

SENATE No. 00313

The Commonwealth of Massachusetts

PRESENTED BY:

Anthony W. Petruccelli

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the passage of the accompanying bill:

An Act establishing risk-based audits of election results.

PETITION OF:

NAME:	DISTRICT/ADDRESS:
<i>Anthony W. Petruccelli</i>	<i>First Suffolk and Middlesex</i>
<i>Cory Atkins</i>	<i>14th Middlesex</i>
<i>Stanley C. Rosenberg</i>	<i>Hampshire and Franklin</i>
<i>Carlo Basile</i>	<i>1st Suffolk</i>
<i>Lori A. Ehrlich</i>	<i>8th Essex</i>
<i>Dennis A. Rosa</i>	<i>4th Worcester</i>
<i>Anne M. Gobi</i>	<i>5th Worcester</i>
<i>Kenneth J. Donnelly</i>	<i>Fourth Middlesex</i>
<i>Martha M. Walz</i>	<i>8th Suffolk</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>
<i>Cynthia S. Creem</i>	<i>First Middlesex and Norfolk</i>
<i>Thomas M. McGee</i>	<i>Third Essex and Middlesex</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>
<i>Katherine M. Clark</i>	<i>Middlesex and Essex</i>
<i>Alice Hanlon Peisch</i>	<i>14th Norfolk</i>
<i>Gale D. Candaras</i>	<i>First Hampden and Hampshire</i>

<i>Karen E. Spilka</i>	<i>Second Middlesex and Norfolk</i>
<i>Denise Andrews</i>	<i>2nd Franklin</i>
<i>Kate Hogan</i>	<i>3rd Middlesex</i>
<i>Kevin G. Honan</i>	<i>17th Suffolk</i>
<i>Kay Khan</i>	<i>11th Middlesex</i>
<i>Tom Sannicandro</i>	<i>7th Middlesex</i>
<i>James M. Cantwell</i>	<i>4th Plymouth</i>
<i>Linda Dorcena Forry</i>	<i>12th Suffolk</i>
<i>Brian A. Joyce</i>	<i>Norfolk, Bristol, and Plymouth</i>

SENATE No. 00313

By Mr. Petruccelli, petition (accompanied by bill, Senate, No. 313) of Joyce, Forry, Cantwell and other members of the General Court for legislation to establish risk-based audits of election results [Joint Committee on Election Laws].

The Commonwealth of Massachusetts

In the Year Two Thousand Eleven

An Act establishing risk-based audits of election results.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Chapter 54 of the general laws, as appearing in the 2008 Official Edition, is
2 hereby amended by inserting after section 109 the following section:-

3 Section 109A. Audits of election results

4 Purpose. The purpose of this section is to provide a routine cross-check on the accuracy
5 of election night vote totals, both for ballots counted originally by hand and for ballots counted
6 by machine. The audit compares reported preliminary (unofficial) election vote totals for certain
7 election contests to hand-to-eye counts of the same ballots and contests in order to independently
8 confirm election outcomes. In the case that the audit uncovers discrepancies that reach a
9 specified level, a contest-wide hand count is mandated.

10 Definitions

11 “Contest”, A race in an election between two or more candidates on a ballot or between
12 the Yes and No position of a ballot question

13 “Draw”, A random selection of an audit unit or precinct

14 “Error Rate”, see subsection (p)

15 (a) Contests to be Audited. Following each primary, general or special election, random
16 hand-count audits shall be conducted for the following offices: US President, US Senator, US
17 Representative, Governor, Secretary of the Commonwealth, State Attorney General and one of
18 the following three state offices chosen by random drawing: Lieutenant Governor, Treasurer and
19 Auditor. All statewide initiative and referenda questions shall be audited. Contests in which
20 only one candidate’s name appears on the ballot shall not be audited. The state secretary, the
21 governor, or the state auditor may require the audit of additional offices or precincts when
22 anomalous conditions are observed. In addition, the chief election officer of any municipality
23 may order an audit of any contest within that municipality.

24 Primaries that take place less than sixty days before a general election may be exempted
25 from the audit at the discretion of the state secretary except when winning candidates are
26 separated by less than 7% of the vote share from the nearest losing candidates.

27 (b) Discretionary Audits. Any candidate on the ballot who has received at least 12% of
28 vote share, or any person who has received at least 12% of the vote share in the current election
29 as a write-in, may request that up to four specified additional precincts be counted by hand.

