Dates	System	Build	Image	Ballot Box	Ballot type	Ballot markings?	Paper Bond (lb)	Paper Weight (gsm)	Paper Length in)	Paper Thickness (mm) [1]	Paper Thickness (in) [2]	Paper Product	Ambient temp (deg C/F)	Humidity (% RH)
7/1-7/3/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank or fille	none	various	various	11	various	various	various		
7/2/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank	none	20 lb [9]	75 gsm	11	0.102	0.00402	Office Depot copy paper		41%
7/2/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank	none	28 lb	105 gsm	11	0.137	0.00539	Office Depot inkjet & laser 28		41%
7/2/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank	none	32 lb [10]	105 gsm	11	0.137	0.00539	Hammermill Premium Laser 3		41%
7/2/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, filled v1	yes (computer pr	32 lb	120 gsm	11	0.105	0.00413	Hammermill Premium Laser 3		41%
7/1-7/3/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank	none	40 lb	150 gsm	11	0.192	0.00756	HP Heavyweight	23-24C (74-	39-49%
7/2-7/3/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank	none	46 lb	176 gsm	11	0.220	0.00866	Neenah Bright W	23-24C (74-	39-49%
7/3-7/5/2024	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank	none	43 lb	162 gsm	11	0.174	0.00685	FedEx laser 60 lb	24-26C (75-	39-41%
7/5/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	none	NH test ballot, blank	none	32 lb	120 gsm	11	0.130	0.00512	FedEx laser 32 lb	23C (74F)	42%
7/8/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	NH test ballot, blank	none	43 lb	162 gsm ?	11	0.188	0.00740	FedEx laser 60 lb	23C (73F)	44%
7/8/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	NH test ballot, filled v2 + bl	yes (computer pr	43 lb	162 gsm	11	0.174	0.00685	FedEx laser 60 lb	22C (71F)	45%
7/12/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	Austin test deck, long ballo	yes (computer fill	38 lb	140 gsm	22	0.145	0.00571	100# matte text,	25C (77F)	41%
7/12/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	Austin test deck, long ballo	yes (computer fill	28 lb	105 gsm	22	0.155	0.00610	28#, Global Print	24C (76F)	42%
7/15/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	NH test ballot, blank	none	43 lb	162 gsm	11	0.174	0.00685	FedEx laser 60 lb	29-35C (85-	30%
7/15/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	NH test ballot, blank	none	46 lb	176 gsm	11	0.220	0.00866	Neenah Bright W	29-35C (85-	30%
7/15/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	NH test ballot, blank	none	28 lb	105 gsm	11	0.137	0.00539	Office Depot inkje	29-35C (85-	30%
7/15/24	VxScan v4.0	Build 0 unit 2	applied by Arsalan in Jun 2024	LP2-1	NH test ballot, filled v2 + bl	yes (computer pr	43 lb	162 gsm	11	0.174	0.00685	FedEx laser 60 lb	29-35C (85-	30-33%
8/6/24-8/10/24	VxScan v4.0	Build 0 unit 3	2024-06-24-austin-testing-vxscan	LP2-1	NH test ballot, blank (mostl	none	28 lb (mostly), 32	105 gsm	11	0.137	0.00539	28#, Global Print 32lb FedEx, (~30 60lb FedEx, (~40 28#, Postnet (~re	24-35C (75-	21-45%
TOTALS (regular tests)														

