

Index

absentee ballots. See also mail ballots; Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) audits of voter tallies and, 76-78 civilian absentee ballot rejection percentages, 302 for disabled voters, 210-218 Election Administration and Voting Survey data on, 13-14 Federal Write-In Absentee Ballot, 141-142 history of, 116, 141-142 mail ballot research, 32-33, 174-176 no-excuse requests for, 167-169 rejection rates, interstate comparisons, 4-5n7, 32-33, 132-134 traditional absentee voting, 114, 115-121 transparency and data availability issues in, 274-276 unreturned ballots, 129-131, 302 UOCAVA return rate comparisons, 163-164f, 164f, 165f usage rates for, 128-129 validity and reliability of, 4-9 voter confidence and use of, 256-261 abstention rates, voting machine performance analysis and, 244-246 academic survey research, election data using, 18-19 acceptance rate data mail ballot analysis, 135–137 provisional ballots, 94-97, 101-111, 1021110 accessibility issues convenience vs., 272n1 election performance and, 36 election security and, 272-273

accuracy problems, registration list processing and quality control, 61 active voter definitions, Election Administration and Voting Survey and, 15 address information accuracy of, in voter registration data, 71f communication with voters using, 69, 70-72 incidence of incomplete information, 70-71 missing data in, 66-67, 70-72 summary index of registration quality and, 82-85 undeliverable addresses, 66-67, 71-72 administration of elections. See also local election administration systems ballot technology and, 172-174 campaign practices and, 185-187 data transparency and, 271-297 disabled voters and, 210-218 early voting research and, 174-176 future research issues, 137-138 impact of mail ballots on, 115t, 121-126 mail ballot rejection rates and, 132-134 measurement data transparency and, 272-273 partisanship of officials, provisional ballot usage and, 100 residual vote rate distribution analysis and, 244-246 transparency and data availability issues in, 274-276 voter confidence metric concerning, 248-270, 26ot African American voters, voter confidence among, 256-261

348 Index

age levels, disabled voter turnout rates and, 194-201, 196n11 aggregation rule, state-based election evaluation, 25-30 Alvarez, R. Michael, 172-176, 240-242 American Community Survey, disable voter data, 8 American elections administrative validity and reliability of, 4-9 assessment data sources, 9-19 myths and misperceptions concerning, 1 state-based evaluation, 19-30 turnout statistics for, 2 American National Election Study (ANES), 28 voter abstention data and, 244-246 Ansolabehere, Stephen, 28, 46, 59-60, 61-90, 172-174, 225-228 on voter registration, 31 Atkeson, Lonna Rae, 36, 251–252, 271–297 audits of vote tallies requirements for, 305 state-by-state comparison of, 72-76n1, 76-78 voter confidence and, 261t, 262-263 voting machine performance and, 228-230 Australian ballot, 15-18

ballots. See also absentee ballots; counted ballot/counted voter discrepancies; mail ballots; provisional ballots; rejected ballots

blank ballots, 236n9 residual vote rate and cour

residual vote rate and counting of, 224–225 technology innovation, historical evolution of, 230–234

transit problems, UOCAVA ballots, 142–148 turnout measurement and counting of,

43-45, 49

barriers to voting

for disabled voters, 190–193, 205–210 socioeconomic barriers for disabled voters, 205–210

UOCAVA participation, 142–148 voter registration list barriers, 61–62

Being online is Not Enough: State Elections Websites 20008 (BONE I), 287–288, 295–296

Being online is Still Not Enough: Reviews and Recommendations for State Elections Websites 2010 (BONE II), 287–288, 295–296

Berinsky, Ádam J., 167-169

biased data processing
disabled voters data, 194n9, 205–210
registration list quality and, 63–65
birthdate coverage
factor analysis of, 85–88
missing data in, 67
voter authentication, state-by-state
comparisons, 72–75, 74f
birthdate distribution
missing data in, 67

voter authentication, state-by-state coverage, 72–75, 75f bivariate analysis. See also multivariate

analysis; statistical analysis disabled voter turnout, 194–201 polling place operations research, 183–185 blank ballots, residual vote rate and, 236n9 bottom-up data management, voter registration and turnout measurement

and, 56–59 "Building Confidence in U.S. Elections," 248 Burden, Barry C., on registration and

turnout, 30–31

Bush v. Gore, voting machine technology as issue in, 230–234

Caltech/MIT Voting Technology Project, 91, 224–225

campaign practices, early voting impact on, 185–187

Carter, Jimmy, 10111

Catalist LLC

data gathering methods, 63–65 voter registration data, 31, 48, 62–63 Census Bureau. *See also* Current Population

Survey (CPS) disabled voters data, 193–194 disable voter data, 188n1, 193n6 Voter and Registration Survey, 122 voter registration list accuracy and, 61–62

Voting Age Population (VAP) estimate, 43–45

centralization of voting places distance issues with, 174n6 polling location difficulties and, 180–183 research hypotheses concerning, 174–176 turnout rates and, 169–172 voter satisfaction with, 185–187 wait times for voting and, 177–180

churches as polling places early voting turnout at, 169–172 location difficulties with, 180–183