30 These discretionary audit counts may be requested up to five days after the ordinary
31 audits and their secondary expansions, if any, are completed for contests that are audited under

32 this act. For contests not being audited under this act the request must be submitted within ten
33 days of the election.

34 (c) The number of precincts to audit shall be based on the reported contest-wide Margin
35 of Victory for each audited contest. The Margin of Victory percentage shall be calculated for
36 each audited contest by dividing the difference between the total numbers of votes received by
37 each of the two leading candidates or between the Yes and No referenda positions by the total
38 number of ballots cast in all the precincts in which the audited contest appeared on the ballot.

39 (d) Report of preliminary results prior to random selection.

40 1. The preliminary unofficial election results for auditable contests, excluding
41 unprocessed ballots such as provisional and late absentee ballots, shall be immediately reported
42 to the state secretary and shall be provided in written format to members of the public. The state
43 secretary shall make public the number and percentages of votes received for auditable contests,
44 including blank votes and over-votes, before the random selection of precincts for the audit.
45 The state secretary or the auditor shall calculate the Margins of Victory of the apparent winners.

46 2. Any representative of a candidate, ballot question or non-profit good-government
47 organization present at close of polls may request and receive a printed copy of the signed tally
48 slip/s on election night in order to verify the publicly posted results.

49 3. A mechanism shall be implemented for timely, accessible public posting, such as on
50 the Internet, of scanned copies of all precinct tally slips to the public no later than 2 years after
51 the implementation of this law.

52 4. A mechanism shall be implemented to convert the numeric information contained on
53 the tally slips into a format amenable to mathematical manipulation for purposes of verification
54 by mathematicians and the public no later than 4 years after implementation of this law.

55 (a) The ballots for all contests susceptible to audit in all precincts shall be confined in
56 secure facilities that prevent single person and single party access until completion of all audits,
57 recounts and legal challenges except when such audits, recounts or legal challenges are taking
58 place in full public view.

59 (b) Time and Place of the Audit. Each municipality shall designate in advance the
60 location where it will conduct an audit should it be selected for an audit in the random drawing.
61 The audit shall commence no later than 48 hours following the selection of precincts to be
62 audited. The general mechanism for scheduling and sequencing such audits in various areas of
63 the state shall be developed by the state secretary in advance of the election as specified in
64 subsection (v) of this section.

65 (c) Random selection of precincts to be audited.

66 Statewide contests shall be selected from a pool including all precincts in the state. US
67 Congressional contests may be taken sequentially from the same audit sample. However, if
68 additional Congressional precinct selections are needed they shall be drawn from a pool
69 including all precincts in a single congressional district.

70 The precincts to be audited, including any selected for an expansion of said audit, shall be
71 chosen using a random selection process that is fully observable and which can be easily
72 understood to be random by members of the public.

73 The time and place of such random selection shall be publicly noticed at least ten days in
74 advance of the election. The time and place of any expanded selection of precincts shall be
75 publicly noticed not less than three days before it occurs. The drawing shall be open to one
76 observer representing each candidate or referendum position that may be audited, who shall be
77 positioned where s/he can meaningfully observe the process, and it shall be open to and be
78 observed by the public. The selection shall take place as soon as possible after the close of the
79 polls but after preliminary results and vote margins have been reported for auditable contests. In
80 the event that preliminary precinct results are not published by a municipality by 48 hours after
81 the election, such precincts shall be audited in addition to those randomly selected as specified in
82 subsection (k) of this section. The precincts selected and the municipalities to which they belong
83 shall be announced aloud as they are selected and shall be recorded in the order they are selected.
84 The precincts and the order in which they were selected shall be published on the website of the
85 state secretary as soon as possible but not later than fifteen hours after the random selection takes
86 place. Specific location information shall be added to this website no later than 24 hours after
87 the drawing.

88 (d) Sequential selection of precincts to count for different statewide contests. The
89 precincts chosen to audit statewide contests shall be recorded in the order in which they are
90 drawn. The same sequence of randomly selected precincts may be used in order they were
91 drawn for all statewide and Congressional contests. The minimum number of precincts that must
92 be audited for each contest shall vary in accordance with the contest-wide Margin of Victory
93 percentages as set forth in Tables One and Two in subsection (k) of this section. At the
94 discretion of the state secretary, several contests may be grouped together and audited according
95 to the highest number of draws required by the audit of any contest within that group.

