provided. As lost confidence in election integrity continues to strain bureaucratic processes and national unity, the gap in research on how local governance plays a role in strengthening public confidence in elections grows even more critical. The findings of this study point to the urgent need to boost support for county-level programs run out of election offices to engage with the public. Findings also highlight the absence of any significant financial evaluation of the national cost of elections and how those funds are used.

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## Introduction

In the 2016 United States presidential election, Russia targeted U.S. election security via simultaneous disinformation, also called social hacking, and election infrastructure attacks. After investigation by U.S. intelligence agencies into 2016 election interference, it is still difficult to decipher the impact of Russian election interference on voters. Also in question is the trust the public now holds for the U.S. election system.<sup>1</sup> With the credibility of the electoral process, the cornerstone of U.S. democracy, under threat, understanding constituents' voting response to election interference is crucial. Between October of 2018 and August of 2020, surveys conducted by the Pew Research Center showed growing concern in both the Democratic and Republican party regarding expected foreign influence in the 2020 election. The poll, conducted to determine how the American public viewed Russian attempts to influence the 2016 presidential election, recorded that 67 percent of respondents in October of 2018 believed it was likely that foreign governments would attempt to influence the 2020 Election. This increased to 72 percent by January of 2020, just over half a year later, in August of 2020, that number increased to 75 percent.<sup>2</sup>

Some election security experts perceive the effect of inadequate national security responses to interference to have made the U.S. public's doubt irreversible and misinformation impossible to defend against.<sup>3</sup> The Trump administration created further doubt in the integrity of

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<sup>1</sup> Robert S. Mueller III, "Report on the Investigation into Russian Interference in the 2016 Presidential Election," *U.S. Department of Justice* 1 (March 2019): 448, <https://www.justice.gov/archives/sco/file/1373816/download>.

<sup>2</sup> Hannah Hartig, "75% of Americans Say It's Likely That Russia or Other Governments Will Try to Influence 2020 Election," *Pew Research Center*, August 18, 2020, <https://www.pewresearch.org/fact-tank/2020/08/18/75-of-americans-say-its-likely-that-russia-or-other-governments-will-try-to-influence-2020-election/>.

<sup>3</sup> Scott Rosenberg, "Russia Has Already Won the Fight to Undermine U.S. Elections," *Axios*, January 16, 2020, <https://www.axios.com/putin-russia-undermine-trust-us-elections-4dce1cb3-4696-41d0-8a71-ef8fe362f1f8.html>.

the 2020 election by discrediting mail-in ballots, promoting unsubstantiated claims of corruption, and refusing to commit to a peaceful transfer of power throughout the 2020 campaign cycle and after his defeat had been called.<sup>4</sup> Academics have yet to explore the extent to which decreased confidence of election integrity is reflected in voting behavior prior to the election. Similarly, the role that county level election office play in assuring the public confidence in elections has not been a focus for election related research, especially in comparison to voter turnout or partisanship.

Turnout trends from the 2016 and 2020 election make it unclear if low confidence in election security at the county level disincentivizes voter participation – resulting in low voter turnout – or if it motivates typically ambivalent voters to act on the fear that interference may hurt their preferred candidate’s outcome. Despite the low voter confidence levels, voter turnout for the 2020 election notably broke several early voting records.<sup>5</sup> Early voting in 2020 surpassed the number of pre-election votes cast in 2016 by 19 million votes, which suggests low confidence does not necessarily translate to decreased civic participation and or low personal motivation to vote.<sup>6</sup> While we know that voters cast approximately 17 percent of ballots via in-person early voting and nearly 24 percent by-mail absentee voting, figures for in-person and

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<sup>4</sup> Davey Alba, “Now Circulating on Social Media: 4 Election Falsehoods,” *The New York Times*, October 14, 2020, <https://www.nytimes.com/2020/10/14/technology/four-election-related-falsehoods.html?smid=fb-nytimes&smtyp=c>.

<sup>5</sup> Barbara Sprunt, “93 Million and Counting: Americans Are Shattering Early Voting Records,” NPR.org, November 1, 2020, <https://www.npr.org/2020/10/26/927803214/62-million-and-counting-americans-are-breaking-early-voting-records>.

<sup>6</sup> Nathaniel Persily and Charles Stewart III, “The Miracle and Tragedy of the 2020 Election,” SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, February 22, 2021), <https://doi.org/10.2139/ssrn.3790904>.

mail-in voting percentages for 2020 — which will not be publicly available until June 30, 2021 — are expected to be much higher.<sup>7</sup>

This paper makes a substantial deviation from previous studies of voter trust such as Rosenstone and Hanson’s 1993 mobilization study and Citrin’s 1974 empirical assessment of America’s depleted reserves of the peoples’ trust.<sup>8</sup> In contrast to those works, this paper does not focus on trust in a government, regime, or incumbent leader. Instead, this study evaluates bureaucratic responses on the county and state level to voters’ lost sense of confidence in the structural and procedural components of elections in their home district. In other words, when people in the U.S. do not trust that their votes are protected, how can local government respond to reassure them? The concern over security is distinct from a concern over how well the incumbent’s administration can respond to international crisis, pass legislation, or prepare a budget.

This study addresses the uncertainty in what role county or precinct-level election bureaucracy plays in ensuring that election results are not unsubstantially delegitimized after the election has been called. Previous research has been done to identify each state’s voting infrastructure weaknesses, specifically the lack of paper trails and outdated technology, as well

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<sup>7</sup> “Newly Released 2016 Election Administration and Voting Survey Provides Snapshot of Nation’s Voter Turnout Registration Trends Voting Systems | U.S. Election Assistance Commission,” *U.S. Election Assistance Commission*, November 2020, <https://www.eac.gov/news/2017/06/29/newly-released-2016-election-administration-and-voting-survey-provides-snapshot>; “A Guide to the Election Administration and Voting Survey” (Election Assistance Commission, August 10, 2020), [https://www.eac.gov/sites/default/files/Research/A\\_Guide\\_to\\_the\\_Election\\_Administration\\_and\\_Voting\\_Survey.pdf](https://www.eac.gov/sites/default/files/Research/A_Guide_to_the_Election_Administration_and_Voting_Survey.pdf)

<sup>8</sup> John M. Hansen and Steven J. Rosenstone, “Mobilization and Participation in Electoral Politics,” in *Mobilization, Participation, and Democracy in America* (Peason, 1993); Jack Citrin, “Comment: The Political Relevance of Trust in Government,” *The American Political Science Review* 68, no. 3 (September 1974): 973–88, <https://www.jstor.org/stable/1959141>.

as provided insight on how each state fares in meeting minimum security standards.<sup>9</sup> However, the integrity of local elections goes beyond software and paper ballots. Election security is a dynamic issue that stems from a range of America's many civic flaws, from current and historic voter suppression of disenfranchised minority communities to lack of funds for updating local computer programs. This history of election insecurity involves wide-scale voter disenfranchisement in the form of voter ID laws, felon voter restrictions, gerrymandering, single-member district-plurality, and the absence of adequate voting machines for persons with disabilities.<sup>10</sup> However, because there is no way to completely disassociate any of these issues, this study attempts to review state election procedure and legislation holistically.

To explore how county election offices can respond to lost confidence in election security among voters, I first review relevant academic literature on foreign election interference, U.S. voter behavior, and the role of county-level bureaucracy in recent Florida and New York elections. The frameworks consulted for this study, David Easton's 1953 political systems framework and Jean-Paul Faguet's model of local government, help assess how the scope of this study can address a lack of research on how county election offices can interact with the public.<sup>11</sup> Based on the Root et al.'s (2018) assessment of all fifty states and territories, this study uses

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<sup>9</sup> Danielle Root et al., "Election Security in All 50 States: Defending America's Elections," *Center for American Progress*, February 2018, 245,

[https://cdn.americanprogress.org/content/uploads/2018/02/21105338/020118\\_ElectionSecurity-report11.pdf?\\_ga=2.12255997.816739505.1615574448-682271167.1609811692#page=31](https://cdn.americanprogress.org/content/uploads/2018/02/21105338/020118_ElectionSecurity-report11.pdf?_ga=2.12255997.816739505.1615574448-682271167.1609811692#page=31).

<sup>10</sup> Guillermo de Veyga, "The Disenfranchisement of the American Electorate," *The Academic Forum New Jersey City University* 18, no. 1 (2016): 4,

[https://www.njcu.edu/sites/default/files/5\\_the\\_disenfranchisement\\_of\\_the\\_american\\_electorate\\_0.pdf](https://www.njcu.edu/sites/default/files/5_the_disenfranchisement_of_the_american_electorate_0.pdf).

<sup>11</sup> David Easton, *The Political System: An Inquiry into the State of Political Science* (New York: Alfred A. Knopf, 1953), <http://pi.lib.uchicago.edu/1001/cat/bib/423509>; Jean-Paul Faguet, "Governance from Below a Theory of Local Government with Two Empirical Tests" (London School of Economics & Political Science, August 2005), <https://are.berkeley.edu/~ligon/ARESeminar/Papers/faguet08.pdf>.

Florida and New York as comparative case studies of election systems that are unsecure versus secure, respectively. This provides contrasting security backgrounds that allows for a comparison of findings between the two states. Other factors that make Florida and New York ideal comparisons are some of their population distribution similarities. First is the similar number of counties — 62 for New York and 67 for Florida — of each state. This plays a role in how states handle resource logistics during elections, thus avoiding a baseline difference in politics surrounding resource allocation between the two states. Additionally, the difference in population size between the two states is just over two million. This is a relatively small difference when considering that the next state closes in population to Florida is Texas with nearly 7.5 million more people. Similarly, the difference in population size between New York and Pennsylvania, the state with the next closest population size, is approximately 6.8 million. Again, by using Florida and New York, any significant impact state population may have on the variables considered is minimized.

Through these case studies and data analysis, this study investigates the ways county election offices accommodate the threat of interference and how county-level election security challenges can be successfully tackled. The chief objective of this study is to determine beneficial county-level election security policy responses to low public confidence in election security.

Findings from this study show that after 2016, Florida and New York counties generally did not significantly change their outreach methods to increase public knowledge of the county's elections process. The most common adjustment was updating the local office's website or starting a social media account. The study also found county budgets in both Florida and New

York did not remain stagnant between 2016 and 2020. However, despite the increase counties rarely consulted security assistance outside of what the state provided. It is largely expected that federal funds provided in 2019 via the Help America Vote Act went towards updating voting machines and supporting state registration databases. Semi-structured interviews with New York county Election Commissioners, Florida county Election Supervisors, and voters from each state helped inform the factors that should be evaluated as a part of this study as well as how to address sources of low confidence in election security and integrity. From this analysis, I recommend a boost in support for county-level programs run out of election offices that purposefully engage with the public on the topic of election integrity. Findings also highlight the absence of any significant financial evaluation of the national and state cost of elections and how those funds are used.

## Literature Review

### U.S. Elections as a National Security Concern

This study relies on a foundational understanding and evaluation of academic literature regarding the prevailing influences on public trust and election security risks in the United States. The discovery of Russian interference in the 2016 U.S. presidential election spurred general interest and academic research into the potential and real impact of offensive cyber capabilities on the outcome of elections. However, there is a general lack of policy studies on the role local election offices can play in facilitating stronger public faith that elections are by and large protected. This paper aims to address that gap in literature.