Index 349

Citizen Voting Age Population (CVAP), 45n5 civilian overseas voting data, 144n6 civilian absentee ballot rejection percentages, 302 comparison of 2008, 2010, and 2012 absentee ballots, 277-279 Coding Accuracy Support System (CASS), 67 commercial election data vendors, voter registration list quality and, 63-65 commercial survey research, election data using, 18-19 competitiveness of campaigns "fall-off" in turnout rates and, 56-59 voter registration and turnout correlation with, 53-56 completeness of election data comparison of 2010 and 2012 overall completeness by section, 279-283, 282t EVAS rates for, 305 state-based assessment, 284-285f, 285f voters online searches and, 288-290 confirmatory factor analysis, state-based election evaluation, 28 contestation vs. participation principle (Dahl), 21 convenience in voting accessibility issues vs., 272n1 turnout rates and, 169-172 voter confidence and, 263-266 voter satisfaction and, 170n5, 185-187 Cooperative Congressional Election Study (CCES) voter abstention data and, 244-246 voter confidence data in, 256n11, 256-261 correlation coefficients, voter data crosschecking analysis, 85-88 cost analysis of elections, centralization of polling operations and, 185-187 counted ballot/counted voter discrepancies. See also recount problems, voting machine performance and provisional ballots and problems with, state-by-state comparisons, 76-79, 77f voter confidence and, 251 county election administration residual vote rate analysis and, 244-246 voter registration and turnout rate variations, 49-52

Crawford v. Marion County, 248-250 cross-sectional regression heterogeneity in voting machines and performance analysis using, 234-238 voter registration and turnout measurement, 56n20 current list maintenance, state-by-state comparisons, 78-82 Current Population Survey (CPS), 10 early voting data, 167-169 quality measurement of, 85-88 voter registration measurements, 40-41, 45-49 Dahl, Robert, 21 database cross-checking systems, 85-88, 301 data sources for American elections, 9-19 academic and commercial survey research, 18-19 comparison of 2008, 2010, and 2012 elections, 277-282, 278t comparison of 2010 and 2012 overall completeness of EAVS data by section, 279-283, 282t disabled voter data, 193-194 EAC quantitative data, assessment of, 276-277 Election Administration and Voting Survey, 12-15 list processing and quality control and, 63-65 mail ballot data shortage, 121-126 new index measures, analysis of, 85-88 Pew database cross-checking system, 85–88 quality indicators, 66-69 stakeholder transparency and data availability, 274-276 state and local election boards, 15-18 transparency of, 271-297 UOCAVA data sources, 150-152 voter's perceptions of transparency in, 287-288 Voting and Registration Supplement, 9-19 deadwood current list maintenance and, 78-82, 84f factor analysis of, 85-88 obsolete voter data, 68 summary index of registration quality and, 82-85

voter registration lists, 301



350 Index

deceased voters current list maintenance and, 78-82, 79f data quality for, 67 factor analysis of, 85-88 decentralized election administration, registration list processing and quality control, 61-90 state-based election evaluation, 25-30 voter confidence and, 248-250 demographic data disabled voter turnout rates and, 194-201 provisional ballot research and, 100 voter confidence and role of, 256-261 voter registration and turnout measurement and, 53-59 direct barriers for disabled voters, 205-210 direct recording electronic voting machines (DREs), 172-174 heterogeneity in, 234-238 historical evolution of, 230-234 residual vote rates and performance of, 242-244 residual vote rates using, 243f statistical analysis of residual vote rate and, 238-240 disabled voters barriers to voting for, 190-193 current and future research issues for, data concerning, 11, 111112 election performance measurements and, 205-210 election policies and practices concerning, 34, 210-218 non-voting by, reasons for, 201-205 non-voting percentages of, 304 statistics on, 188 theory and research sources on, 190-193 turnout rates for, 194-201 discrimination of disabled voters, 190-193, 205-210 racial identity, voter confidence and, 256-261, 256t disenfranchisement of voters, provisional ballots as protection against, 92-94 Doherty, David, 82-85 down-ballot races, audits of voter tallies and, 76-78 Dunaway, Johanna, 185-187

Eagleton-Moritz analysis, provisional ballot usage and acceptance, 101-111 early voting disabled voter access and, 210-221 Election Administration and Voting Survey data on, 15 historical evolution of, 41-43 increased use of, 167-169 location and setting of, 169-172 polling place operations research concerning, 183-185 as positive voting experience, 166-167 research on, 33-34, 174-176 residual vote rates and, 242-244 turnout and registration measurement and, 56-59 voter confidence analysis and, 263-266 voter registration during, 53-56 voter satisfaction with, 185-187 waiting times for, 177-180 educational levels disabled voter turnout rates and, 194-201, 205-210 turnout rates and, 7-9 Election Administration and Voting Survey (EAVS) accessibility and transparency issues and, 36 comparison of 2008, 2010, and 2012 elections, 277-282, 278t comparison of 2010 and 2012 elections and, comparison of 2010 and 2012 overall completeness of data by section, 279-283, 282t data completeness rates, 305 data transparency issues, 271-272 disabled voters data, 189, 193-194 election assessments using, 12-15 mail ballot data, 114, 121-126, 128-129 provisional ballot research and, 32, 98-99 quality measurement of, 85-88 rejected mail ballot data, 132-134 transparency and data availability issues in, 274–276 UOCAVA voter data, 151 voting system choice and mail ballot use, 128-120 "Election Administration by the Numbers: An Analysis of Available Datasets and How to Use Them" (Pew), 12-15, 277-279