96 (i) Cost. The cost of the audits for all statewide and federal offices shall be the
97 responsibility of the Commonwealth of Massachusetts excluding the salaries of city and town
98 employees for normal hours of work.

99 (j) Audit units other than precincts may be used for implementation of this audit if such
100 are determined by the Secretary of the Commonwealth in consultation with experts in the field of
101 election audits to be in general at least as efficient and efficacious as counting entire precincts.

102 (k) General protocol for random selection of precincts to be audited.

103 1. The audit shall follow a protocol whereby, for each audited race or ballot
104 question, the chance that a precinct will be selected for inclusion in the random sample shall be
105 proportional to the number of ballots cast therein, or, if the number of ballots cast cannot be
106 provided in time, shall be proportional to the number of registered voters in each precinct as of a
107 single specified date within the month preceding the election that shall be used for all precincts
108 in the state.

109 2. A draw with replacement method shall be used, such that, once a precinct has
110 been drawn it shall immediately be made available to be randomly selected again in subsequent
111 draws. In such a case such precinct shall be counted manually only once but if tabulation is
112 necessary it shall be included as many times as it is drawn.

113 3. The number of precincts to be selected randomly for hand counting shall be
114 determined by the size of the margin between the winning candidate and the top losing candidate
115 or between the Yes and No votes on a ballot question as set forth in the following tables. .

116 TABLE ONE: For statewide contests

- 117 draw 13 precincts draw when the margin is equal to or greater than 15%
- 118 draw 17 precincts when the margin is at least 12% but under 15%
- 119 draw 21 precincts when the margin is at least 10% but under 12%
- 120 draw 24 precincts when the margin is at least 9% but under 10%
- 121 draw 27 precincts when the margin is at least 8% but under 9%
- 122 draw 31 precincts when the margin is at least 7% but under 8%
- 123 draw 37 precincts when the margin is at least 6% but under 7%
- 124 draw 44 precincts when the margin is at least 5% but under 6%
- 125 draw 49 precincts when the margin is at least 4.50% but under 5%
- 126 draw 52 precincts when the margin is at least 4.25% but under 4.5%
- 127 draw 56 precincts when the margin is at least 4.00% but under 4.25%
- 128 draw 60 precincts when the margin is at least 3.75% but under 4.00%
- 129 draw 64 precincts when the margin is at least 3.50% but under 3.75%
- 130 draw 69 precincts when the margin is at least 3.25% but under 3.50%
- 131 draw 75 precincts when the margin is at least 3.00% but under 3.25%
- 132 draw 78 precincts when the margin is at least 2.90% but under 3.00%
- 133 draw 80 precincts when the margin is at least 2.80% but under 2.90%

- 134 draw 83 precincts when the margin is at least 2.70% but under 2.80%
- 135 draw 87 precincts when the margin is at least 2.60% but under 2.70%
- 136 draw 90 precincts when the margin is at least 2.50% but under 2.60%
- 137 draw 94 precincts when the margin is at least 2.40% but under 2.50%
- 138 draw 98 precincts when the margin is at least 2.30% but under 2.40%
- 139 draw 103 precincts when the margin is at least 2.20% but under 2.30%
- 140 draw 108 precincts when the margin is at least 2.10% but under 2.20%
- 141 draw 113 precincts when the margin is at least 2.00% but under 2.10%
- 142 draw 119 precincts when the margin is at least 1.90% but under 2.00%
- 143 draw 126 precincts when the margin is at least 1.80% but under 1.90%
- 144 draw 134 precincts when the margin is at least 1.70% but under 1.80%
- 145 draw 142 precincts when the margin is at least 1.60% but under 1.70%
- 146 draw 152 precincts when the margin is at least 1.50% but under 1.60%
- 147 draw 157 precincts when the margin is at least 1.45% but under 1.50%
- 148 draw 163 precincts when the margin is at least 1.40% but under 1.45%
- 149 draw 169 precincts when the margin is at least 1.35% but under 1.40%
- 150 draw 175 precincts when the margin is at least 1.30% but under 1.35%

