NOTE: If we decide on using a normalized approach, then these data need to be revised.

k_min values for risk limit 5% for various error distributions

k_min	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Tier 6	Tier 7	Tier 8	Tier 9
Bayesian RLA (uniform prior)	122	232	447	868	1698	3339	6596	13063	25913
Uniform	119	225	434	849	1667	3293	6527	12967	25793
Increasing (Linearly)	123	229	438	850	1668	3292	6522	12955	25776
Decreasing (Linearly)	117	223	433	846	1666	3296	6535	12987	25835
Traditional RLA, second spike at x = 65000	120	236	466	927	1849	3693	7381	14759	> 28625 (My binary search broke.)

Conjecture: More variance due to more extreme k_mins?

Average number of ballots examined for various error distributions (all of 5% risk) and margins, N = 100,000

Number of ballots	50500	51000	51500	52000	52500	55000	57500	60000	65000	75000
Bayesian RLA (uniform prior) (if completed in tiers, as opposed to ballot by ballot)	86,601	37,310	18,970	11,096	7,108	1,679	708	394	221	200
Traditional RLA (if completed in tiers, as opposed to ballot by ballot)*	N/A (There is no k_min for at least the first audit tier.)	70,174	10,564	6,273	4,091	1,055	487	312	213	200
Uniform	47,717	17,911	8,924	5,289	3,498	955	469	304	209	200
Increasing (Linearly)	44,260	17,285	8,988	5,499	3,729	1,135	585	375	226	200
Decreasing (Linearly)	56,958	19,474	9,098	5,162	3,303	858	416	274	204	200
Decreasing (Geometrically, r = 2/3)	62,415	22,603	10,325	5,682	3,527	802	381	260	203	200
Decreasing (Geometrically, r = 1/2)	74,263	27,956	12,437	6,515	3,845	777	365	250	202	200

* The k_mins for computing this were calculated as a “two-spike prior”, as discussed in BRLA-I. Different priors generated for each margin in the table (so in this row there are actually ten different sets of k_mins). Eg: second spike of prior at 75000 if number of votes for winner where horizontal axis = 75000.