Index 351

employment barriers, disabled voter

discrimination and, 205-210

Election Assistance Commission (EAC). see U.S. Election Assistance Commission (EAC) Election Day Registration (EDR) assessment of, 40 for disabled voters, 210-218 HAVA provisions concerning, 97n4 measurement issues with, 43-45, 56-59 provisional ballots and, 97-100 purging requisites and, 78-82 turnout rates and, 53-56 wait times for voting and, 177-180 Election Day vote centers (EDVCs) distance issues with, 174n6 early voting turnout at, 169-172 location difficulties with, 180-183 polling place operations research concerning, 183-185 voter satisfaction with, 174-176 waiting times for, 177-180 Election Initiatives project, 22-25 election laws, turnout rates and, 53-56, 56f election machines. see voting machines election officials. see administration of elections; local election administration Election Performance Index (EPI), 22-25, 231122 analysis of, 85-88 indicators in, 299-305 election results. see also audits of vote tallies; counted ballot/counted voter discrepancies comparison of provisional ballots of 2010 and 2012 elections, 101-111 election data using, 17-18 residual vote rate and, 224-225 turnout measurement and, 43-45, 49 voter registration list quality and, 65-69 vote tally audits, state-by-state comparisons, 76-78 election-specific mail ballots, 114, 115-121 Election Systems and Software (ES&S), 230-234 Votronic DRE system, 242-244 Electronic Registration Information Center (ERIC) initiative, 59-60 electronic voting machines, 172-174, 230-234 eligible voting population as percentage of registered voters, 300 turnout as percentage of, 300

factor analysis, quality measurements of voter data and, 85-88 fail-safe election measures degrees of provisional ballot use and, 94-97 provisional ballots as, 32, 92-94 "fall-off" in turnout rates, state variations in, 56-59 federal elections mail ballot data for, 121-126 provisional ballot use in, 103t residual vote rate in, 225f statistical analysis of technology and residual vote rate in, 238–240 transparency and data availability issues in, 274-276 UOCAVA voting and, 141-142 voting machine technology and, 233 Federal Postcard Application, 141-142 Federal Voting Assistance Program (FVAP) surveys, 150-151 UOCAVA voting participation barriers, 142-148 Federal Write-in Absentee Ballot (FWAB), returned ballot data, 152 FIPS codes, disabled voters data and, 193-194 first time voters, polling place location difficulties for, 180-183, 183t "flipped" votes, residual vote rates and analysis of, 242-244 Foley, Edward B., 95, 97-100, 101-111 "for cause" absentee voting. See also no excuse voting for disabled voters, 210-218 disabled voters data for, 189, 210-218 in-person early voting, 167-169 mail ballots and, 120 traditional absentee voting and, 114, 115-121 voting technology and residual voting rate and, 240-242 Fulton County, Georgia, vote counting controversy in, 12-15 "gatekeeping" decisions, disabled voter barriers and, 190-193 geographic area polling location difficulties and, 180-183 residual vote rate distribution and, 225–228 voter confidence variation by, 256-261

352

Index

Gerber, Alan, 82-85 identification requirements Gerken, Heather K., 25-30 HAVA vs. state requirements, 93n3 get-out-the-vote (GOTV) efforts, voter limitations as quality indicator, 272-273 list data quality and, 65-69 registration and turnout correlation with, 53-56 voter authentication, state-by-state Google search phrases, online search comparisons, 72-75 assessment and analysis of, 288-290, voter confidence and, 248-252, 254-255, 289t, 290t Government Accountability Office, voter fraud arguments for, 267-268 disabled voter accessibility data, income level, as disabled voter barrier, 190-193, 192113 205-210 Gronke, Paul, 35-36, 248-270 Indiana, election performance evaluation in, 22-25 Hall, Thad, 33, 114, 141-165, 172-176, indirect barriers for disabled voters, 205-210 240-242, 250-252 individual-level data, mail voting research Hammer, Michael J., 32, 91–112 and, 137-138 Hart InterCivic voting machines, 230-234 inequality issues, turnout measurement hearing-impaired voters, turnout rates for, and, 59-60 194-201 infrequent voters Help America Vote Act (HAVA) purging of voter data and, 69-70 ballot technology and, 172-174 research hypotheses concerning, 174-176, disabled voter accessibility requirements, 185-187 in-person voting disabled voters and, 34, 189 absence of rejection measurements for, 126 Election Day Registration provisions, early voting data, 167-168n3, 169-172, 174-176 identification requirements in, 93n3 residual vote rates and, 242-244 impact of, 41-43 unreturned mail-ballot measurement vs., 125 impact on state provisional ballot voter confidence and role of, 254-255 procedures, 98-99 waiting times for, 177-180 passage of, 62 intellectual disabilities, voting provisional ballot research and, 32, 92-94, disqualification based on, 190-193 97-100, 101-111 invalid address data, factor analysis of, 85-88 provisional ballots and, 91 isolation problems, for disabled voters, stakeholder transparency and data 190-193 availability expansion under, 274-276 Uniformed and Overseas Citizens Journal of the American Medical Association Absentee Voting Act ballots and, 33 (JAMA), 6-7 UOCAVA data evaluation, 152-163 justification bias, in disabled voters data, voter confidence and impact of, 251 194n9, 205-210 voting machine technology and, 230-234, Kimball, David, 101-111 242-244 Hernson, Paul S., 32, 91-112 Kolomogorov-Smirnov test of differences state-level mail ballot data, 129n13, 130n14 Hersh, Eitan, 31, 46, 59-60, 61-90 unreturned mail ballots, 129n12 heterogeneity in voting machines, Kruse, Douglas, 11, 34, 188-222 performance assessment and, 234-238 Hollerith card, punch card voting machines least square regression, voter confidence and, 230–234 analysis, 261-262 homogeneity in technology, residual vote rate "leaves on a tree" measurement technique, 21 and, 234-238 legislative policies, state mail ballot systems human-machine interaction analysis, voting and, 115–121 machine performance and, 228-230