Much of the research available on the topic of foreign meddling in U.S. elections prior to 2016 is related to the qualification of such action as a cyber-attack and, more broadly, how to define a cyber-attack. Research done prior to the 2016 presidential election primarily focuses on the evolving meaning of cyber security and threats as a broad range of malign actions. Catherine Theohary and John Rollins' 2015 report to the U.S. Congress points out the precarious position of the lack of consensus on what is classified as a "cyber-attack" and there being no clear legislation to monitor cyberspace — pointing to a deeper issue of a severe knowledge gap of the threat posed to the U.S. election system and therefore very little preparation for such an issue at the time.<sup>12</sup> Theohary and Rollins' report, like earlier reports to Congress such as a 2007 report from Clay Wilson, did not specifically address the threat posed to election infrastructure.<sup>13</sup>

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<sup>12</sup> Catherine A. Theohary and John W. Rollins, "Cyberwarfare and Cyberterrorism: In Brief.," CRS Report for Congress (Washington, DC, March 27, 2015), <https://fas.org/sgp/crs/natsec/R43955.pdf>.

<sup>13</sup> Clay Wilson, "Information Operations, Electronic Warfare, and Cyberwar: Capabilities and Related Policy Issues," CRS Report for Congress (Washington, DC, March 20, 2007), <https://fas.org/sgp/crs/natsec/RL31787.pdf>.

Wilson (2007) did however address expected policy issues as cyber threats evolve. Wilson also mentioned the use of psychological operations to affect the domestic audiences of U.S. allies and the worry that foreign states will accuse the U.S. of war crimes if offensive military computer operations or electronic warfare tools disrupt critical civilian computer systems. Although these concerns are not directly related to elections, it is clear that the conversation surrounding social hacking as a threat and military computer operations as a war crime had begun at the time.

The Russian meddling witnessed in the 2016 election, which aimed to tip the election in favor of President Trump, is an activity defined as foreign electoral intervention according to Michael Tomz and Jessica Weeks.<sup>14</sup> Tomz and Weeks (2020) found that even relatively small forms of intervention polarize the public along partisan lines. They argue that these interventions spur Americans' condemnation of foreign involvement, loss of faith in democracy, and desire for retaliation when a foreign power sides with their opposing party.

Their research builds on a prominent 2016 study by Don Levin that investigates the effects of great power electoral interventions on election results.<sup>15</sup> Levin (2016) argues that public, targeted attempts to intervene in competitive elections usually increase the electoral chances of the aided candidate significantly and that overt interventions, such as threatening to cut off aid, are more effective than covert interventions. Levin's later studies (2018, 2019) went even further to show that foreign electoral interventions with partisan motives contribute to domestic political instability by inciting the formation of domestic terrorist groups and raising

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<sup>14</sup> Michael Tomz and Jessica L.P. Weeks, "Public Opinion and Foreign Electoral Intervention," *American Political Science Review* 114, no. 3 (2020): 856–73, <https://web.stanford.edu/~tomz/pubs/TomzWeeks-APSR-2020.pdf>.

<sup>15</sup> Dov H. Levin, "When the Great Power Gets a Vote: The Effects of Great Power Electoral Interventions on Election Results," *International Studies Quarterly* 60, no. 2 (2016): 189–202, <https://academic.oup.com/isq/article/60/2/189/1750842>.

the probability of a democratic breakdown.<sup>16</sup> These findings highlight the significant implications of not addressing the ongoing loss of public trust and faith in major elections and why finding solutions that bring voters closer to understanding election security is necessary at this time.

Levin's (2018, 2019) findings are further supported by various works by Bush and Prather (2018, 2020). Through broad scale surveying in October of 2018, Bush and Prather (2018) were able to discern that if Americans believe warnings about foreign interference in U.S. election are significant, it can undermine their trust in U.S. elections.<sup>17</sup> Other survey studies covering the same period, such as work by Keeter, et al. (2019), found a split in trust of the electoral process in the U.S., with 53 percent of study participants expressing "a fair amount" or "a great deal" of confidence that other Americans will accept the results, while 47 percent say they have "not too much" or "no confidence at all" that others will accept the election outcome.<sup>18</sup>

This study builds off the theory and findings of Bush and Prather (2018, 2020) and evaluation of the American public by Keeter et al. (2019) to look more closely into how county-level budget modifications and outreach work was elevated after 2016 in the face of voters' lost confidence in election integrity nationally.

### Role of the Polling Location in Voter Trust Formation

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<sup>16</sup> Dov H. Levin, "Voting for Trouble? Partisan Electoral Interventions and Domestic Terrorism," *Terrorism and Political Violence* 32, no. 3 (January 8, 2018): 489–505, <https://doi.org/10.1080/09546553.2017.1383243>; Dov H. Levin, "Partisan Electoral Interventions by the Great Powers: Introducing the PEIG Dataset," *Conflict Management and Peace Science* 36, no. 1 (January 1, 2019): 88–106, <https://doi.org/10.1177/0738894216661190>.

<sup>17</sup> Sarah Sunn Bush and Lauren Prather, "Foreign Meddling and Mass Attitudes Toward International Economic Engagement," *International Organization* 74, no. 3 (2020): 584–609, <https://doi.org/10.1017/S0020818320000156>.

<sup>18</sup> Andrew Perrin, Scott Keeter, and Lee Rainie, "Trust and Distrust in America" (Pew Research Center, July 22, 2019), <https://www.pewresearch.org/politics/2019/07/22/trust-and-distrust-in-america/>.

Work by Marina K. Schneider, former Pennsylvania Deputy Secretary for Elections and Administration highly informed the background and direction of this study.<sup>19</sup> Schneider's (2020) analysis of concepts and best practices for establishing integrity and security around the voter registration process and the setup of elections find that many of the critical issues related to elections security are at the county level. According to Schneider (2020), challenges that the county may face involve having access to quality voting systems, relying on Internet facing tools for voter registration, and accessing resources for post-election audits.

In the United States, state and local election administrators are responsible for every aspect of the process in the electoral cycle — ensuring voter eligibility, registering voters, creating and maintaining the voter registration rolls, preparing and setting up the voting process for early voting and election day voting, processing and handling absentee ballots, managing proper tabulation of and accounting for voting materials, reporting results accurately, and certifying those results. Candidates are also managed by election administration by overseeing the process for candidates to get on the ballot, regulating the candidate positions on the ballot, and enforcing campaign finance laws. Schneider (2020) points out that the range of the responsibilities that falls to election administration, especially at the local level, simultaneously provides the opportunity for skepticism if those duties are not carried out in a credible fashion as well as the opportunity to create change around election integrity without the need to pass through national levels of bureaucracy (245). This is a driving principle for this study and the implications of this study aim to expand on Schneider's (2020) analysis.

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<sup>19</sup> Marian K. Schneider, "Election Security: Increasing Election Integrity by Improving Cybersecurity," in *The Future of Election Administration*, ed. Mitchell Brown, Kathleen Hale, and Bridgett A. King, Elections, Voting, Technology (Springer International Publishing, 2020), 243–59, [https://doi.org/10.1007/978-3-030-14947-5\\_14](https://doi.org/10.1007/978-3-030-14947-5_14).

Even after recognizing Schneider's (2020) argument for the significance of election related work done on within individual precincts, one could argue that state and national level policy work has the greatest potential to influence security enhancements at a more meaningful or expansive level. The broad reaches and centralized power of a State government system could implement policy changes that hundreds of counties at a time as opposed to small scale changes at the precinct level. However, this study focuses instead on individual counties first, because of a need for a better understanding of opportunities for policy improvements at this level. Secondly, because of Bridgett King's (2017) findings that voters' positive evaluations of polling locations and poll workers led them to have higher confidence that individual votes are counted as intended.<sup>20</sup> King's (2017) study follows previous findings that machine type and prior knowledge of the machine functions (Claassen et al. 2013) as well as the location of polling places (Stein and Honahme 2012) also affect voter confidence.<sup>21</sup> In her evaluation of voters' trust, King (2017) also looks at how voter ID laws directly affect the confidence minority groups have in the electoral process. This is an important factor when considering the fact that the number of states that have passed laws making identification mandatory to participate in elections since the passage the Help America Vote Act of 2002 (HAVA) has gone from 11 states to 36.<sup>22</sup> In 2014, Lonna Atkeson et al. found, via an analysis of opinions on voter ID regulation in New Mexico, that approximately 70 percent of voters believe that voter ID laws do work to

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<sup>20</sup> Bridgett A. King, "Policy and Precinct: Citizen Evaluations and Electoral Confidence," *Social Science Quarterly* 98, no. 2 (June 2017): 672–89, <https://doi.org/10.1111/ssqu.12303>.

<sup>21</sup> Ryan. L. Claassen et al., "'At Your Service': Voter Evaluations of Poll Worker Performance," *American Politics Research* 36, no. 4 (2008): 612–34; Robert M. Stein and Greg Honahme, "When, Where, and How We Vote: Does It Matter?," *Social Science Quarterly* 93, no. 3 (2012): 692–712.

<sup>22</sup> "Voter Identification Requirements," National Conference of State Legislatures, accessed April 13, 2021, <https://www.ncsl.org/research/elections-and-campaigns/voter-id.aspx>; The 2002 Help America Vote Act (HAVA) was passed in response to voting system irregularities that came to light in 2000. HAVA provided federal funding to states that agreed to implement voter registration systems, replace punch card voting machines, improve voter education and poll worker training, allow provisional ballots, and provide adequate voting machine alternatives for voters with disabilities.

prevent fraud and do not block legitimate voting.<sup>23</sup> Analysis by Atkeson et al. (2014) also found that, despite voters' confidence that voting ID law do defend against fraud, policies that ensure widespread participation in elections are more important than preventing the forms of fraud they expected ID laws to deter. How voters interact with local administration and poll workers on the day of elections and in the period leading up to it shapes their confidence in the electoral process. King (2016) similarly concludes that the ability to improve voters' confidence in electoral outcomes and potentially increase political participation partly lies with administrative changes at the precinct level.

### Theoretical Framework

The current fascination with the impact of low national trust in election integrity spans from innocuous topics like voter turnout rates to the threat of cynicism developing into noncustomary, sometimes illegal, activities such as participating in sit-ins or riots, or organizing for revolution — the latter being a position of Citrin (1974). With limited legislative action improving U.S. election security, little occurred between 2016 and 2020 to calm public fear surrounding extensive polarization and claims of fraudulent elections. Some of the most significant action taken between 2016 and 2020 were Democratic-Republican budget compromises of \$425 million in 2019 and \$380 million in 2018 for new funding for election security — an amount that some election specialist still found disappointing.<sup>24</sup>

The 2020 federal election presented similar issues of interference, not only foreign but domestic this time, which again caused many to question the legitimacy of the electoral process.

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<sup>23</sup> Lonna Rae Atkeson et al., “Balancing Fraud Prevention and Electoral Participation: Attitudes Toward Voter Identification,” *Social Science Quarterly* 95, no. 5 (2014): 1381–98, <https://doi.org/10.1111/ssqu.12110>.