- 151 draw 182 precincts when the margin is at least 1.25% but under 1.30%
- 152 draw 190 precincts when the margin is at least 1.20% but under 1.25%
- 153 draw 198 precincts when the margin is at least 1.15% but under 1.20%
- 154 draw 208 precincts when the margin is at least 1.10% but under 1.15%
- 155 draw 217 precincts when the margin is at least 1.05% but under 1.10%
- 156 draw 228 precincts when the margin is at least 1.00% but under 1.05%
- 157 draw 241 precincts when the margin is at least .95% but under 1.00%
- 158 draw 254 precincts when the margin is at least .90% but under .95%
- 159 draw 269 precincts when the margin is at least .85% but under .90%
- 160 draw 286 precincts when the margin is at least .80% but under .85%
- 161 draw 305 precincts when the margin is at least .75% but under .80%
- 162 draw 327 precincts when the margin is at least .70% but under .75%
- 163 draw 352 precincts when the margin is at least .65% but under .70%
- 164 draw 382 precincts when the margin is at least .60% but under .65%
- 165 draw 417 precincts when the margin is at least .55% but under .60%
- 166 draw 459 precincts when the margin is at least .50% but under .55%
- 167 draw 510 precincts when the margin is at least .45% but under .50%

168 draw 574 precincts when the margin is at least .40% but under .45%

169 draw 656 precincts when the margin is at least .35% but under .40%

170 draw 766 precincts when the margin is at least .30% but under .35%

171 draw 919 precincts when the margin is at least .25% but under .30%

172 when the margin is 0.2 % or less a full recount shall be conducted

173 TABLE TWO: For U.S. Congressional contests

174 draw 5 precincts when the margin is equal to or greater than 20%

175 draw 7 precincts when the margin is at least 15% but under 20%

176 draw 9 precincts when the margin is at least 12% but under 15%

177 draw 11 precincts when the margin is at least 10% but under 12%

178 draw 12 precincts when the margin is at least 9% but under 10%

179 draw 14 precincts when the margin is at least 8% but under 9%

180 draw 16 precincts when the margin is at least 7% but under 8%

181 draw 22 precincts when the margin is at least 6% but under 7%

182 draw 25 precincts when the margin is at least 5% but under 6%

183 draw 28 precincts when the margin is at least 4.50% but under 5%

184 draw 32 precincts when the margin is at least 4.00% but under 4.50%

- 185 draw 35 precincts when the margin is at least 3.50% but under 4.00%
- 186 draw 38 precincts when the margin is at least 3.00% but under 3.50%
- 187 draw 42 precincts when the margin is at least 2.70% but under 3.00%
- 188 draw 49 precincts when the margin is at least 2.30% but under 2.70%
- 189 draw 57 precincts when the margin is at least 2.00% but under 2.30%
- 190 draw 63 precincts when the margin is at least 1.70% but under 2.00%
- 191 draw 67 precincts when the margin is at least 1.60% but under 1.70%
- 192 draw 71 precincts when the margin is at least 1.50% but under 1.60%
- 193 draw 76 precincts when the margin is at least 1.45% but under 1.50%
- 194 draw 79 precincts when the margin is at least 1.35% but under 1.45%
- 195 draw 82 precincts when the margin is at least 1.30% but under 1.35%
- 196 draw 85 precincts when the margin is at least 1.25% but under 1.30%
- 197 draw 88 precincts when the margin is at least 1.15% but under 1.25%
- 198 draw 91 precincts when the margin is at least 1.25% but under 1.15%
- 199 draw 99 precincts when the margin is at least 1.00% but under 1.05%
- 200 draw 109 precincts when the margin is at least 1.05% but under 1.00%
- 201 draw 114 precincts when the margin is at least 1.00% but under .1.05%

202 draw 121 precincts when the margin is at least .95% but under .1.00%

203 draw 127 precincts when the margin is at least .90 but under 1.00%

204 draw 143 precincts when the margin is at least .80% but under .90%

205 draw 153 precincts when the margin is at least .75% but under .80%

206 draw 164 precincts when the margin is at least .65% but under .70%

207 draw 176 precincts when the margin is at least .70% but under .75%

208 draw 191 precincts when the margin is at least 60% but under .65%

209 draw 209 precincts when the margin is at least 55% but under .60%

210 draw 230 precincts when the margin is at least 50% but under .55%

211 draw 255 precincts when the margin is at least .45% but under .50%

212 draw 287 precincts when the margin is at least .40% but under .45%

213 draw 328 precincts when the margin is at least .35% but under .40%

214 when the margin is 0.3 % or less a full recount shall be conducted

215 1. A full statewide hand-count shall be conducted for any audited statewide contest
216 with a Margin of Victory of 0.2% percent or less or U.S. Congressional race with a Margin of
217 Victory of 0.3% or less.