Index 353

lever voting machines, historical evolution loser's regret of, 230-234 voter confidence and, 254-255, 256-261, lines at polling places. See waiting times 267f to vote voter fraud perceptions and, 267-268 list processing and quality control lower bound in residual vote rate, voting audits of vote tallies, 72-76n1, 76-78 machine performance analysis and, currency of list, maintenance for, 78-82 244-246 data characteristics and, 63-65 mailability prediction, address accuracy deadwood percentages and, 301 and, 71-72 new index measures, analysis of, 85-88 mail ballots. See also absentee ballots; precinct assignment of voters and mail permanent vote-by-mail systems communication, 70-72 disabled voters and, 190-193, 194-201, state-by-state analysis of, 69-82 summary index of registration quality, early vote using, 167-169, 174-176 69-88t election-specific ballots, 114, 115-121 voter identification at polling places, future research issues, 137-138 impact on outcomes, 121-126 voter registration and, 31, 61-90 increased use and acceptance of, 113-114, litigation risk, provisional ballot usage and acceptance and, 94-97 127f permanent vote-by-mail, 114, 115-121 local election administration systems. policy choice and administrative See also administration of elections; challenges in, 32-33, 113-140 polling place practices barriers to UOCAVA and, 142-148 postal voting systems, 114, 115-121 registration lists as tool for, 69-70 as data source, 15-18 requests for, 135-137 mail ballot rejection or acceptance by, 125 systems of, 115-121, 115t provisional ballot usage and, 100 unsigned ballots, statistics on, 135-133f quantitative transparency evaluation, voter confidence in, 254-255, 256-261, 286-287 263-266 residual vote rate analysis and, 244-246 voter registration rates and, 53-56 stakeholder transparency and data voter satisfaction with, 174-176 availability issues, 274-276 UOCAVA voting data and, 150–151, 154f voting system choice and usage data, voter confidence and, 254-255, 255110, 128-120 mail communication with voters, address list 263-266, 264f accuracy and, 69, 70-72 voting machine distribution and, 233 maintenance of voter rolls voting technology and residual vote rate current list maintenance, state-by-state and, 240-242 comparisons, 78-82, 8of locations for voting provisional ballot use and, 95-96 data concerning early voting, 169-172 Mann, Christopher B., 32-33, 113-140, difficulties for voters in finding, 180-183, 182f, 183t marginal voters, polling place operations disabled voter accessibility and, 210-218 research concerning, 183-185 online voter information about, 290-292 Martinez, Ray, 248-250 percentage of successful voter searches McDonald, Michael, 43-45, 49 for, 304 logit regression measurement techniques data transparency problems, 272-273 disabled voter turnout rates, 194-201 errors in, data quality assessment polling place operations research, 183-185, and, 85–88 voter registration and turnout longitudinal analysis, heterogeneity in voting

assessments, 45-49

machines and, 234-238

354

Index

media coverage of elections National Voter Registration Act (NVRA), early voting impact on, 185-187 274-276 voter confidence metric and, 248 Medicare, quality of care for recipients Survey, 12-15 impact of, 41-43 of, 6-7 midterm elections disabled voter turnout for, 218-221 provisional ballot usage and acceptance and, 45-49 in. 101-111 absentee voting residual vote rates in, 224n1 Military and Overseas Voting Enfranchisement (MOVE) Act ballot transit issues and, 142-148 mail ballots and, 120 compliance data on, 144n7 data evaluation, 152-163 history of, 141-142 Uniformed and Overseas Citizens Absentee Voting Act ballots and, 33 military voter profiles, UOCAVA categories, 142-148 Minnesota, election performance evaluation obsolete voter data in, 22-25, 25n23 minority voter turnout measurement of, 59-60 provisional ballot usage and, 100 deadwood, 68 voter confidence and, 256-261, 256t missing data address information, 66-67 comparison of 2010 and 2012 overall completeness of EAVS data by section, 292-297, 294t 279-283, 282t election performance evaluation and, 22-25 291t, 292t mobile voting centers, early voting turnout at, 169-172 mobility problems, for disabled voters, 288-290 190-193 "motor voter" legislation, 40. See also National Voter Registration Act 287-288 (NVRA) issues, 36 impact of, 41-43 online voter registration multivariate analysis voter confidence, 261-262, 269-270 voter registration and turnout openness of polling places correlation, 53-56 operations research concerning, 183-185 Munck, Geraldo, 21 polling location difficulties and, 180-183 National Association of Secretaries of State research hypothesis concerning, 174-176 (NASS), 2 turnout rates and, 169-172 National Change of Address (NCOA) voter satisfaction and, 185-187 wait times for voting and, 177-180 database, 63-65