<sup>24</sup> Miles Parks, “Congress Allocates \$425 Million For Election Security In New Legislation,” NPR, December 16, 2019, <https://www.npr.org/2019/12/16/788490509/congress-allocates-425-million-for-election-security-in-new-legislation>.

Political trust is vital for creating system legitimacy, which is necessary for the sustainability of an effective democracy. Establishing a framework of how voters build political support and trust is essential to this study. Several theories about what determines political trust have been presented. However, no consensus of which theory has the strongest effect has been reached. This paper examines the effects of local government investment in methods of boosting democratic security and public outreach by local government regarding political trust within the United States. This study looks at potential variation in the personal and bureaucratic response to changed political trust at the local level.

Previous studies examining how support for political systems is developed have primarily built on the conceptual framework of David Easton (1953, 1975), as expanded by Norris (1999) and Dalton (2004).<sup>25</sup> Easton's (1975) political systems model (PSM) is generally composed of five main elements that describe two forms of political support for an institution.<sup>26</sup> According to the PSM, support and demands from the citizens engage in the political system to produce policy (see Figure 1). The first form is *diffuse support*, which is comes from socialization from childhood through adulthood and can be generalized as a state of mind. Diffuse support is one's regard towards a system and its institutions as a whole and is not impacted by mistakes done by one or some elected representatives. The second form of support is *specific support*, which is

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<sup>25</sup> David Easton, *The Political System: An Inquiry into the State of Political Science*; David Easton, "A Re-Assessment of the Concept of Political Support," *British Journal of Political Science* 5, no. 4 (1975): 435–57, <https://www.jstor.org/stable/193437>; Pippa Norris, *Critical Citizens: Global Support for Democratic Government*, *Critical Citizens* (Oxford University Press), accessed March 12, 2021, <https://oxford.universitypressscholarship.com/view/10.1093/0198295685.001.0001/acprof-9780198295686>; Russell J. Dalton, *Democratic Challenges, Democratic Choices: The Erosion of Political Support in Advanced Industrial Democracies*, *Democratic Challenges, Democratic Choices* (Oxford University Press), accessed March 12, 2021, <https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780199268436.001.0001/acprof-9780199268436>.

<sup>26</sup> Kenneth E. Bouding, "David Easton. A Systems Analysis of Political Life. New York: John Wiley, 1965," *Behavioral Science* 13, no. 2 (1968): 147–49, <https://doi.org/10.1002/bs.3830130208>.

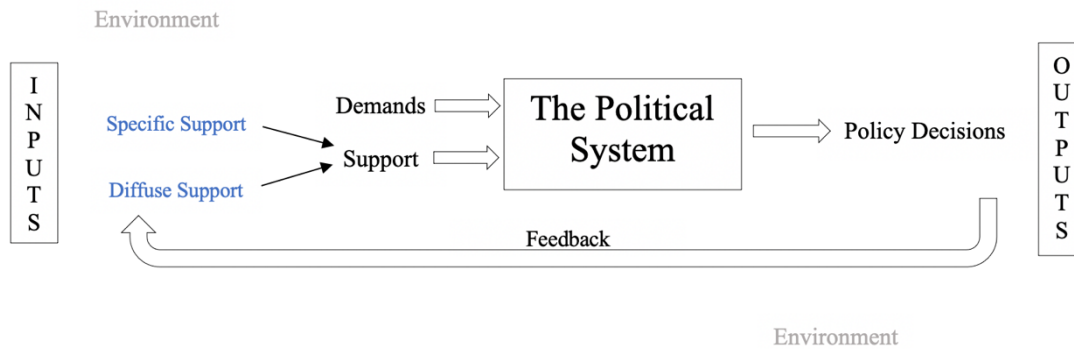


Figure 1: Easton's (1953) Political Systems Model

informed by the actions of the political leaders either succeeding or failing to live up to the expectations of a democratic system.

These two forms of PSM support are influenced by five main elements with the first being the feeling of belonging to a national community, such as feelings of patriotism and a sense of national identity. The second element is support for regime principles, such as endorsement of the democratic ideals of freedom, inclusion, tolerance, pluralism and equality. The third element is informed by evaluations of regime performance, which could be one's satisfaction with how democracy functions. The fourth element, confidence in political institutions, comes from political parties, parliaments, governments, the news media, the courts and elections. And the fifth element, support for specific political authorities, is related to leaders and politicians.

Based on Easton's (1975) behavioral framework, this study uses the secondary form of support, specific support, as a way of understanding local support. In Florida and New York counties where the majority of votes went to President Trump in 2020, it can be assumed that there was specific support for governance at that time. In counties where President Biden received the majority of votes, for quantitative purposes and based on the PSM, this paper assumes votes against the incumbent signal little to no specific support. The goal of this study is to establish how county-level bureaucracy was influenced by low political confidence; thus,

Easton's (1975) theoretical framework is applied to establish the existence or absence of support in each county. There are inherent limitations to this theory regarding the specificity of the support it refers to. Additionally, this study makes a point of reviewing how counties responded, via their election budget and security updates, to a loss of trust in the election process and not in the system of governance as a whole. However, while some frameworks have been presented for evaluating how citizens build political trust and how state policies influence confidence in electoral outcomes, there is no framework for assessing how local governments respond to citizens' low confidence levels.

Another component of this study is the analysis of the budget allocations for counties in New York and Florida after the 2016 federal election and prior to the 2020 federal election. The overall expectation that responsible budgeting reform would include more funds would be allocated to the election office's budget following the public revelation that cyber security threats included the software of voting systems used across the country. However, state and local budget processes differ widely, providing a more significant challenge for the development of a single theory of public budgeting than the national budget process.<sup>27</sup>

The final framework this study relies on is Jean-Paul Faguet's (2008) theory of local government. Faguet's (2008) good governance model (GGM) deals with decentralized governments specifically, making this model particularly appropriate for the U.S. elections network. The highly decentralized structure of the U.S. election system is often presented as one of the first deterrence methods for hackers who need to access countless county networks.<sup>28</sup>

However, it is worth noting that decentralization did not stop bad actors that hacked previous

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<sup>27</sup> M.M. Hackbart and R.J. Carson, "Budget Theory and State Budget Practice: Analysis and Perspective," *Journal of Budgeting and Financial Management* 5, no. 1 (1993): 31–41.

<sup>28</sup> "Our Democracy Is Under Strain. Here's Why It Will Hold Up.," *Brennan Center for Justice*, October 19, 2020, <https://www.brennancenter.org/our-work/research-reports/our-democracy-under-strain-heres-why-it-will-hold>.

elections and a major component of the 2002 HAVA was to create a more centralized voting registration database — a system, that if hacked, could be equally detrimental to election integrity.<sup>29</sup>

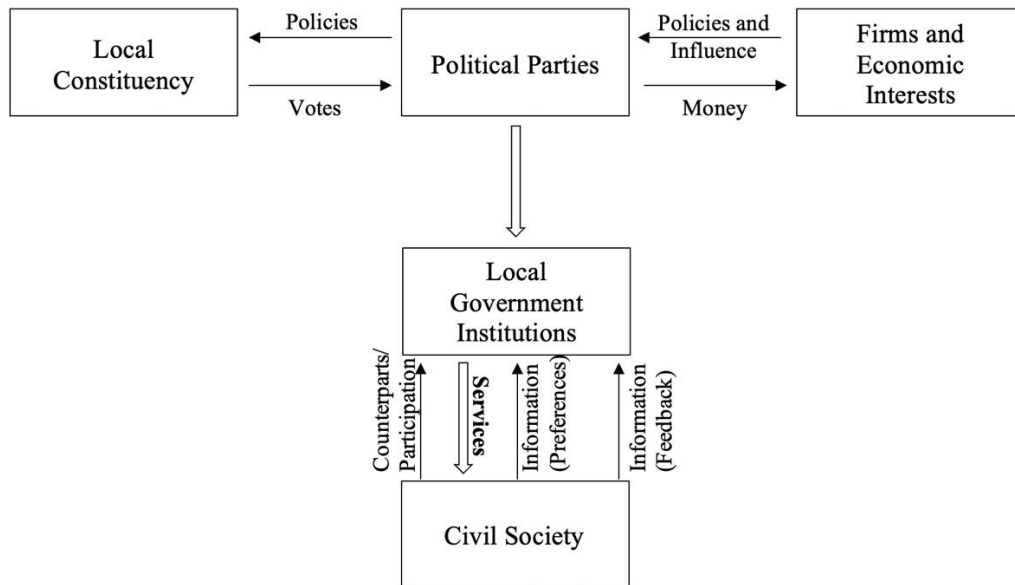


Figure 2: Faguet's Good Governance Model

Faguet’s (2007) GGM is centered around the importance of balance between three elements of local power — political, economic, and civil. These three elements of the GGM are incorporated into this study via an analysis of each county’s voter turnout, election office budget, and constituents’ engagement with election offices over social media. Although the three elements help outline interaction between election administrations and the public, it should be noted that the GGM framework was originally built to encompass organizational dynamics and markets in Bolivian municipalities. While this may weaken the GGM’s applicability to counties in Florida and New York, the focus on civil society’s ability to shape local government from the bottom while political parties do so from the top (see Figure 2) is consistent with this study.

<sup>29</sup> “Statewide Voter Registration Systems,” U.S. Election Assistance Commission, August 31, 2017, <https://www.eac.gov/statewide-voter-registration-systems>.

Faguet (2007) also states that “in order for civil society to provide useful oversight and a feedback mechanism for the governing process, it must be able to identify a specific failing of local policy at the community lever, formulate a coherent demand or complaint, and transmit it upward to a level where it is advocated convincingly to policy-makers” (20). As Faguet points out, the ability to complete these civic tasks is not specific to any one culture or organization, making it possible to apply the framework more broadly to U.S. counties.

## Methodology

### Data Collection

In order to evaluate how county election offices responded to decreased confidence in election systems, this study relies on election data from U.S. elections from 2000 to 2020, county election office social media engagement, annual budgets for county election officers, and semi-structured interviews with election officials and voters. A mixed-method approach is most appropriate for this study because of the dynamic relationship between understanding how voting populations behave on a large scale as well as how individuals engage with local election offices and form opinions on election security. Accessing voter turnout and registration numbers is possible primarily through counties’ Supervisor of Elections or Board of Elections websites. These are the most direct sources of data for this study and only in cases where this information is not published by government bodies will other sources be used. Public databases run by the New York Times, OpenElections, the Massachusetts Institute of Technology, and the U.S. Census Bureau were referred in cases where data was missing from county records or needed to be confirmed.

## County Election Budgets

Data on county election budgets between 2000 and 2021 is used to build a model depicting the fluctuation of funding following the 2000 and 2016 election credibility crises. Because no public database of the cost of elections at the county or precinct level exist, this required collecting the available annual county budgets for all 59 counties in New York and 67 in Florida.<sup>30</sup> This collection was done primarily by a review of each county's annual budget, pulled from their public website. In cases where no budget information is available for the years between 2000 and 2010, it was necessary to contact either the county's Supervisor of Elections office in Florida, New York counties' Boards of Elections, or the public record department by email to request the appropriate figures. Of the 75 percent of Florida and 56 percent of New York counties with no public budget data available for 2010 and earlier that were contacted, eight responded. In 21 cases between New York and Florida where election offices were contacted directly via telephone to speak with either the Supervisor (Florida counties), Commissioner (New York counties), or an office representative, in addition to discussing outreach activities and outsourced security support, annual budget numbers were requested as well. In all of these cases, the administrators recommended referencing the county's website and they were not able to provide archived budget data over the phone at that time.