Dates	System	Paper disruption [3]	New/Old paper?	Start Ballot Num [4]	End Ballot Num	Number of Sheets	Number of Misfeeds [5]	Types of misfeeds	Misfeed Rate [6]	Tester	MSD notes	Notes, general	Used auto paper feeder?	.env misfeed time (s) [7]	timeRunning (s) [8]
7/1-7/3/2024	VxScan v4.0	none	new			32	0	n/a	0.00%	Pius Wong	MSD enabled, recalibrated		no		
7/2/2024	VxScan v4.0	none	new			50	0	n/a	0.00%	Ryan Aparicio	MSD enabled		no		
7/2/2024	VxScan v4.0	none	new			50	0	n/a	0.00%	Pius Wong	MSD enabled		no		
7/2/2024	VxScan v4.0	none	new			41	0	n/a	0.00%	Pius Wong	MSD enabled, recalibrated		no		
7/2/2024	VxScan v4.0	none	new			10	0	n/a	0.00%	Pius Wong	MSD enabled		no		
7/1-7/3/2024	VxScan v4.0	none	old & new			337	0	n/a	0.00%	Pius Wong	MSD enabled		yes, mostly	9	2
7/2-7/3/2024	VxScan v4.0	none	old & new			59	0	n/a	0.00%	Pius Wong	MSD enabled		yes, mostly	9	2
7/3-7/5/2024	VxScan v4.0	none	old & new			500	0	n/a	0.00%	Pius Wong	MSD enabled		yes	8	2
7/5/24	VxScan v4.0	none	old & new			589	0	n/a	0.00%	Pius Wong, Ryan	MSD enabled		yes	8	2
7/8/24	VxScan v4.0	stored in 75-88RH	old			33	0	n/a	0.00%	Pius Wong	MSD enabled	harder to insert; s	no		
7/8/24	VxScan v4.0	none	old & new	45	1130	1085	0	n/a	0.00%	Pius Wong	MSD enabled	only saw 2 misfe	yes		
7/12/24	VxScan v4.0	none	new	2	242	240	0	n/a	0.00%	Pius Wong	MSD enabled, recalibrated		yes	9	2
7/12/24	VxScan v4.0	none	new	0	240	285	0	n/a	0.00%	Pius Wong	MSD enabled, re cleaned scanner		yes	9	2
7/15/24	VxScan v4.0	none	old	19	69	50	0	n/a	0.00%	Pius Wong	MSD enabled, recalibrated		yes	8	2
7/15/24	VxScan v4.0	none	old	69	119	50	0	n/a	0.00%	Pius Wong	MSD enabled		no		
7/15/24	VxScan v4.0	none	old	119	169	50	0	n/a	0.00%	Pius Wong	MSD enabled		no		
7/15/24	VxScan v4.0	none	old	169	412	243	0	n/a	0.00%	Pius Wong	MSD enabled		yes	8	2
8/6/24-8/10/24	VxScan v4.0	none	new (mostl	0		5882	4	unknown causes sheet 1012, rejec sheet 2387, verti sheet ~4500, cau sheet 5825, ballo	0.07%	Pius Wong	MSD enabled, recalibrated for 28#		yes	8	1.5
TOTALS (regular tests)						9586	4		0.04%		Accuracy comments?				
								estimate actual misfeed rate w/ binomial distribution							

Dates	System	distance threshold
7/1-7/3/2024	VxScan v4.0	
7/2/2024	VxScan v4.0	
7/2/2024	VxScan v4.0	
7/2/2024	VxScan v4.0	
7/2/2024	VxScan v4.0	
7/1-7/3/2024	VxScan v4.0	100
7/2-7/3/2024	VxScan v4.0	100
7/3-7/5/2024	VxScan v4.0	100
7/5/24	VxScan v4.0	100
7/8/24	VxScan v4.0	
7/8/24	VxScan v4.0	
7/12/24	VxScan v4.0	150
7/12/24	VxScan v4.0	150
7/15/24	VxScan v4.0	150
7/15/24	VxScan v4.0	
7/15/24	VxScan v4.0	
7/15/24	VxScan v4.0	150
8/6/24-8/10/24	VxScan v4.0	100
TOTALS (regular tests)		

Dates	System		
7/1-7/3/2024	VxScan v4.0		
7/2/2024	VxScan v4.0		
7/2/2024	VxScan v4.0		
7/2/2024	VxScan v4.0		
7/2/2024	VxScan v4.0		
7/1-7/3/2024	VxScan v4.0		
7/2-7/3/2024	VxScan v4.0		
7/3-7/5/2024	VxScan v4.0		
7/5/24	VxScan v4.0		
7/8/24	VxScan v4.0		
7/8/24	VxScan v4.0		
7/12/24	VxScan v4.0		
7/12/24	VxScan v4.0		
7/15/24	VxScan v4.0		
7/15/24	VxScan v4.0		
7/15/24	VxScan v4.0		
7/15/24	VxScan v4.0		
8/6/24-8/10/24	VxScan v4.0		
TOTALS (regular tests)			