Election Administration and Voting purging guidelines, 69-70, 78-82 voter registration measurements no excuse voting. See also "for cause" disabled voters data for, 189, 210-218 in-person early voting, 167-169 voter confidence analysis and, 263-266 disabled voters as, 194-218, 304 motivations of, 272-273 percentage of registration problems for, 301 polling place operations research concerning, 183-185, 183t, 304 audits of vote tallies and purging of, 76-78 current list maintenance and, 78-82, 8of online information sources qualitative assessment of state websites, usability assessment of state websites, usability of state election web sites, 305 voter-focused evaluation of, 295-296 voter information, assessment of, 290-294, voter satisfaction with, 292-297, 294t voter's online searches, transparency in, voter's perceptions of transparency in, voting accessibility and transparency disabled voters, 210n14, 210-221 historical evolution of, 41-43

optical scanning technology

data cross-checking using, 85-88



Index

355

for disabled voters, 210-218 historical evolution of, 230-234 43-45 performance measurement of, 228-230 single-state technology and residual voting See also mail ballots rate analysis, 240-242 statistical analysis of residual vote rate and, increased use of, 167-169 238-240 voting process and, 172-174 usage rates for, 128-129 ordered probit analysis, voter confidence, 261 over votes. See also under votes ballot technology and occurrence of, Pettigrew, Stephen, 122 172-174 blank ballots and, 236ng elections, 277-279 paper ballots single-state analysis of residual voting rates with, 236f and, 82-85 technological innovations in, 230-234 policy choices voter satisfaction and confidence and, voting machine heterogeneity and, 234-238 partisanship statistical data on, 1-2 operations research concerning, 183-185 provisional ballot usage and, 100 voter confidence and, 254-255 190-193 percentage of the range, state-based election evaluation, 27–28 measurements and, 272 percentile approach, election performance evaluation, 22-25 performance measurements for elections precincts alternatives to residual vote rate, 228-230 common themes in, 37-39 impact on, 185-187 data transparency problems, 272-273 disabled voter policies, 210-218 election administration, 7-9 election machines, 223-247 of elections, disabled voters' impact on, 205-210 Survey, 12-15 heterogeneity in voting machines and, 234-238 indicators of, 299-305 methodology overview, 19-30 182f, 183t, 183t, 304 provisional ballot usage and acceptance, 92 residual vote rate and voting machine performance, 224-238, 242-244 200-202 state-based election evaluation, 19-30 Uniformed and Overseas Citizens 183-185, 183t Absentee Voting Act, 141-165 validity and reliability testing, 4-9 usage, 100 values for performance indicators table, 306-319

voter registration and turnout rates, permanent vote-by-mail systems, 114, 115-121. for disabled voters, 210-221 unreturned mail ballots in, 129-131 voter confidence analysis and, 263-266 voter satisfaction with, 174-176 Pew Center on the States, 22-25 comparison of 2008, 2010, and 2012 new index measurements from, 85-88 summary index of registration quality disabled voter policies, 190-193, 210-218 mail-ballot impacts on, 139 mail ballot rejection rates and, 132-134 voter confidence metric and, 248-250 political recruitment, for disabled voters, political values, election administration polling place practices. See also local election administration systems; campaign practices and media coverage current research on, 33-34, 174-176 disabled voter accessibility and, 190-193, disabled voter turnout rates and, 194-201 Election Administration and Voting location and administration, research hypotheses concerning, 174-176 location difficulties for voters, 180-183, non-voter percentages due to, 304 online information sources, 41-43, operations research concerning, 174-176, partisanship and provisional ballot registration lists as tool for, 69-70 state-by-state ratings of, 184f voter authentication, 65-69

voter confidence metric, 35-36, 248-270

356 Index

polling place practices (cont.) voter confidence and, 250-252, 254-255, 256-261, 265f, 266f, 267f voter fraud perceptions and, 267-268 voter identification, state-by-state comparisons, 72-75 voter satisfaction research and, 174-176 voting experience and, 166-187 voting location changes and, 169-172 voting machine performance measurement and, 228-230 wait times for voting and, 177-180 Pollster.com, voter registration and turnout estimates by, 53-56 population size, UOCAVA voter population, 148-149 postal voting systems, 114, 115-121 disabled voters data, 189 rejection rates, interstate comparisons, 132-134 unreturned mail ballots in, 129-131 usage rates for, 128-129 Post Office database, 63-65 post-registration policies, voter registration and turnout and, 59-60 precincts. See also local election administration systems; polling place practices consolidation of, impact on turnout, 169-172 disabled voter access in, 210-218 mapping of voters to, 65-69 stakeholder transparency and data availability issues in, 274-276 voter assignment to, 70-72 wait times for voting and number of, 177-180 pre-Election Day voting. See early voting . Premier Data Systems, 230–234 presidential elections lower bound to residual vote rates in, 244-246 provisional ballot usage and acceptance in. 101-111 residual vote rates in, 224-238 principal components analysis, quality measurements of voter data and, privacy issues, birthdate coverage and voter authentication, 72-75 private homes as polling places, voter difficulty with, 180-183

prospective voters, polling place operations research concerning, 183-185 provisional ballots acceptance and usage measurement and interpretation, 94-97 comparison of 2008, 2010, and 2012 data, 277-279 comparison of 2010 and 2012 usage and acceptance rates, 101-111 current research on, 32 Election Administration and Voting Survey data on, 12-15 in federal elections, 103t historical context for, 92-94 registration lists and, 60 rejection percentages for, 302 research history concerning, 97-100 state-by-state comparisons of, 98-99, 102f, 104f, 106-109f, 107f, 108f, 109f substantive vs. procedural view of, 97-100 transparency and data availability issues with, 274-276 turnout percentages for, 302 usage and acceptance analysis, 91-112 psychological factors for disabled voters, 190-193 disabled voters' reasons for not voting, 201-205 psychometrics, validity and reliability testing, 4-9 punch card voting machines heterogeneity in analysis of, 234-238 historical evolution of, 230-234 performance of, 223-224 residual vote rate and, 225-228 single-state analysis of residual voting rates with, 236f purging of voter data audits of voter tallies and, 76-78 requisites for, 78-82 vote history as basis for, 69-70

quality indicators
definitions in EPI for, 300–306
EAC transparency assessment, 287
election administration measurements,
272–273, 299–305
future research issues, 89–90
for list data, 66–69
new index measures, analysis of, 85–88
qualitative assessment of state websites,
292–297