## Voter Engagement with Administrative Social Media

In order to assess how local election offices engaged with the community, social media is used as both a qualitative and quantitative measure. Whether or not each office has a Facebook

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<sup>30</sup> Although New York State does have 62 counties, New York City's Board of Election acts as the administrative authority for several of the surrounding precincts, bringing the total to 59 individual Boards.

page is used as a signifier of basic engagement with the public. In order to further quantify this engagement, the number of followers each page had was recorded.<sup>31</sup>

These Facebook pages provide information on upcoming elections, volunteer opportunities, policy changes, and educational events. While the counties' official web pages often provide similar information, the channels of communication and multi-directional communication facilitated on the Facebook page is what qualifies the follower count to act as a measurement of engagement for this study. However, there are limitations to what insight the follower count can provide. There are additional biases associated with the counties' population size or how long the page has been active. Despite these factors, the follower count, if not entirely encompassing of the extent to which election administrators engaged with the public, can still act as an indicator of local election administrators' engagement virtually. Additionally, given the restriction on in-person events due to the COVID-19 pandemic, virtual engagement is particularly appropriate. Had a county been inclined to supplement regular in-person programming, social media was one of the most viable options.

#### Voting Machines Used in Florida and New York Counties

In an attempt to assess each counties' commitment to voting integrity and security, the predominant voting machine type used across the county. They are then scored based on susceptibility to manipulation by potential bad actors. Several other factors comprise a county's election security. However, collecting data on those factors — use of internet facing registration systems, access to provisional ballots, contracted security support, etc. — is much more challenging to do for all 129 counties reviewed in this study. The scoring scheme for the voting

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<sup>31</sup> See Appendix D for New York Counties with Facebook pages and followers counts. See Appendix E for Florida Counties with Facebook pages and followers counts.

machines ranges from 1 (least susceptible to manipulation) to 3 (most susceptible to manipulation). Each machine type was scored according to the system in Table 1. Descriptions of each machines type are also provided in Table 1.

Table 1: Voting Machine Scoring System

Machine Type	Score	Characteristics
ICC and DRS	2	<i>Used for mail in ballots, optically scans ballots marked by hand.</i>
ImageCast	2.5	<i>Optically scans hand-marked ballots, has non-paper modifications that make it an Accessible Voting Device.</i>
DS200, DS850, DS450	2	<i>Optically scans hand-marked ballots, is not an Accessible Voting Device.</i>
ExpressVote	3	<i>Electronic, touchscreen selection with printed ballot and barcode, is an Accessible Voting Device.</i>
AutoMark	3	<i>Electronic, touchscreen selection with modifications that prints ballot, designed to be an Accessible Voting Device.</i>
*Hand-marked and counted	1	<i>Not used widely in any county,</i>

Sources: New York counties — <https://www.elections.ny.gov/VotingMachines.html>; Florida counties — [https://files.floridados.gov/media/703669/voting-systems-in-use-by-county\\_4publication-website-copy-111220.pdf](https://files.floridados.gov/media/703669/voting-systems-in-use-by-county_4publication-website-copy-111220.pdf).

### Interview Collection

The virtual interviews in this study are conducted with constituents, election officials, and county election office representatives — election offices and office representatives are both included under the umbrella term “administrator” — in order to reach players with a broad range of involvement in the electoral process. The aim of these interviews is to assess how administrators engaged with the community and made changes between 2016 and 2020 to address the public’s lost confidence in election integrity. Interviews are conducted exclusively with participants registered to vote in Florida or New York elections. All interviews are conducted remotely over either a video conferencing platform or the phone to best adhere to public health and social distancing requirements due to COVID-19.

The study incorporates insight gained from multiple groups in order to identify specific capabilities election officials have to implement systemic changes that best address voter concerns. The focus of the interview questions for each group of players differs based on their background and participation in elections.<sup>32</sup> Semi-structured interviews conducted with voters assess general public understanding of threats to election integrity by foreign interference and their history of engagement with their county's election office. Election officials, or in cases where an administrator was not available, election office representatives, were asked about deliberate community engagement, cybersecurity support, and potential roadblocks.

The recruitment method for each group of actors also varied. Election officials were contacted and asked to participate via publicly available emails or office phone numbers on either the Supervisor of Elections or County Board of Elections' websites. When Supervisors or Commissioners were not available, office representatives were asked similar questions about engagement with the local community, outsources security support (outside of what the State provided), and any available budget data. The last group, voters, were recruited through snowball sampling.

While snowball sampling is an effective method for this study, especially while physical contact and public outreach has been limited by COVID-19, the method provides only a limited perspective based on the fact that participants are not randomized and are previously connect via other channels that may influence their assessment of election security. There is an additional weakness in using interviews that are not from a random sample of Florida and New York voters which is that election security and foreign interferences has been a partisan issue during the past four years and beyond. Should the interviewee pool be composed of primarily one group over the

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<sup>32</sup> Reference Appendix A for interview questions.

other in a way that is not representative of the state, the results of the interviews risk being skewed in a way that is not accurately representative of the scope of the study. Nonetheless, the insight and concerns they share still help inform how local government can address election integrity.

There is also the potential influence of social-desirability bias on the data. This study relies on participants answering interview questions honestly. During the period in which interviews took place, elements of the issue of election credibility were partisan due to recent events related to President Trump's contestation of then President-elect Biden's win. This may influence participants to cater their answers to someone of my general background — specifically a young, white, female student in a higher education environment that is predominantly liberal. In effort to minimize social-desirability bias, I did not provide the participant with information on my voting background prior to the interview and I did not ask questions that require participants to reveal their party affiliations. Participants were also given the opportunity to remain anonymous outside of my ability to identify them. Word choice and open-ended questions also helped to mitigate bias and the nature of using an online, virtual platform may conveniently provide a barrier between the researcher and participant. This ideally reduces the number of elements that participants might otherwise use to make judgement calls about how their answers may or may not be socially desirable.

## Findings and Data Analysis

The analysis methods used in this study are generalizable and can be used for other states and counties across the United States. Because the data types and sources are largely available in other state and national elections, recreating the data collection and analysis should be possible. These methods could be applied to other studies outside of election security and voter

engagement as well. Other research areas that may benefit from these methods and data include studies on the cost of national elections in the U.S. and the flow of election information over social media.

#### Trends in Annual Election Budgets

The U.S. Bureau of Labor Statistics CPI Inflation Calculator is used to standardize all budget values to the buying power in November 2020.<sup>33</sup> Analysis of election budgets show that in the four years between 2016 and 2020, county in Florida and New York both, on average, received higher funding than in 2016 even after all values were adjusted for inflation.<sup>34</sup> In New York, 2020 budget were 35.18 percent higher than they were in 2016. The increase in Florida was less dramatic with only a 16.30 percent average increase in 2020. Although data collection did go as far back as 2000, due to the significantly fewer number of counties with publicly available budget numbers prior to 2018, making further generalizations about budget increases in between earlier elections is not plausible.

While not guaranteed, it is possible that the increases observed between 2016 and 2020 was purposefully done to accommodate threats of interference that became well known to the public only after 2016. This would imply that counties do have the agency to react to low confidence by increasing operational budgets — when state funding is made available as it was in both Florida and New York via federal grants.<sup>35</sup>

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<sup>33</sup> “CPI Inflation Calculator,” United States Bureau of Labor Statistics, accessed April 14, 2021, [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm).

<sup>34</sup> See Appendix G for all inflation-adjusted annual election budgets 2000-2021 for Florida and New York.

<sup>35</sup> Freeman Klopott, “New York State Division of the Budget Announces Approval of \$10 Million to Support Early Voting,” New York State Division of the Budget, August 29, 2019, <https://www.budget.ny.gov/pubs/press/2019/approval-of-earlyvoting-funding.html>; “Help America Vote Act (HAVA) Federal Funding,” Florida Department of State Division of Elections, accessed April 15, 2021, <https://dos.myflorida.com/elections/laws-rules/help-america-vote-act/>.

## Voter Facebook Engagement

After preliminary interviews with election administrators, I was made aware of election offices' use of Facebook pages to share information and interact with the public. Using the number of followers for each page, I included this variable in the voter turnout regression model in the following section as an indicator of engagement between constituents and administrators.

Generally, just over 50 percent of all New York county Boards of Elections had a Facebook page. This was much lower compared to Florida where only 17.74 percent did not have a Facebook page. The average number of followers was also just slightly higher for Florida counties (1,573 people) compared to New York counties (1,070 people).

## Voter Turnout Regression Model: Voter Social Media Engagement, Annual Budget, Voting

### Machine Type

I use ordinary least squares (OLS) linear regression to test the relationship between the variables of interest. In this section, I present summary statistics for multiple relevant variables and results of the regression models. The models provide mixed evidence for key predictions of the GGM and PSM. Local financial investment in election infrastructure (annual budget), the security level of the predominant voting machine type used in the counties', and engagement via social media constitute the explanatory variables for this study. Data on voter turnout is the dependent variable used to evaluate voter behavior. It is important to acknowledge that voter turnout, or a lack thereof, does not directly translate to either trust or distrust in election infrastructure. However, without an available measurement for confidence levels among voters at the precinct or county level, voter turnout is used as a signal of willingness to participate in an

election. This provides some amount of insight to how impactful the local administrators were in communicating to the public their concern for election security.

**New York Counties Statistical Summary**

<i>Regression Statistics</i>	
Multiple R	0.30694514
R Square	0.09421532
Adjusted R Square	-0.0064274
Standard Error	0.04509209
Observations	31

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	0.00571033	0.00190344	0.93613624	0.43682764
Residual	27	0.054899	0.0020333		
Total	30	0.06060933			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.41753425	0.12890774	3.23901599	0.00317307	0.1530374	0.68203109
Voting Machine Score	0.03237757	0.05004731	0.64693916	0.5231337	-0.070311	0.13506617
Followers	-1.314E-05	1.3874E-05	-0.9472457	0.35191496	-4.161E-05	1.5325E-05
2020 Annual Election Budget	4.5314E-10	8.163E-10	0.55511702	0.58338492	-1.222E-09	2.1281E-09

Table 2: New York Counties Statistical Summary

**Key Finding: Turnout Correlates Weak**

Table 2 provides summary statistics for the variables chosen to predict New York counties' voter turnout in the 2020 presidential election. Those variables are 2020 county election budgets, the county elections office Facebook page following, and the security score assigned to the voting machine type used in the relevant county. Only counties that had available

quantities for all three variables were included in the analysis. The table does not confirm that they factor strongly influence the percentage of the population that votes, which is used in this study as a signal of voter confidence.