218 2. The state secretary, in consultation with persons with peer-reviewed expertise in
219 statistical protocols and election auditing, may substitute another method of random selection

220 and auditing if it is at least as transparent as the one described herein and at least as effective in
221 ensuring that a full hand recount will occur whenever such a recount would reverse the
222 preliminary outcome reported by the voting system.

223 (l) Audit report: Comparison of precinct audit results to original reported results. Upon
224 completion of the audit in each municipality the registrars shall record each contest audited in
225 each precinct on a separate audit report form provided by the state secretary for easy comparison
226 of the following:

227 1. the audit tallies for each candidate or each yes and no vote and the blank votes and
228 over votes as recorded on the official audit forms pursuant to paragraph (w) 4) of this section

229 2. the election night tallies reported for each candidate or each yes and no vote and the
230 blank votes and over-votes for the same ballots that were counted in the audit sample

231 3. the differences between the audit tallies and the election night tallies for each
232 candidate, yes and no question and blank votes ; the differences should be marked with "+" when
233 the audit result is higher or with "-" when the reported result is higher.

234 4. The number of votes for each contest for which voter intent is discernible but that
235 are not marked by the voter according to the instructions provided to the voters under Section 48
236 of Chapter 54, that were identified under (w) (6) of this section. and any explanatory notes
237 related thereto.

238 5. Any additional notes on perceived causes for discrepancies as provided for in
239 section 48 chapter 54

240 (m) Reporting audit results. The registrars shall submit the official audit form or forms
241 described in paragraph (l) of this section to the state auditor who shall make public the
242 information in these reports as soon as practicable thereafter in both human- and machine-
243 readable formats, such as a spreadsheet or comma-separated-value (CSV) file.

244 (n) Comparison of contest-wide audit sample to preliminary contest-wide results. Upon
245 receipt of the results of the manual audit counts from the audited precincts, the state auditor shall
246 calculate the total number of votes for candidates, yes and no referenda positions, blanks votes
247 and over-votes in each audited contest as recorded in the manual audit count pursuant to
248 subsection (w) 4 and shall compare them to the corresponding totals reported directly after the
249 election for the same candidates and ballot questions on the same ballots and shall publish any
250 resulting discrepancies. The auditor shall calculate the error rate and determine whether further
251 hand-counts are required pursuant to subsection (p) of this section.

252 (o) If after one or more expansions of the audit sample discrepancies in the expanded
253 audit indicate a substantial possibility, as specified in subsection (p), of a different prevailing
254 candidate or outcome than the outcome originally reported in the preliminary election night
255 count, a complete hand count of all ballots cast on which the above contest or contests appeared
256 shall be conducted. The results shall be reported within sufficient time to meet state and federal
257 election deadlines for final certification but no winner shall be certified until 24 hours after all
258 audits or recounts for that contest have been completed.

259 If there is a successful petition for a recount pursuant to section 135 of chapter 54 the audit
260 counting for that contest shall and cease. The state secretary shall determine whether any ballots
261 already counted in the audit need to be recounted.

262 (p) The error rate for discrepancies shall be calculated as follows:

263 The Error Rate equals the vote share as reported on election night for the same ballots
264 that were counted in the audit sample for the first place candidate minus his/her vote share as
265 counted by hand in the audit sample subtracted from the vote share as reported on election night
266 for the same ballots that were counted in the audit sample for the second place candidate minus
267 his/her vote share as counted by hand in the audit sample.

268 This may also be expressed as $(E2/EO - A2/AO) - (E1/EO - A1/AO)$ where

269 E1 is Election night vote count for the first place candidate for all ballots selected in the audit
270 sample

271 E2 is Election night vote count for the second place candidate for all ballots selected in the audit
272 sample

273 A1 is Audit sample hand-count for the first place candidate

274 A2 is Audit sample hand-count for the second place candidate

275 EO is All ballots cast for the office as reported by the preliminary election results

276 AO is All ballots cast for the office as reported by the audit hand counts

277 "Candidate" here means a person or a Yes or No for a referendum vote.