Index 357

summary index of registration quality,	blank ballots and, 236n9
69–88t	calculation of, 304
values for performance indicators table,	decline in U.S. of, 223–247
306–319	derivation of, 224–225
voter-focused evaluation of, 295–296	disabled voters, 190–193
voter registration list management, 62–69	distribution across time and space,
quantitative data assessment	225–228
election data, 276–277	election data using, 15–18
transparency evaluation, 286–287	future research issues and
	recommendations concerning, 246–247
racial identity, voter confidence and role of,	lower bound in, 244–246
256–261, 256t. See also minority voter	mail ballot analysis, 135–137
turnout	in national elections, 225f
recount problems, voting machine	paper vs. electronic balloting, 172–174
performance and, 223–224	research on, 34–35
registration date accuracy	single-state analysis of voting technology
factor analysis of, 82–83f, 83f, 85–88	and, 236f, 240–242, 245f
purging requisites and, 78–82	state-based election evaluation, 225–228,
regression analysis	226n3
polling location difficulties, 180–183, 183t	statistical analysis of voting technology
polling place operations data, 183–185,	and, 238–246
183t	turnout measurement and, 43–45
turnout rates, 157	voter confidence analysis and, 263–266
UOCAVA ballot data, 159t, 160t	voting machine heterogeneity and,
voter confidence, 261–262	234-238
voting machine technology and residual	voting machine performance and, 224-238,
vote rate, 238–240	239t, 242–244
wait times for voting, 177–180	resource limitations, for disabled voters,
rejection rates	190-193
absentee ballots, 4–5n7, 32–33	returned ballot data, UOCAVA voting, 152,
civilian absentee ballots, 302	158t, 161f, 163–164f, 164f
mail ballot data, 121–126, 132–135, 133f, 134f	"risk-adjusted turnout" data, limitations
provisional ballots, 302	of, 7–9
UOCAVA ballots, 152–163, 157t, 158t, 162f,	Rodden, Jonathan, 28
165t, 303	Rosenstone, Steven, 11
voter applications, 85–88	
reliability	same day registration (SDR)
of American election administration, 4–9	for disabled voters, 210–218
comparison of 2010 and 2012 overall	turnout rates and, 53–59
completeness of EAVS data, 279–283,	sample size, data quality assessment
282t	and, 85–88
of disabled voters data, 205–210	scaling techniques
mail ballot measurement, 135–137	Cronbach's alpha and, 28–29n25
turnout rate measurement, 49	state-based election evaluation, 28–29
voter registration measurements, 45–49	scatterplots, voter registration data, 45-49, 53f
repeat voters, polling location difficulties for,	school-based polling places
180–183, 183t	early voting turnout at, 169–172
Report on 2008 Early and Absentee Voting	location difficulties with, 170n4,
Dataset (Cemenska), 174–176	180–183
request data, mail ballot analysis, 135–137	Schur, Lisa, 11, 34, 188–222
residual vote rate	search costs, voting location changes and,
alternatives to, 228–230	169–172



358 Index

search phrase index, voters online search correlation with, 288-290 Secure Electronic Registration and Voting Experiment (SERVE), UOCAVA population size, 148-149 security management, voter accessibility and, 272-273 shopping centers polling places early voting turnout at, 169-172 location difficulties with, 180-183 Snyder, James M., 28 social science research, voter confidence measurement and, 250-252 Social Security Death Index, 63-65, 67 socioeconomic barriers, for disabled voters, 205-210 Southwell, Priscilla, 167-169 stakeholder transparency, election data availability and, 274-276 state-based election administration, 19-30 aggregation of data, 25-30 authority of election officer, 15 comparison of 2010 and 2012 overall completeness of EAVS data on, 279-283, comparison of provisional ballots of 2010 and 2012 elections, 101-111 completeness of data on, 284-285f, 285f current list maintenance comparisons, 78-82 database cross-checking systems, 85-88, 301 as data source, 15-18 disabled voter disenfranchisement and, future research issues concerning, 89-90 identification requirements for voters, 65-69, 72-75 "leaves on a tree" measurement technique, 21 list quality, state-by-state analysis, 69-82 mail ballot policies, 114, 115-121, 129113, 130N14 online voter information, assessment of, 288-294, 291t, 292t, 294t, 305 polling place operations data, 183-187 precinct assignment and mail communication with voters, 70-72 provisional ballot policies, 32, 98-99, 102f, 104f, 106–109f, 107f, 108f, 109f, 110t quantitative transparency evaluation, 286-287

residual vote rate distribution, 225-228, 226n3, 227f standard deviation in voter turnout, 52f summary index of registration quality, 69 - 88ttransparency and data availability issues, 274-276 transparency of, voters' perceptions concerning, 287-288 turnout rate data, 43-45, 49-52, 50f, 56-59 two-state comparisons, 22-25, 24t UOCAVA voting data, 142-148 voter confidence in, 256-261 voter file maintenance issuers, 43-45, 59-60 voter registration data quality and, 49-52, 50f, 56-59, 62-65, 69-88t, 98-99 voter satisfaction research, 174-176 vote tally audits, comparisons of, 76-78 voting machine distribution, 233 waiting times for voting, 177-180 state election laws turnout rates and, 53-56, 56f voter confidence and role of, 254-255 statistical data. See also bivariate analysis; multivariate analysis for public policy, 1-2 registration list quality and, 63-65 turnout rates, 8no voter confidence, 258n12 voting technology and residual vote rate, 238-246 Statutory Overview disabled voters data, 193-194 qualitative transparency assessment, 287 transparency and data availability in, 274-276 Stein, Robert M., 33-34, 166-187 Stevens, John Paul, 248-250 Stewart, Charles, 34-35, 122, 172-174, 223-247, 251-252, 256-261 stigma of disabled voters, 190-193, 218-221 summary index of registration quality, list data quality and, 69-88t summary measure of registration data, 68, 69-88t survey data comparison of 2010 and 2012 overall completeness of EAVS data by section, 279-283, 282t for disabled voters, 205-210 election research using, 18-19