**Florida Counties Statistical Summary**

<i>Regression Statistics</i>	
Multiple R	0.320147121
R Square	0.102494179
Adjusted R Square	0.027702028
Standard Error	0.070677722
Observations	40

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	0.0205366	0.0068455	1.3703868	0.2673713
Residual	36	0.1798323	0.0049953		
Total	39	0.2003689			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.416581259	0.5725	0.7276528	0.4715324	-0.744503	1.5776651
2020 Voting Machine Security Score	0.036521021	0.2270163	0.160874	0.8730921	-0.423889	0.4969315
Facebook Page Following	2.37756E-05	1.479E-05	1.6074042	0.1167024	-6.22E-06	5.377E-05
2020 Annual Election Budget	-4.07226E-09	2.19E-09	-1.859219	0.0711849	-8.51E-09	3.699E-10

Table 3: Florida Counties Statistical Summary

The regression described in Table 3 is also an evaluation of the voter turnout per population size in Florida counties. It similarly relies on budget, Facebook following, and voting machine type and does not support a strong correlation between these variables and voter turnout for 2020. The low model fit described in Tables 1 and 2 calls into question what role, if any, these factors played in the 2020 election turnout.

## Interview Findings

For interviews, I analyzed data, through qualitative coding, transcripts and written notes from interviews conducted in this study. Different variables were assessed depending on the subject type and follow the codebook designed for this study.<sup>36</sup> Interviews with election officials provided clarity on 1) how election officials modified protocols between elections and 2) how the public has responded to their choices. However, the primary function in speaking with election administrators was to assess engagement with the public and whether or not the county had sought outside or contracted support for election infrastructure security aside from what resources the state directly supplied.

Interviews with election official interviews also focused on election legislation and where responsibility for election cybersecurity falls. This provides insight on the prevalence of certain security efforts and legislation and how this differs between states. Understanding the source of a state's election system success and failure relies on asking election officials how they have addressed the issue at hand. Coding results from all interview types were analyzed for trends and provide context to the results of the state and county level voter and government framework. Interviews with voters are coded on degrees of prior knowledge and concern for election integrity on the issue of cybersecurity as well as how that knowledge impacted their decision to vote. This helps establish the extent to which the risk of foreign interference had in comparison to the level of understanding. A key component of this study is insight on how either strong or weak understanding and awareness of the mechanisms available to bad actors working to interfere with the election can impact voter behavior or voter turnout.

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<sup>36</sup> See Appendix H for interview codebook.

### Interview Count by Category

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	Florida	New York
<b>Category 1</b>	<b>4</b>	<b>3</b>
<i>Official Election Supervisors or Board Commissioners</i>		
<b>Category 2</b>	<b>10</b>	<b>9</b>
<i>County Election Office Representatives</i>		
<b>Category 3</b>	<b>4</b>	<b>3</b>
<i>Voters</i>		
<b>Total</b>	<b>18</b>	<b>15</b>

### Election Administrators

#### Background

Interviews with multiple county Election Supervisors, Commissioners, and county election office representatives provided more detail on the risks associated with different types of vote tabulation machines, the process of how county officials choose these machines, and other efforts to minimize the risk of interference via the physical election infrastructure. Physical infrastructure refers to the buildings that host polling locations, the voting machines, software used to calculate votes, and any related computers or servers connected to either the voting process of vote reporting. This definition of physical voting infrastructure is purposely broad to account for the security issues that go beyond cyber-threats to software and may relate to the polling building or location.

In an explanation of the importance of thinking beyond the voting machine, one anonymous Florida Election Supervisor said, “I can make the most secure voting system in the world, but it'd be so secure that nobody could use it. Or I could make the most accessible voting

system in the world, but it would be so successful and so open that it would be completely subject to manipulation and fraud, etc. So, we've always had that balancing act.... We now have to worry more intently about the things that every other office, whether public sector, private sector is to worry about. Things like, you know, 'don't fall for phishing emails' and 'make sure that your networks are secure.' 'Make sure you have appropriate firewalls,' things of that sort. That was the new thing.”

This helps in understanding how budget differences between counties' offices of the Election Supervision or Board of Elections plays a role in which machines a county is able to purchase and how they allocate funds for other security measures — or how other aspects of security needed to be prioritized. Escambia County Supervisor of Elections David Stafford, who also serves as a member of the Election Infrastructure Government Coordinating Council highlighted the attention paid to Florida's election security in the two years prior to the 2020 election. He specifically noted the involvement and support of the sector specific agency, the Cybersecurity and Infrastructure Security Agency (CISA) and the importance of Secretary of Homeland Security Jay Johnson 2017 designation of elections infrastructure as critical infrastructure, which put them on the same footing as nuclear power plants and the electric grid.

A significant hurdle for election security is the current need to compromise between voter accessibility and risk of interference. Typically, forms of voting accessibility that involve transmitting or inputting information over the internet have a correlated risk of bad actors exploiting that online access. The same can be said of trying to secure votes by using paper ballots, which create obstacles for populations that rely on accessible voting forms due to various disabilities.<sup>37</sup> Stafford framed this dichotomy by describing Escambia County's use of a modem

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<sup>37</sup> Orey, Rachel. “Election Security and Accessibility: Two Sides of the Same Coin.” February 27, 2020. Bipartisan Policy Center. .

that is connected to the wider internet to communicate voter tallies to state officials. While this invites a higher risk of interference and meddling, it also allows the county to have nearly 75 percent of votes announced by 7:30 PM on election day. The 2020 election demonstrated how critical fast reporting times can be to public trust and confidence in election outcomes.<sup>38</sup>

Of note is that during an interview in which the person requested to remain anonymous for a portion of what was said, it was claimed, without prior mention of New York or prompting on the issue, that the Florida election system infrastructure was more secure in the 2020 election than that of New York. Specifically, the interviewer said, Florida has recounts because “we have close elections, and these things matter in close elections. That’s why is you look at New York, it’s a disaster” regarding a potential recount under the threat of interference.

The findings of Root et al. (2018) stand in direct opposition to this claim. This example highlights the drawbacks on relying on the security grading scheme (Root et al. 2018) that does not evaluate the most recent security efforts made by all 50 states and the District of Columbia in the period between 2018 and 2020.

## **Outreach and Engagement**

Beginning with Florida counties, the administrator and officials that did discuss outreach primary brought up previous events the elections office would hold in person. One representative from Citrus County recalled there being, “several speaking event during the year and definitely doing a yearly visit to the high school. That was part of [their] voter registration drive programming but [they] weren’t able to that last year.” An Alachua County administrator brought up similar outreach activities such as voter registration drives at the jail, a Voting 101 public class, and regular school events. The focus remained on in-person event for a majority of

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<sup>38</sup> Add info about election reporting delays and the security impact that had.

the time engagement was discussed. Events ranged from giving talks at assisted living communities (Bay County), stands at the local agricultural fair (Bradford County), conducting mock elections at middle schools (Brevard County), to sending office members to talk at farmers markets on the weekend (Collier County).

Some officials did mention challenges faced in terms of putting on events. One anonymous Supervisor claimed, “because we have such a small office, we don’t usually do events or go to schools.” Another Supervisor similarly stated that, “the office staff is small so we have interest groups that will stop by to pick up materials that we can provide to them” which was the extent of their public engagement.

When discussing social media for Florida election officials, engagement in this form was usually mentioned more briefly and with reference to how recently they had begun to use it. Twice, officials stated that their Facebook and Twitter accounts were the result of the COVID-19 pandemic pushing everyone online but needing to make sure they were able to get information out quickly.

For New York counties, an election official in Allegany reported a similar experience, saying that, “social media is new for the pandemic.” Generally, the level of engagement was lower for the county I contacted in New York with only two of the twelve county officials stating that the office has continued to engage in public events over the past four years. Of those that did (Chemung and Clinton), high school registration card drives and “whenever anyone asks us to speak” were the two forms of engagement described.

## Personal Concerns

Based on a preliminary conversation with Florida and New York voters and an assessment of data from voter trends in both states, voters felt confident their ballot would be secure despite personal concern, or even expectation, that there would be election interference in the 2020 election. One Florida voter stated that, “the risk of my own ballot wasn’t something I was ever concerned about but the idea of interference someone else did seem possible.” This was stated in a similar way from a New York voter who claimed, “in terms of security, I think I would have felt comfortable voting in any form under normal circumstances [related to COVID-19]. The idea of New York City being hacked doesn’t seem impossible but I think they invest in ways to avoid that.”

This confidence comes in spite of heightened public interest and vocal concern from experts about the integrity of the 2016 and 2020 elections. Overall, voters viewed election meddling as a broadscale issue that was unlikely to impact their vote specifically but may risk the success of their preferred candidate. Other respondents mentioned expectations that public concern would result in actionable security changes by election day, feeling confident because of their choice to vote by mail,<sup>39</sup> and active disregard of sources, such as President Trump, claiming the election would be fraudulent in the campaign period leading up to the election.

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<sup>39</sup> Because classifications and titles of ballots sent through the mail vary by state, this study will use the terms “mail-in ballot” or “vote by-mail” to refer to all ballots not cast in person. Further specification will be provided for mailed absentee ballots, electronically submitted absentee ballots, and absentee ballots delivered to a drop box.

In terms of voters' level of previous understanding and awareness of election security, it primarily included some knowledge of the 2019 Mueller Report, Florida's 2000 election difficulties, or one or all of the sixteen cases of election interference in 2020. No voter participants thus far have described an understanding of the risk associated with internet-facing registration databases or voting machines without paper trails, nor U.S. security agencies charged with defending election integrity from foreign influence. Primary sources which participants mentioned for this information were word of mouth and social settings. Participants specifically noted that their sources on the issue were not academic and that they usually held some skepticism for news sources or attempted to disregard news sources completely in some cases.

One voter expressed interest in voting in person despite their stated convenience of using a mail-in ballot and their experience of voting by mail in multiple elections prior to the 2020 election while others mentioned newly developed preferences for mail-in voting. They chose to vote by mail in 2020 as a COVID-19 precaution. This voter also explained that they felt there was uncertainty in voting by mail but only in regard to their concern that the Postal Service would not deliver the ballot in time for it to be counted — a consequence of significant postal delays in late 2020.<sup>40</sup> This voter stated, "I think my biggest concern was that the ballot wouldn't get there in time to be counted because of the postal service."

A second voter also shared this concern and stated that although they requested a mail-in ballot be sent to them with the intention of mailing it back, they eventually took the ballot to a drop box due to their strong concern that the Postal Service would not deliver their ballot by the deadline.

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<sup>40</sup> <https://www.cnbc.com/2020/10/27/us-mail-slowed-down-just-before-the-election-these-states-are-most-at-risk.html>

The issue of election interference did impact voters' candidate preference based on each candidate's expressed and demonstrated concern for election security as a policy issue. However, no voter stated that the threat of election interference impacted their decision to vote nor their ability to vote. In three of the four voter interviews conducted so far, participants expressed concern about the security of their ballot but stated that they still would not have forgone the opportunity to vote because, as one voter stated, "the best option was to try to send to send my vote and hope that it was counted."