278 A negative error rate indicates that the winning margin decreases.

279 A positive result confirms the election outcome.

280 Either or both of the following discrepancies in the initial audit sample shall trigger
281 further hand counts:

282 1. If the contest-wide error rate between the reported election night results and the
283 hand counted audit sample reaches 20 % of the election night Margin of Victory and/or

284 2. If the difference in any one precinct between the reported election night results and
285 the hand counted audit results reaches 50 votes an expanded random sample shall be selected and
286 counted that requires three times the number of draws as did the initial sample.

287 Otherwise the audit counting may be deemed to be complete.

288 Either or both of the following discrepancies in the expanded audit sample just described
289 shall trigger further hand counts:

290 1. If the contest-wide error rate between the reported election night results and the
291 second hand counted-audit sample reaches 30% of the election night victory Margin of Victory,
292 and/or

293 2. If the difference in any four precincts between the reported election night results and
294 the hand counted audit results reaches 50 votes a full 100% recount shall be conducted.

295 Otherwise, at the discretion of the state auditor, the audit counting may be deemed complete.

296 Notwithstanding this, at the discretion of the state auditor, a new audit sample may be selected
297 and counted that requires at least three times as many draws as the initial sample, in lieu of a full
298 recount. In such a case, if the contest-wide error rate between the newly expanded combined
299 audit sample and the preliminary election night results reported for the same ballots reaches 50%

300 of the election night victory Margin of Victory a full hand recount shall be conducted.

301 Otherwise, at the discretion of the state auditor, the audit counting may be deemed complete.

302 (q) Vote of record. If there is a discrepancy between a manual count and originally
303 reported tallies, where the original results were obtained using electronic equipment, the manual
304 count of the official paper ballots shall be the official vote of record.

305 (r) Archiving audit results. The results of audits and hand-counts, as well as the
306 corresponding data for the originally reported tallies, shall be made publicly available on a
307 precinct-by-precinct basis both in hardcopy and in electronic file format, and shall be archived
308 indefinitely, but for no less than sixteen years, in order to facilitate research and to provide for
309 continuous improvement of election procedures.

310 (s) Analysis of discrepancies. Discrepancies between the hand-counted audit and the
311 original vote tally shall be analyzed in consultation with other experts in the field of election
312 audits to ascertain their cause. The state secretary shall oversee the analysis and shall publish
313 and make available online the findings within 180 days.

314 (t) Analyzing discrepancies by machine model. Whenever the difference between the
315 hand-counted audit and the originally reported tally is more than one percent for any particular
316 machine model, the discrepancy between the hand-counted audit and the original vote tally shall
317 be analyzed to ascertain the cause of the discrepancy and to discern patterns, if any, between
318 counts by each machine model and hand counts. The state secretary shall oversee the analysis
319 and shall publish and make available online the findings within 180 days.

320 (u) Training and deployment of audit personnel. Training for audit personnel shall be
321 based on uniform written and visual training materials issued by the state secretary. In

322 consultation with municipal clerks or their representatives the state secretary shall develop a
323 plan for flexibly and timely deploying trained audit personnel to perform audits in precincts
324 selected for audits in various areas in the state. Personnel may be drawn from pools of workers
325 within certain areas or districts and may be deployed sequentially to perform audits in various
326 locations.

327 (v) The state secretary shall promulgate procedures to carry out this act and shall solicit
328 public comment for at least 45 days. The secretary shall revise such procedures as necessary to
329 respond to public comment and shall post final procedures on the state website at least 30 days in
330 advance of each election to which they apply. These procedures shall be revised, with
331 opportunity to comment, periodically as needed, but at least every four years.

332 Written procedures shall

- 333 1. describe the random selection process for precincts to be audited
- 334 2. set up a mechanism for municipalities to inform the state secretary, in advance, of
335 the exact location they will provide if any of their precincts are selected for audits and for
336 informing municipalities and candidates when they have been selected for an audit
- 337 3. set up a mechanism to coordinate the times of audits after precincts have been
338 selected and to report such to the public
- 339 4. coordinate audits and recounts for optimum efficiency and to avoid duplicate
340 counting when that is desired and possible

341 5. ensure secure multi-partisan chain of custody for all ballots and election equipment,
342 with signed access, to prevent single person or single party access to any ballots pertaining to an
343 election until after all audits, recounts and legal challenges have been completed