Index 359

Federal Voting Assistance Program surveys, 150-151 voter confidence and, 253-254 voter registration measurements, 45-49 Survey of Income and Program Participation, disable voter data, 188n1 Survey on the Performance of American Elections (SPAE) disabled voters data, 189, 193-194n7, 193-194 early voting data, 167-169 election data using, 18-19 mail ballot data from, 121-126 polling place location data, 180-183 polling place operations data, 183-185 voter confidence data, 256-261 voter fraud data, 267-268 voter satisfaction data, 174-176 waiting times data in, 177-180

technological innovations in elections disabled voter access and, 190-193, 210-218 distribution of residual vote rate and, 225-228 historical evolution of, 41-43 provisional ballots and, 98-99 residual vote rate and, 34–35, 238–246, 239t single-state analysis of machines and residual vote rate, 236f, 240-242, 241t, 245f statistical analysis of residual vote rate and, 238-240 UOCAVA voting patterns, 147t voter confidence and, 251, 265f voter registration data and, 62-63 voter satisfaction and, 172-174 voting machine performance and, 223-224, 230-234 transit times, UOCAVA ballot data and, 152-163 transparency of election data election administration measurements, election performance and, 36 future research and recommendations, 296-297 overview of, 271-297 qualitative assessment of state websites, 292-297 qualitative EAC evaluation of, 287 quantitative EAC evaluation of, 286-287

security vs. accessibility tension in election administration and, 272-273 stakeholder transparency and data availability, 274-276 voter-focused evaluation of, 295-296 voter information, assessment of, 290-294, 291t, 292t voter's online searches, 288-290 transportation issues for disabled voters, 190–193, 205–210 voting location changes and, 169-172 trust in election officials, voter confidence measurement and, 254-255, 255n10 turnout rates advantages and disadvantages of, 7-9 all-vote-by-mail systems for disabled voters and, 221-222 comparison of 2008, 2010, and 2012 data, 277-279 disabled voters data for, 190-193, 194-201, disabled voters' direct and indirect barriers and, 205-210 early voting impact on, 167-169 early voting location and setting, 169-172 eligible voting population as percentage of, 300 "fall-off" from voter registration and, 56-59 future research issues concerning, 59-60 geographical variations in, 52n16 "highest office" vs. "total ballots" measurements, 51n14 historical trends in, 41-43 international comparative data on, 2 mail ballot policies and, 137-138 measurement techniques for assessment of, 43-49 midterm vs. presidential election variability, 52n15 polling place practices and, 166-187 provisional ballot percentages and, 302 state-based variations in, 49-52, 52f statistical analysis of, 8ng, 30-31 top-down analysis of, 40-60 transparency and data availability issues with, 274-276 unreturned ballot measurements and, 129-131 variables in state rates, 53-56 voter confidence impact on, 256-261

360

turnout rates (cont.)
voter registration correlations with,
45–49, 53–56
voting location openness and, 169–172

undeliverable addresses
factor analysis of, 85–88
incidence of, 66–67, 71–72, 84f
summary index of registration quality
and, 82–85

under votes. *See also* over votes ballot technology and occurrence of, 172–174

residual vote rates and analysis of, 242–244 Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA)

ballot policies, analysis of, 33 barriers to participation in, 142–148 comparison of 2008, 2010, and 2012 absentee ballots, 277–279

comparison of 2010 and 2012 overall completeness of EAVS data on, 279–283 data source evaluation, 150–152, 161f

EAC data evaluation, 152–163, 153t Election Administration and Voting Survey, 12–15

evaluation of, 141–165 Federal Voting Assistance Program surveys, 150–151

historical ballot data, 155t, 156–157t history of, 141–142 mail ballot system in, 114

performance measurement barriers, 148–149 population size estimates, 148–149

rejection rates for, 303 technology use patterns, 147t transparency and data availability

provisions, 274–276 unreturned ballot percentages, 303 validity and reliability of ballots, 4–9

unreturned mail ballots civilian absentee ballots, percentages

of, 302 differences in, 129–131

Kolomogorov-Smirnov test of differences, 129n12

mail ballot research on, 130f, 134–135f UOCAVA ballot data, 159t, 160t, 303 unsuccessful provisional voting rate,

provisional ballot usage and acceptance and, 94–97

Index

usability assessment of state websites, 305 transparency for voters and, 292–297, 294t usage rate analysis

comparison of 2010 and 2012 election provisional ballots, 101–111 mail ballots, 113–114, 121–126, 128–129 provisional ballot measurement and interpretation, 94–97

voting machines, 232–236f

U.S. Election Assistance Commission (EAC), 2. See also Election Administration and Voting Survey (EAVS)

completeness of data, 284–285f, 285f data transparency issues, 271–272 disabled voters data, 193–194 mail ballot use data, 114 precinct data from, 174–176 provisional ballots and, 92–94 qualitative transparency assessment,

quantitative data assessment, 276–277 quantitative transparency assessment, 286–287

self-reports by states and, 59n23 stakeholder transparency and data availability expansion under, 274–276 UOCAVA voter data, 151, 152–163, 153t voter confidence analysis and, 248–250 voter registration reports to,