When asked about their thoughts on instituting a national voting bureaucracy, such the Census Bureau, three of four participants noted a preference for it but had no expectation that it can or will be formed. One voter expanded on this point by mentioning that they perceived the discrepancies in the needs of constituents located in different parts of the U.S. as too severe to create a federal level voting system. One Florida voter expressed discomfort with running elections through a federal level bureaucracy saying, "I'd like to know that the elections are safe but I don't think centralizing the system would be the best way, that seems like it would get a lot of pushback, at least from the people I know." Both New York and Florida voters had a strong assumption that their local officials and their state election systems were more secure in comparison to other states. One election official also made similar remarks. It is possible that the apprehension to a national voting bureaucracy is linked to distrust in the security of elections outside of a voter's own county.

### Comparison of New York and Florida Voting Infrastructure

After comparing the prevalence of specific machine types in both New York and Florida, it is clear that while Florida has more diversity in the type of machines available across the state, New York is better situated to address concerns of vote manipulation. This is because nearly 80

percent of machines used in 2020 were ImageCast machines, which use paper ballots that can act as a verifiable voter trail.<sup>41</sup> In terms of counties using riskier machines, New York had only 11 percent of machines that are categorically the least secure — AutoMark and ExpressVote. Nearly 30 percent of Florida’s machines are in this category. What is unclear is whether or not these two machines are used for all voters in the county, or if they are used selectively as Accessible Voting Devices (AVD).

AVDs rely on using digital vote selection and submission. AVD machines are designed to be inclusive of various ability concerns by using eye-movement tracking, blow pressure sensing, and a variety of other mechanisms to count votes without requiring the voters to use a pencil and paper. However, by the nature of addressing accessibility, there are increased security risks — further jeopardizing the voice and votes of an already marginalized group.

#### Comparison of National Voter Turnout and Pre-prescribed State Security Scores

Finally, an analysis of the relationship between voter turnout for all 50 states and the District of Columbia in 2020 and the state’s security score, as prescribed by Root et al. (2018), was conducted. The results show a very weak link between a state’s compliance with baseline security guidelines, as prescribed by the U.S. Election Assistance Commission.<sup>42</sup> This was done not to suggest that there is a relationship between these two factors, but because the case study states, Florida and New York, were chosen for several reasons and in particular because of the difference in score that they received in Root et al.’s (2018) study. As previously discussed, other studies have repeatedly established that voter engagement is not significantly impacted by trust

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<sup>41</sup> See Appendix F for pie graphs of voting machine types used in Florida and New York.

<sup>42</sup> See Appendix C for graphical comparison of state security scores and 2020 turnout.

in government.<sup>43</sup> The analysis conducted in this study corroborated older findings that election security and voter participation are not strongly linked.

### Claims and Implications

The findings of this study provide insight to how other states and counties across the U.S. might respond to lost faith in election integrity among constituents. Because this study focused on two cases studies at the ends of the spectrum of election security, some findings also likely to be generalizable for a state with any level of security infrastructure.

When thinking about the answer to the research question, there is still much to be investigated as budget, virtual constituent engagement, nor voting machine security have a strong correlation with motivating voters to turnout on election day. This implies that more should be done to understand how local government can in fact assure voters of their ballot's security and bring them to the polls. Interviews with voters showed, however, that fear of interference was not likely to keep them from voting, although they did question the state of election integrity across the country as a whole. This could still have larger implications for the strength of democracy in the U.S. overall.

### Limitations, Weaknesses, and Sources of Error

One of the most significant limitations and potential sources of error in this study are the annual county budgets. This is primarily because of the lack of publicly available budget number in the earlier years considered in this study. With a limited data pool there is a greater risk of calculation error for predictions made with budget numbers. In the years prior to 2011, less than

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<sup>43</sup> Donald P. Green and Michael Schwam-Baird, "Mobilization, Participation, and American Democracy: A Retrospective and Postscript" (Columbia University, September 2015), [https://www.researchgate.net/publication/282467463\\_Mobilization\\_participation\\_and\\_American\\_democracy/link/566fff4708ae4d9a425985cd/download](https://www.researchgate.net/publication/282467463_Mobilization_participation_and_American_democracy/link/566fff4708ae4d9a425985cd/download).

50 percent of New York counties have annual election budgets that are accounted for in the dataset. Similarly, not until 2018 are 50 percent or more of the Florida counties' budgets available.

Regarding the lack of evidence pointing to a strong connection between voter turnout and engagement with election offices' social media, it is possible that the study did not account for interest in an elections office social media account to be a self-selective behavior. Generally, when compared to county population, the number of people following the Facebook pages constituted a very small percentage. Additionally, none of the voters that were interviewed referenced social media as a medium of election information they use. This suggest the role of virtual engagement in spurring trust in election infrastructure is not as significant as expected.

In future studies, analysis done in the style of this research should evaluate multiple election years. By only looking closely at changes between 2016 and 2020 and building regression models focused on only the 2020 presidential election turnout, the window of analysis limited what claims could be made on the topic of building trust in election security at a local level.

## Policy Recommendations

### In Person Engagement May be More Impactful than Viral Engagement

Within the past year, several major media groups have taken up the fight against disinformation in the effective yet limited ways that they can as private companies. Facebook, YouTube, and Twitter have all made substantial user policy changes that either ban election-related advertisements, remove misleading information, or attach warning labels to certain posts

in response to increased misinformation about the election process.<sup>44</sup> While policy changes by media companies are beneficial to election security, in that they reduce the strain on government institutions to clarify false claims about elections, state legislation for election procedures and standards must also change at a pace that adequately addresses the development of cyber threats. State election officials hold significant responsibility and arguably have the greatest agency for instituting defenses against election interference as well as the counterpart of interference, delegitimization.

While the data analysis done in the study demonstrated that virtual engagement with voter likely has no significant impact on motivating voters, there may still be a space for election administrators on social media platforms. Encouraging open online conversations with community members while also providing true and useful information may still build stronger understanding and faith in the election process, even if it does not sway others to vote.

Election officials can leverage social media engagement by reaching out via Facebook or Twitter. Several New York Election Commissioners and Florida Election Supervisors commented on the limitations of their small office. When asked what community outreach they were able to participate in, the lowest level was providing paper materials to special interest groups that visited the office. This was often linked to a low number of staff members. Larger offices were able to attend more in-person events such as farmer's markets, community festivals, high schools, and church meetings because of their larger size. A large staff often translated to office members that could regularly update the website and post of social media more frequently

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<sup>44</sup> Shannon Bond, "Facebook And Twitter Limit Sharing 'New York Post' Story About Joe Biden," NPR, October 14, 2020, <https://www.npr.org/2020/10/14/923766097/facebook-and-twitter-limit-sharing-new-york-post-story-about-joe-biden>; Alba, "Now Circulating on Social Media: 4 Election Falsehoods."

as they reported. Therefore, investing in a larger administrative team, or specifically for a member of the office to engage with voters on social media, is recommended.

### Addressing Security with a Focus on Accessibility

Oftentimes, voter disenfranchisement and election accessibility are impacted by improvements to elections physical infrastructure integrity. For example, touchscreen voting machines rely on technology that is more susceptible to cyber-attacks. Although there is evidence that each state made some improvement in securing their elections against foreign interference between 2016 and 2020, some states are significantly more prepared to combat hacking than others.<sup>45</sup> Constituents of these states may feel more secure that their ballot will not be altered, discarded, or lost. In many but not all, these improvements were done via a change in the voting machines used, specifically the use of paper ballots. While this increase may have been a result of mail-in ballots used due to the COVID-19 pandemic, this study will look closely at which machine types counties planned to use before said pandemic began to get a more accurate picture of how county election officials responded to lost election integrity confidence.

### Fund Consistency and Transparency

Data on county election budget demonstrated first, that funding streams are not constant and second that finding this data is particularly challenging. Recommendation based on these two factors include federal funding streams to either state or county government for elections

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<sup>45</sup> Ibid., 4. — According to Root et al. 2018, there were no states with election infrastructure secure enough to rank in the highest possible category and only eleven states qualified for the second the highest security category: Alaska; Colorado; Connecticut; District of Columbia; Maryland; Minnesota; New Mexico; New York; North Carolina; Oregon; and Rhode Island

that can be relied upon and a broad scale investigation of how election funding is distributed across the country.

Seeing as funding via grants is uncertain and the past twenty years of budgeting has shown significant fluctuation in Florida and New York, Congress should prioritize making funding for election infrastructure reliable and consistent. Larger questions remain regarding the sourcing and what role county government can play in this step.

Additionally, there exist no concrete analysis of the cost of U.S. presidential election costs at the precinct level. The lack of this information will remain a barrier for most election integrity related research to come.

## Conclusion

This goal of this study is to establish the role of county-level governance, specifically the offices of the Supervisor of Elections and the County Board of Elections in a state that largely met cyber security requirements in 2018 compared to a state that fell short of minimal security standards according to a nation-wide evaluation by Root et al. (2018). Data was collected on Florida and New York counties' voter engagement, annual election budgets, voter turnout, and additional cyber security support. These metrics were selected based on Easton's (1953) theory of support and trust in political systems and Faguet's (2007) model of good governance. The study evaluates county-level policy responses to voter's decreased confidence in election security after the 2016 U.S. presidential election. Through analysis of the 2020 county voter turnout in comparison to three potential factors of confidence in election integrity, this study established that after 2016, most counties did not significant change their outreach methods to increases public knowledge of the county's elections process aside from occasionally updating

social media outreach. Security support from the state-level was provided in 2019 in both Florida and New York. Federal funding from HAVA also increase in this year, thus county election budgets in Florida and New York both increased variably between 2016 and 2020. Additionally, counties very rarely consulted security assistance outside of what the state provided. Semi-structured interviews with New York county Election Commissioners, Florida county Election Supervisors, and voters from each state helped inform the factors that should be evaluated as a part of this study as well as how to address sources of low confidence in election security and integrity.

New ways of approaching this research question may include more direct survey work with administrators to observe what other obstacles they face regarding election integrity. An investigation of various programs that aim to engage and educate voters may also provide more insight on what local election administrators can do. Future studies related to election integrity will likely face similar issues in attempting to quantify voters' confidence in the ballot security. Any studies that focus on this specific aspect will provide an important reference and tool for other election security studies to rely on.

As lost confidence in election integrity continues to strain bureaucratic processes and national unity, the gap of research on how local governance plays a role in strengthening public confidence in elections grows even more critical. The findings of this study point to the urgent need to boost support for county-level programs run out of election offices to engage with the public. Findings also highlight the absence of any significant financial evaluation of the national cost of elections and how those funds are used.

## Appendices

### Appendix A: Interview Protocols and Questions

#### **Election Officials: Public Engagement and Security Support**

- Are you or someone else in the office available to discuss ways the Office of the Supervisor of Elections/Board of Elections Commissioners has engaged with the community since 2016 or how the county receives support for election security measures?
- Is it okay if I used this information publicly in a university research paper? Would you like to remain anonymous if you do share information?
- What is your role in election procedures between elections?
- What is your role in election security between elections?
- What is the history of election security for this county?
- What is the current state of election security in your county? Policy, public opinion, or otherwise.
- How does your county balance voter accessibility with the risk of interference by bad actors?
- What outside groups/people have assisted in either the progress or decline of election security in your county?
- What changes to district, state, and national election systems, if any, would increase your confidence in the election system?
- Is engagement with the community on election related activities before and between elections a priority for the Office of the Supervisor of Elections/Board of Elections Commissioners?
  - Despite the challenges of the past year due to the COVID-19 pandemic, in what ways does the Office of the Supervisor of Elections/Board of Elections Commissioners inform and engage the community in election activities outside of voting?
- Has assuring the constituents in your county that the elections are safe and secure been a priority of the Office of the Supervisor of Elections/Board of Elections Commissioners since 2016?
  - In what ways has the Office of the Supervisor of Elections/Board of Elections Commissioners done this?
- What support election security (against hacking) does the Office of the Supervisor of Elections/Board of Elections Commissioners receive?
  - Is this primarily, completely, or not at all provided by State resources?

