

DEVICES & SOFTWARE	Min Price	Max Price	HAND MARKED PAPER BALLOTS			BALLOT ON DEMAND SYSTEMS			BALLOT MARKING DEVICES		
			# Devices	Min \$	Max \$	# Devices	Min \$	Max \$	# Devices	Min \$	Max \$
Electronic Poll Book	\$995	\$1,200	7,095	\$7,059,525	\$8,514,000	7,095	\$7,059,525	\$8,514,000	7,095	\$7,059,525	\$8,514,000
Ballot Marking Device	\$3,500	\$7,200	2,365	\$8,277,500	\$17,028,000	2,365	\$8,277,500	\$17,028,000	30,745	\$107,607,500	\$221,364,000
On Demand Ballot System	\$4,500	\$4,895	0	\$0	\$0	4,730	\$21,285,000	\$23,153,350	0	\$0	\$0
Precinct/County Scanner	\$5,750	\$7,900	4,890	\$28,117,500	\$38,631,000	4,890	\$28,117,500	\$38,631,000	4,890	\$28,117,500	\$38,631,000
County Hi Speed Scanner	\$25,000	\$111,500	160	\$4,000,000	\$17,840,000	160	\$4,000,000	\$17,840,000	160	\$4,000,000	\$17,840,000
County Tabulation Server	\$17,954	\$17,954	160	\$2,872,640	\$2,872,640	160	\$2,872,640	\$2,872,640	160	\$2,872,640	\$2,872,640
County Training Days	\$1,700	\$2,000	480	\$816,000	\$960,000	480	\$816,000	\$960,000	480	\$816,000	\$960,000
	<b>PURCHASE COSTS</b>			<b>\$51,143,165</b>	<b>\$85,845,640</b>		<b>\$72,428,165</b>	<b>\$108,998,990</b>		<b>\$150,473,165</b>	<b>\$290,181,640</b>
	<b>PURCHASE SAVINGS</b>			<b>\$99,330,000</b>			<b>\$78,045,000</b>				
Poll Book Licensing Fee	\$51	\$51	7,095	\$361,845	\$361,845	7,095	\$361,845	\$361,845	7,095	\$361,845	\$361,845
Ballot Marking Device License	\$65	\$228	2,365	\$153,725	\$539,220	2,365	\$153,725	\$539,220	30,745	\$1,998,425	\$7,009,860
Ballot on Demand Licenses	\$195	\$390		\$0	\$0	4,730	\$922,350	\$1,844,700		\$0	\$0
Precinct Scanner License	\$80	\$228	4,730	\$378,400	\$1,078,440	4,730	\$378,400	\$1,078,440	4,730	\$378,400	\$1,078,440
Hi Speed Scanner License	\$1,575	\$2,575	15	\$23,625	\$38,625	15	\$23,625	\$38,625	15	\$23,625	\$38,625
County Election Mgmt License	\$4,082	\$7,500	160	\$653,120	\$1,200,000	160	\$653,120	\$1,200,000	160	\$653,120	\$1,200,000
Poll Book Maintenance	\$51	\$51	7,095	\$361,845	\$361,845	7,095	\$361,845	\$361,845	7,095	\$361,845	\$361,845
Ballot Marking Device maint.	\$75	\$235	2,365	\$177,375	\$555,775	2,365	\$177,375	\$555,775	30,745	\$2,305,875	\$7,225,075
Ballot on Demand Maint.	\$195	\$390		\$0	\$0	4,730	\$922,350	\$1,844,700		\$0	\$0
Precinct Scanner Maint	\$110	\$135	4,730	\$520,300	\$638,550	4,730	\$520,300	\$638,550	4,730	\$520,300	\$638,550
Hi Speed Scanner Maint	\$1,500	\$1,895	15	\$22,500	\$28,425	15	\$22,500	\$28,425	15	\$22,500	\$28,425
County Election Mgmt Maint.	\$4,082	\$7,500	160	\$653,120	\$1,200,000	160	\$653,120	\$1,200,000	160	\$653,120	\$1,200,000
Per Device Ballot Testing	\$50	\$100	14,365	\$718,250	\$1,436,500	18,920	\$946,000	\$1,892,000	42,745	\$2,137,250	\$4,274,500
Per Device Storage/Transport	\$75	\$100	14,365	\$1,077,375	\$1,436,500	18,920	\$1,419,000	\$1,892,000	42,745	\$3,205,875	\$4,274,500
Avg Maint. & Licensing Increase			14,365	\$291,610	\$701,371	19,095	\$387,629	\$932,313	42,745	\$867,724	\$2,087,025
County Election Support Avg	\$4,500	\$4,675	272	\$1,224,000	\$1,271,600	272	\$1,224,000	\$1,271,600	272	\$1,224,000	\$1,271,600
Ongoing County Training Days	\$1,700	\$2,000	320	\$544,000	\$640,000	320	\$544,000	\$640,000	320	\$544,000	\$640,000
Auditing Per Precinct Average	\$100	\$250	4,021	\$402,050	\$1,005,125	4,021	\$402,050	\$1,005,125	4,021	\$402,050	\$1,005,125
Per Paper Ballot Printing	\$0.20	\$0.45	0	\$0	\$0	5,567,803	\$1,113,561	\$2,505,511	5,567,803	\$1,113,561	\$2,505,511
Per Paper Ballot Pre-Printing	\$0.28	\$0.55	6,681,363	\$1,870,782	\$3,674,750	0	\$0	\$0	0	\$0	\$0
Pre Print Admin/Distribution	\$0.10	\$0.20	6,681,363	\$668,136	\$1,336,273	0	\$0	\$0	0	\$0	\$0
	<b>ANNUAL EXPENSES</b>			<b>\$10,102,057</b>	<b>\$17,504,843</b>		<b>\$11,186,794</b>	<b>\$19,830,675</b>		<b>\$16,773,514</b>	<b>\$35,200,926</b>
	<b>ANNUAL SAVINGS</b>			<b>\$6,671,457</b>			<b>\$5,586,720</b>				

See Back for Variables and Assumptions

Variables	Count
# Counties + SOS:	160
#Precincts:	2,365
Registered Voters	6,550,356
Average Annual Elections	1.70
Average Turnout	50.00%
Annual Average Demand Ballots	5,567,803
Pre-Printed Excess Factor	20%
Scanners Per Precinct	2
Poll Books Per Precinct	3
BOD Systems Per BOD Precinct	2
BMDs Per HMPB Precinct	1
BMDs Per BMD Precinct	13
Annual Maint/License Increase	3.50%
Maint & Licensing Term Years	10
High Scan Volume Counties	15
Initial County Training Days	3
Ongoing County Training Days	2

**Assumptions**

- 1.- Estimates include new pollbook system that integrates with electronic BMDs or BOD systems
- 2.- At least 10% more BMDs than DREs are needed in BMD estimate for voter ballot printing time
- 3.- Estimates include tabulation and ballot building server for each county and one central site
- 4.- Minimum and maximum costs are derived from vendor responses received and released to date
- 5.- Spreadsheet accounts for cost differences in types of voting systems but not all election costs
- 6.- At least one BMD is needed at each precinct in HMPB estimate to provide assistive technology
- 7.- At least two BOD systems are needed at each precinct in BOD estimate in case of malfunction

[Sample cost sheet from incumbent vendor](#)

[Sample incumbent vendor total projected costs](#)