344 6. set standards for tamper evident seals for elections, audits and recounts

345 7. set standards for tamperproof containers and for their secure storage

346 8. describe ballot counting and sorting methods that require that each counter, sorter or
347 recorder to be checked by a person of an opposing party

348 (w) Audit procedures. Audits shall be conducted publicly in a similar manner to the
349 procedures for counting ballots in Section 105 of Chapter 54. In addition, audits shall follow
350 these procedures:

351 1. each precinct audit will be presided over by two registrars of voters from the two
352 leading political parties who shall examine such election records as they deem necessary
353 including but not limited to spoiled and unused ballots, absentee ballots and envelopes,
354 provisional and overseas ballots as available, and the poll register;

355 2. observers representing candidates and ballot questions shall be positioned and may
356 move about if needed so that they can clearly and comfortably observe every aspect of the
357 proceedings, including marks on ballots, seals, signatures, documents and forms pertaining to the
358 audit and to the election.

359 3. upon commencing an audit of its contents the registrars shall examine the signatures
360 and the seals securing ballot containers before they are opened and compare them to the
361 signatures and seal numbers recorded after close of polls in the Precinct Log described in

362 paragraph (y) 3 of this section and determine whether either have been disturbed and if so shall
363 record this in the Precinct Log;

364 4. audit personnel shall count and record the total number of ballots cast at the precinct
365 on Election Day, including the unused and spoiled ballots, and count the total votes, blank votes,
366 over-votes and total write-ins for each candidate and the Yes and No votes and blanks for each
367 ballot question on those ballots and record such on official forms provided by the state secretary;

368 5. audit personnel shall compare the information on the signed machine tally slips
369 produced at the precinct at close of polls to the vote totals report submitted to the state secretary
370 as required in subsection (d) 1) of this section and shall record discrepancies, if any, on the
371 appropriate audit form ;

372 6. voter intent shall be the standard for counting votes;

373 7. in order to assist with analysis of the error rate, in jurisdictions where votes were
374 counted initially by an electronic voting system, an additional record shall be made on the audit
375 report form of the number of votes for which voter intent is discernible but ballots were not
376 marked according to the instructions provided to the voters under Section 48 of Chapter 54;

377 8. when they have been counted all the ballots shall be enclosed in envelopes or
378 containers, marked with the name of the city or town, ward, if any, and precinct and each
379 envelope or container shall be sealed with a secure tamper-evident seal provided therefor, and
380 the number thereof shall be recorded in the Precinct Election and Audit log.

381 9. the registrars or three members of the audit team shall sign and date an affixed seal
382 designed so that it cannot be removed without damaging the signatures.

383 (x) Audit personnel shall not work with the preliminary tally numbers at hand but shall
384 record and sign their own hand-counts on forms provided therefor by the state secretary. If any
385 subsequent counts are taken to clarify perceived errors the final audit report shall contain the
386 results of all counts, the order in which they were performed, the perceived error/s and an
387 explanation thereof.

388 (y) Precinct Election and Audit Log

389 A log book shall be maintained by hand at and for each precinct in which shall be recorded
390 various items pertaining to elections and to their audits, if any. Items to be recorded therein
391 include:

392 1) the model and serial numbers of all voting and counting devices used, if any, signed
393 by two election officials

394 2) the numbers printed on the seals used to close containers on election night,

395 3) the numbers printed on seals used to close containers after any audit or recount, as
396 set forth in paragraph (e) 3 of this section,

397 4) the printed names and signatures of those signing seals and tally slips on election
398 night,

399 5) the printed names and signatures of those signing seals and tally slips after an audit
400 or recount,

401 6) any problems or anomalies encountered during the election, or any audit or recount

402 7) any protests made by those conducting the audit or any citizen or candidate observer
403 present pertaining to the conduct of the audit along with the names and contact information of
404 such persons.

405 The Log shall be kept in a secure location before during and after the election but shall be
406 available for public inspection and copying under the supervision of the municipal clerk.

407 (z) Candidates. Candidates and referenda sponsors in contests that may potentially be
408 audited must be informed no less than three days before the election of their right to have their
409 own observers present at the audit of their contest if they choose.

410 This act shall take effect for the earliest applicable election which occurs one year after
411 its enactment. Pilot audits may be conducted in the interim.