#### **County Elections Office Representative: Public Engagement and Security Support**

- Are you or someone else in the office available to discuss ways the Office of the Supervisor of Elections/Board of Elections Commissioners has engaged with the community since 2016 or how the county receives support for election security measures?
- Is it okay if I used this information publicly in a university research paper? Would you like to remain anonymous if you do share information?
- Is engagement with the community on election related activities before and between elections a priority for the Office of the Supervisor of Elections/Board of Elections Commissioners?
  - Despite the challenges of the past year due to the COVID-19 pandemic, in what ways does the Office of the Supervisor of Elections/Board of Elections Commissioners inform and engage the community in election activities outside of voting?
- Has assuring the constituents in your county that the elections are safe and secure been a priority of the Office of the Supervisor of Elections/Board of Elections Commissioners since 2016?
  - In what ways has the Office of the Supervisor of Elections/Board of Elections Commissioners done this?
- What support election security (against hacking) does the Office of the Supervisor of Elections/Board of Elections Commissioners receive?
  - Is this primarily, completely, or not at all provided by State resources?

### **Voter Questions: Public Trust and Voter Preferences**

- Would you like to remain anonymous?
- In which elections and states have you voted in?
- How did you register to vote?
- Do have any experiences of engagement (school, work, volunteer, educational) with the county elections office?
- Are you aware of whether or not your local elections office has social media account? Do you follow or engage online with them?
- In brief, what do you know about election security and foreign interference in U.S. elections?
- Who, or what, do you believe holds responsibility for ensuring a free and fair election process?
- Did the issue of election interference impact your vote in any way? (decision to vote, ability to vote, which candidate voted for, etc.)
- What changes to district, state, and national election systems, if any, would increase your confidence in the election system?
- Were you aware of the threat of foreign interference before voting?

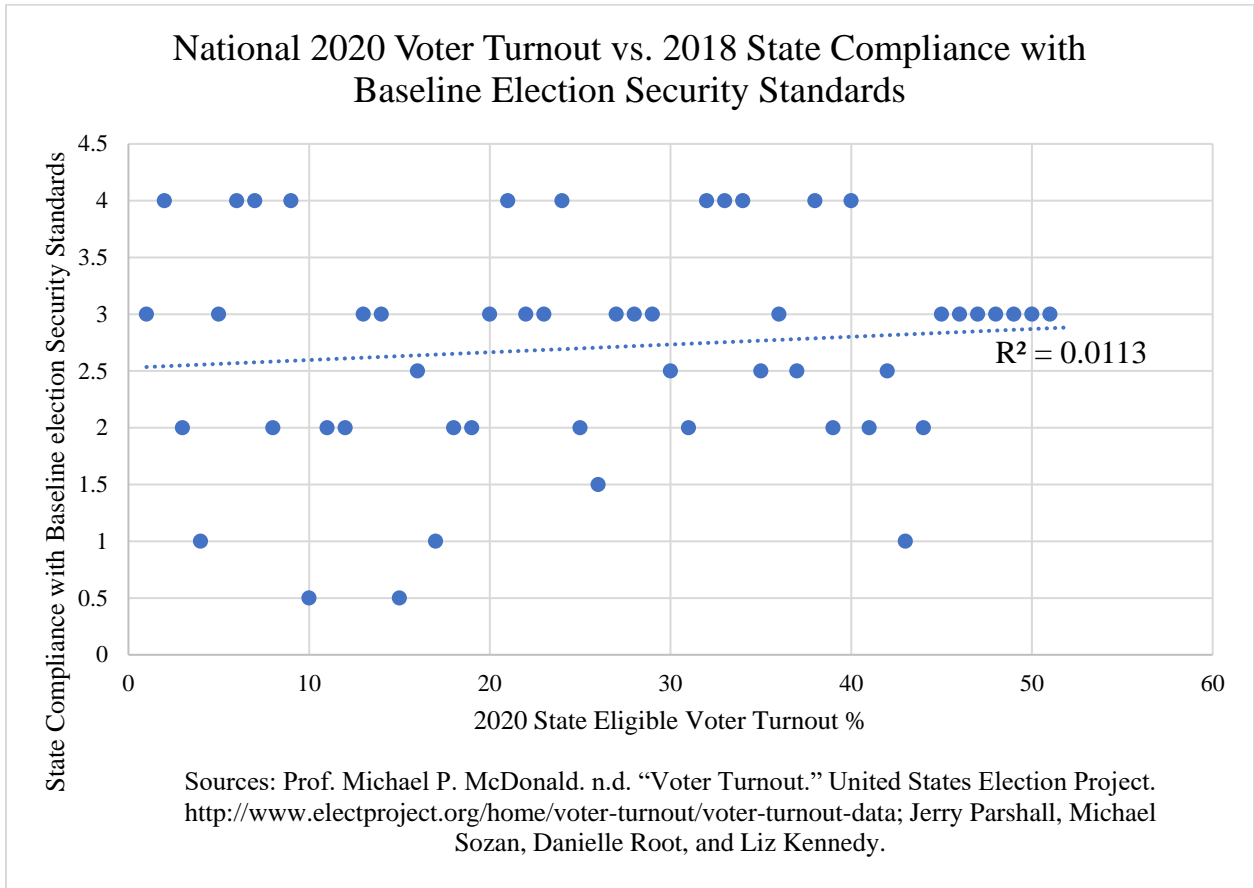
\* Follow up questions may vary depending on participant responses. \*



A1450 Board of Elections			2019	2020	2018	2019	2020	2020	2020
			Count	Count	Expended	Adjusted	Requested	Proposed	Adopted
<b>Contractual Expenses</b>									
A 1450 44020	Office Supplies				\$2,593	\$5,000	\$6,000	\$6,000	\$0
A 1450 44030	Other Supplies				\$7,021	\$9,000	\$10,500	\$10,500	\$0
A 1450 44035	Postage				\$55,733	\$50,000	\$70,000	\$70,000	\$0
A 1450 44036	Telephone				\$1,458	\$1,680	\$1,680	\$1,680	\$0
A 1450 44037	Insurance				\$2,831	\$2,831	\$2,831	\$2,831	\$0
A 1450 44038	Travel,Mileage,Freight				\$1,783	\$10,000	\$10,000	\$10,000	\$0
A 1450 44039	Conferences Training Tuition				\$6,031	\$10,000	\$10,000	\$10,000	\$0
A 1450 44042	Printing And Advertising				\$69,079	\$121,352	\$165,778	\$165,778	\$0
A 1450 44046	Fees For Services				\$140,254	\$175,000	\$238,500	\$238,500	\$0
A 1450 44065	Photocopier Lease				\$1,919	\$2,500	\$2,500	\$2,500	\$0
A 1450 44070	Equipment Repair And Rental				\$2,226	\$10,000	\$10,000	\$10,000	\$0
A 1450 44071	Property Repair And Rental				\$331,964	\$338,609	\$345,376	\$35,000	\$0
A 1450 44074	Election Day Costs				\$0	\$25,000	\$37,000	\$37,000	\$0
A 1450 44903	DGS Shared Services Charges				\$122,584	\$125,036	\$126,286	\$126,286	\$0
A 1450 44919	Election Data Services				\$98,506	\$114,000	\$115,000	\$115,000	\$0
A 1450 44975	Election Day Staffing				\$305	\$530,000	\$884,625	\$884,625	\$0
<b>Subtotal for: Contractual Expenses</b>					\$844,286	\$1,530,008	\$2,036,076	\$1,725,700	\$0
<b>Fringe Benefits</b>									
A 1450 89010	State Retirement				\$231,207	\$217,388	\$219,779	\$219,779	\$0
A 1450 89030	Social Security				\$88,475	\$97,112	\$106,130	\$104,122	\$0
A 1450 89060	Hospital and Medical Insurance				\$293,467	\$304,614	\$318,626	\$318,626	\$0
<b>Subtotal for: Fringe Benefits</b>					\$613,149	\$619,114	\$644,535	\$642,527	\$0
<b>Total Appropriations</b>					<b>\$2,696,506</b>	<b>\$3,468,694</b>	<b>\$4,117,931</b>	<b>\$3,779,545</b>	<b>\$0</b>
<b>Revenue</b>									
A1450	02216	Election Fees			(\$750,473)	(\$508,000)	(\$750,500)	(\$750,500)	\$0
A1450	02770	Other Unclassified Revenues			(\$7,964)	\$0	\$0	\$0	\$0
A1450	03225	SHOEBOX HAVA			\$0	(\$21)	(\$21)	(\$21)	\$0
<b>Total Revenue</b>					<b>(\$758,437)</b>	<b>(\$508,021)</b>	<b>(\$750,521)</b>	<b>(\$750,521)</b>	<b>\$0</b>
<b>County Share</b>					<b>\$1,938,069</b>	<b>\$2,960,673</b>	<b>\$3,367,410</b>	<b>\$3,029,024</b>	<b>\$0</b>

Figure 4: Albany, New York 2020 County Budget

Appendix C: National 2020 Voter Turnout vs. 2018 State Compliance with Baseline Election Security Standards



## Appendix D: New York State County Facebook Page Following

New York Counties with Facebook Pages	Number of Followers	% of County Population Following	New York Counties without Facebook Pages
New York	14,527	0.31%	Bronx
Albany	933	0.43%	Cattaraugus
Allegany	200	0.99%	Cayuga
Broome	1,880	0.70%	Clinton
Chautauqua	887	0.02%	Cortland
Chemung	15	1.21%	Genesee
Chenango	569	0.31%	Greene
Columbia	185	0.69%	Hamilton
Delaware	303	0.41%	Jefferson
Dutchess	1,199	0.16%	Kings
Erie	1,506	1.17%	Madison
Essex	431	0.37%	Montgomery
Franklin	186	1.87%	Niagara
Fulton	999	0.59%	Oneida
Herkimer	362	1.21%	Ontario
Lewis	319	0.98%	Orleans
Livingston	617	0.13%	Oswego
Monroe	1,001	0.01%	Queens
Nassau	198	0.89%	Richmond
Onondaga	2,106	0.46%	Saratoga
Orange	992	0.26%	Schenectady
Otsego	198	0.33%	Schoharie
Putnam	51	0.05%	Schuyler
Rensselaer	676	0.43%	Sullivan
Rockland	1,023	0.31%	Tioga
Seneca	523	1.54%	Washington
St. Lawrence	757	0.70%	Wayne
Steuben	338	0.35%	Westchester
Suffolk	137	0.01%	Wyoming
Tompkins	412	0.40%	Yates
Ulster	116	0.07%	
Warren	609	0.95%	