43-44n3, 45-49

validity testing

of American election administration, 4–9 of disabled voters data, 205–210 mail ballot measurement, 135–137 provisional ballots, 95–96 turnout rate measurement, 49 voter confidence measurement and, 269–270

voter registration measurements, 45–49, 62 Verkuilen, Jay, 21 vital statistics, voter registration

measurements and, 45–49 Vonnahme, Greg, 33–34, 166–187 Votamatic systems, 230–234

vote history. See also infrequent voters; repeat voters, polling location difficulties for audits of vote tallies and, 72–76n1, 76–78 factor analysis of discrepancies in, 85–88 list data quality and discrepancies in, 68 list purging based on, 69–70 research hypotheses concerning, 174–176



Index

361

voter confidence ballot technology and, 172-174 convenience and competence factors in, 263-266 data analysis of, 256-261 demographics and levels of, 256-26ot as election performance metric, 35-36, 248-270 future research issues and recommendations, 268-269 identification requirements and, 248-252, 254-255, 262-263 legal and institutional factors in, 254-255 measurement methods for assessing, 250-252, 305 multivariate analysis of, 261-262, 269-270 national data on, 258f post-election audits and identification requirements, 262-263 sociotropic measures of, 252-253n8 sources of, 261 as survey measurement, 253-254 terminology concerning, 251-252 transparency data assessment and, 287-288 turnout rates linked to, 41-43 voter fraud issues and, 267-268 voter education mail ballot policies and, 124 rejected mail ballot rates and, 132-134 voter fraud accessibility issues and, 272-273 mail ballot rejection or acceptance and assumptions concerning, 125-126 measurements of mail voting and, myths and misperceptions concerning, 1 provisional ballots and, 92-94, 95-96 voter confidence and issue of, 260n13, 267-268, 267f voter list data quality and, 65-69 voter identification. See also identification requirements at polling place, state-by-state comparisons, 72-75 registration lists as tool for, 65-69 voter participation election administration measurements and, 272-273 polling place practices and, 166-187 UOCAVA barriers to, 142-148 voter registration list barriers to, 61-62 voter registration

absence of registration date for, 78-82 comparison of 2008, 2010, and 2012 data on, 277–279 comparison of 2010 and 2012 overall completeness of EAVS data, 279-283 date coverage quality, 68 deadwood on lists, 301 disabled voter rates of, 194-201, 205-210 distribution data, 68 Election Administration and Voting Survey data, 12-15 functions of lists in, 62-63, 65-69 future research issues concerning, 59-60, 89-90 historical trends in, 41-43 list processing and quality control, measurement techniques for, 43-49 new index measures of, 85-88 online registration, 41-43, 210n14, 210-221 online voter information sources for, 290-292 overstatement and understatement of rates, 45-49 over-time variance in, 48n11 percent of eligible population measurement, 300 provisional ballots and problems with, 97-100 state-based variations in, 46n8, 49-52 statistical analysis of, 30-31 top-down analysis of, 40-60 transparency and data availability issues in, 274-276 turnout rate correlations with, 53-59 voter satisfaction ballot technology and, 172-174 campaign practices and media coverage impact on, 185-187 disabled voters data, 193-194 early voting and, 166-167 Election Day voting vs. early voting, 263 polling locations and, 180-183 polling place practices and, 166-187 qualitative assessment of state websites, 292-297, 294t research hypotheses concerning, 174-176 review of research on, 167-174 summary of findings concerning, 185-187 voter confidence and, 254-255, 263-266



362

voter validation study, VRS assessments and, 10–12

Voting Age Population (VAP) estimate, turnout measurements and, 43–45,

Voting and Registration Supplement (VRS) disabled voters data, 189, 193–194 elections data assessment using, 9–19 fluctuations in, 10111 voter registration measurements

and, 45–49

Voting Eligible Population (VEP) limitations of, 45n5 turnout measurement and, 49 turnout rate estimation and, 43–45 voter registration measurements

and, 45-49

voting machines. See also specific types of voting machines

alternative performance measurements of, 228–230

future research issues and recommendations concerning, 246–247

recommendations concerning, 246–24 heterogeneity linked to performance assessment, 234–238

performance measurements of, 223–247 politics of, 233 residual vote rate and performance of,

224–238, 242–244

single-state analysis of technology and, 236f, 240–242, 245f

statistical analysis of technology and, 238–246

Index

technological changes in, 230–234 usage as percentage of voters, 232–236f voter confidence and problems with,

263–266 waiting times to vote and technology

changes in, 228–239, 229n5, 229t voting rights, provisional ballots in context of, 92–94

Voting Rights Act

provisional ballot usage and, 98–99 registration and turnout effects, 40

waiting times to vote average measurements for, 303

data on, 177–180

disabled voter turnout and, 210–218 early and Election Day data comparisons,

for early voting, 177–180, 185–187

impact on democracy of, 185–187 polling place operations research

concerning, 183–185

regression estimates, 181t

state-by-state analysis of, 178f

voting locations and reduction of, 169–172 voting machine performance

measurement and, 228–239, 229n5, 229t Who Votes (Wolfinger and Rosenstone), 11

"winner's regret" voters, 248–250 Wolfinger, Raymond, 11

z-scores, state-based election evaluation, 27–28