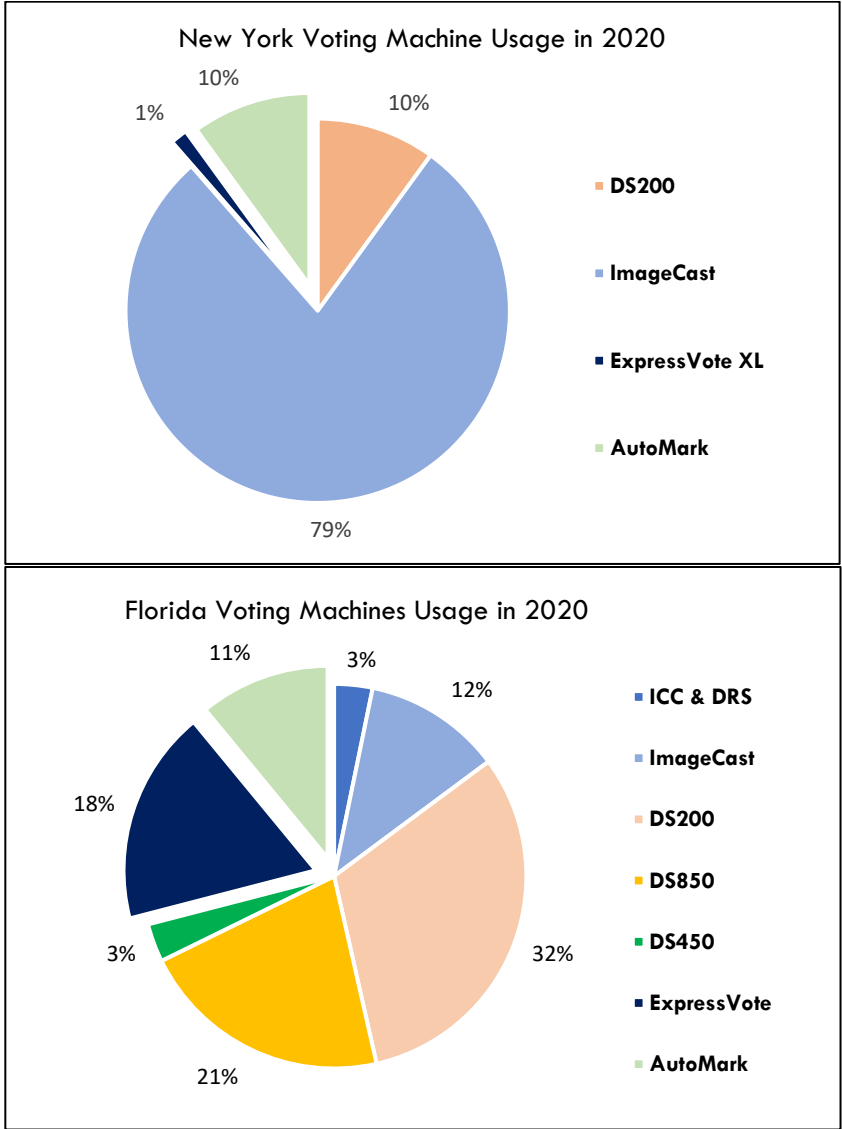
\*Data accurate as of April 2021.

## Appendix E: Florida County Facebook Page Following

Florida Counties with Facebook Pages	Number of Followers	% of County Population Following	Florida Counties with Facebook Pages	Number of Followers	% of County Population Following	Florida Counties without Facebook Pages
Alachua	3,415	1.27%	Lee	2,530	0.33%	Charlotte DeSoto Gulf Hardee Holmes Jefferson Madison Monroe Sumter Union Wakulla
Baker	142	0.49%	Leon	2,068	0.70%	
Bay	15	0.01%	Levy	1,452	3.50%	
Bradford	1,311	4.65%	Liberty	831	9.95%	
Brevard	3,689	0.61%	Manatee	1,070	0.27%	
Broward	3,235	0.17%	Marion	2,717	0.74%	
Calhoun	1,463	10.37%	Martin	1,068	0.66%	
Citrus	853	0.57%	Miami-Dade	3,094	0.11%	
Clay	2,506	1.14%	Nassau	698	0.79%	
Collier	1,597	0.41%	Okaloosa	2,397	1.14%	
Columbia	1,278	1.78%	Okeechobee	70	0.17%	
Dixie	548	3.26%	Orange	3,874	0.28%	
Duval	2,246	0.23%	Osceola	1,313	0.35%	
Escambia	1,611	0.51%	Palm Beach	2,773	0.19%	
Flagler	858	0.75%	Pasco	2	0.00%	
Franklin	862	7.11%	Pinellas	1,763	0.18%	
Gadsden	597	1.31%	Polk	2,735	0.38%	
Gilchrist	921	4.96%	Putnam	1,657	2.22%	
Glades	716	5.18%	Santa Rosa	1,190	0.65%	
Hamilton	527	3.65%	Sarasota	2,363	0.54%	
Hendry	508	1.21%	Seminole	2,925	0.62%	
Hernando	4,187	2.16%	St. Johns	1,169	0.44%	
Highlands	762	0.72%	St. Lucie	1,296	0.39%	
Hillsborough	3,107	0.21%	Suwannee	967	2.18%	
Indian River	1,544	0.97%	Taylor	1,161	5.38%	
Jackson	659	1.42%	Volusia	842	0.15%	
Lafayette	1,036	12.30%	Walton	1,318	1.78%	
Lake	1,443	0.39%	Washington	1,129	4.43%	

\*Data accurate as of April 2021.

Appendix F: Voting Machine Types Used in Florida and New York



# Appendix G: Annual County Election Budget 2000-2021 — Florida and New York

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Alachua	\$1,561,059.59	\$1,432,910.43	\$1,809,468.00	\$3,209,231.93	\$3,192,687.76	\$2,838,575.52																	
Baker																							
Bay																							
Brevard																							
Broward																							
Calhoun																							
Charlottesville																							
Chiefland																							
Citrus																							
Clay																							
Collier																							
Columbia																							
DuSoto																							
Dixie																							
Duval																							
Escambia																							
Flagler																							
Franklin																							
Gadsden																							
Gulf																							
Halifax																							
Hamilton																							
Hardee																							
Hendry																							
Hernando																							
Hillsborough																							
Indian River																							
Jackson																							
Jefferson																							
Lafayette																							
Lake																							
Lee																							
Leon																							
Levy																							
Liberty																							
Madison																							
Maitland																							
Manatee																							
Martin																							
Miami-Dade																							
Monroe																							
Nassau																							
Okaloosa																							
Okechobee																							
Orange																							
Osceola																							
Palm Beach																							
Palm Beach Gardens																							
Pinellas																							
Polk																							
Putnam																							
Santa Rosa																							
Sarasota																							
Seminole																							
St. Johns																							
St. Lucie																							
Sumter																							
Talman																							
Taylor																							
Union																							
Volusia																							
Washington																							
AVERAGE:	\$1,809,009.50	\$1,528,192.26	\$4,085,604.36	\$4,051,798.10	\$4,797,596.90	\$5,124,980.16	\$5,175,695.82	\$5,596,055.89	\$5,908,591.81	\$4,126,771.63	\$5,151,065.64	\$5,846,858.16	\$5,513,820.23	\$3,098,480.99	\$3,158,688.88	\$3,877,218.36	\$3,776,641.33	\$3,587,011.33	\$3,331,939.08	\$4,181,832.27	\$4,287,659.23	\$3,707,490.85	
% Change	-15.52%	167.85%	-0.83%	18.41%	6.82%	6.97%	8.12%	5.83%	8.12%	-30.16%	9.88%	2.53%	-6.69%	-11.82%	1.94%	22.55%	-2.65%	-11.86%	-1.07%	25.87%	2.54%	-13.51%	
Cumulative Four Year % Change				169.40%																			
Inflation Rate	149%	147%	144%	141%	136%	132%	129%	125%	124%	123%	119%	115%	113%	112%	110%	110%	108%	105%	105%	103%	101%	100%	100%

Table 4: New York County Election Budgets

County	2000 Budget	2001 Budget	2002 Budget	2003 Budget	2004 Budget	2005 Budget	2006 Budget	2007 Budget	2008 Budget	2009 Budget	2010 Budget	2011 Budget	2012 Budget	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	2018 Budget	2019 Budget	2020 Budget	2021 Budget	
Alachua																							
Albany																							
Alford																							
Broward																							
Calhoun																							
Charlotte																							
Clay																							
Collier																							
DeSoto																							
Duval																							
Escambia																							
Franklin																							
Flagler																							
Florida																							
Greene																							
Hamilton																							
Hernander																							
Jefferson																							
Levy																							
Lynn																							
Madison																							
Manatee																							
Monroe																							
Nassau																							
New York City																							
Niagara																							
Ontario																							
Osceola																							
Orange																							
Oregon																							
Polk																							
Putnam																							
Rockland																							
Sarasota																							
Seminole																							
Schlesinger																							
Schwartz																							
Schwyler																							
Sears																							
St. Lawrence																							
Strom																							
Suffolk																							
Tallahassee																							
Tampa																							
Tarascon																							
Taylor																							
Volusia																							
Washington																							
Wayne																							
Wheeler																							
Wyoming																							
Yates																							
<b>AVERAGE:</b>																							
<b>% Change</b>																							
<b>Cumulative Four Year % Change</b>																							
Inflation Rate	149%	147%	144%	141%	136%	132%	129%	129%	124%	123%	120%	119%	115%	112%	110%	110%	108%	108%	103%	101%	100%	100%	100%

Table 5: Florida County Election Budgets

Appendix H: Interview Codebooks

<b>Local Election Administration Engagement Codes:</b>		
<b>Elements of Public Engagement 2016-2020 on Behalf of Election Officials/Offices Discussed</b>		
	<b>Administrative Engagement</b>	<b>% of interviewees that mention:</b>
<i>Florida</i>	Virtual events	14.3%
	Community events	42.9%
	School visits	35.7%
	Social media	28.6%
<i>New York</i>	Virtual events	0.0%
	Community events	16.7%
	School visits	25.0%
	Social media	25.0%
<b>Challenges to Engagement</b>		
<i>Florida</i>	Office size	28.6%
	Funding/Resource shortage	8.3%
<i>New York</i>	Office size	16.7%
	Funding Resources	0.0%
<b>Voters' Engagement Experience</b>		
<i>Florida</i>	Social media follower	0.0%
	School experience	50.0%
	Public community event	0.0%
<i>New York</i>	Social media follower	0.0%
	School experience	33.3%
	Public community event	0.0%

**Local Election Administration Security Codes:  
Elements of Election Security Support for County Election Offices**

	<b>Access to Support</b>	<b>% of interviewees that mention:</b>
<i>Florida</i>	State provided additional grants 2016-2020	78.6%
	State provided technical help 2016-2020	57.1%
	Contracted technical support 2016-2020	7.1%
<i>New York</i>	State provided additional grants 2016-2020	58.3%
	State provided technical help 2016-2020	0.4%
	Contracted technical support 2016-2020	0.0%

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