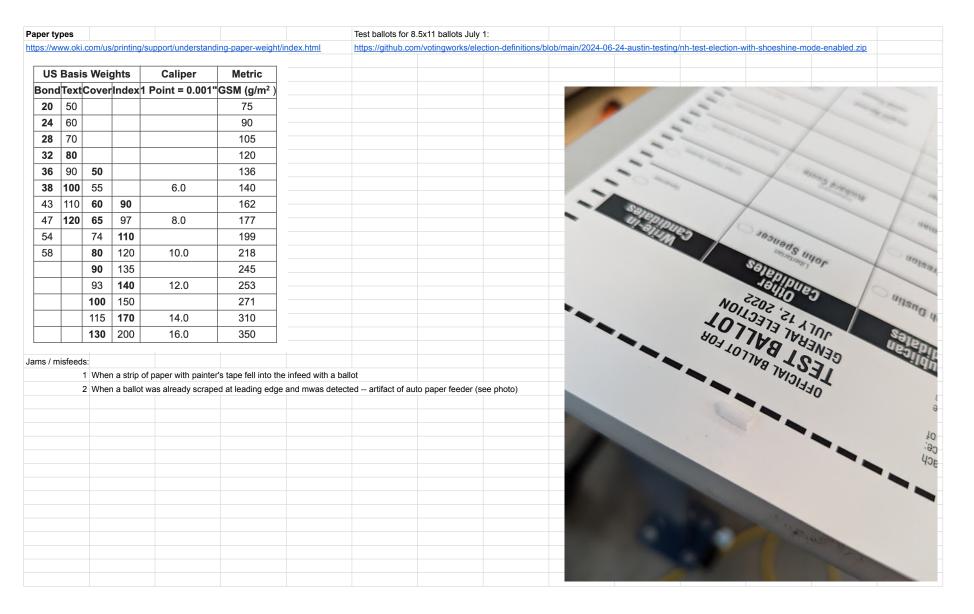| Dates	System	Build	Image	Ballot Box	Ballot type	Ballot markings?	Paper Bond (lb)	Paper Weight (gsm)	Paper Length in)	Paper Thickness (mm) [11]	Paper Thickness (in) [12]	Paper Product	Paper disruption [13]	New/Old paper?
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	none	new
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	folded 1x / horizontal / verti	new
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	leading edge curled up	old
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	leading edge curled down	old
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	folded front corner	old
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	trailing edge curled up	old
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	trailing edge curled down	old
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	crummpled/wrinkled paper	old
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	wrinkled, trifold up	old
7/2/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	blank paper, 60lb cove	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	wrinkled, trifold down	old
7/3/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	NH test ballot, blank	none	43 lb	162 gsm	11	0.174	0.00685	FedEx 60lb cove	none, MSD	new
7/3/2024	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	paper length testing, 2	none	28 lb	105 gsm	11			shipped from Ro	none	old
no clipping observed														

Dates	System	Start Ballot Num [14]	End Ballot Num	Number of Sheets	Number of Misfeeds	Types of misfeeds	Misfeed Rate [15]	Tester	MSD notes	Notes, general	Used auto paper feeder?	.env misfeed time (s) [16]	timeRunning (s) [17]	distance threshold
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			3	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			3	0	n/a	0.00%	Pius Wong	MSD enabled	clipped lip on exit, but expected & no jam				
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/2/2024	VxScan v4.0 Buil			2	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
7/3/2024	VxScan v4.0 Buil			15 MSD tries	0	n/a	0%	Pius Wong	MSD enabled	double and triple sheets rejected properly, no false positives				
7/3/2024	VxScan v4.0 Buil			5	0	n/a	0.00%	Pius Wong	MSD enabled	no jams				
no clipping observed														

Dates	System	Build	Image	Ballot Box	Ballot type	Ballot markings?	Paper Bond (lb)	Paper Weight (gsm)	Paper Length in)	Paper Thickness (mm) [18]	Paper Thickness (in) [19]	Paper Product	Ambient temp (deg C/F)	Humidity (% RH)	Paper disruption [20]
7/8/24	VxScan v4.0 Buil	applied by Arsala	applied by Arsala	none	NH test ballot, blank	none	43 lb	162 gsm?	11	0.2	0.00787	FedEx laser 60 lt	23C (73F)	44%	soaked wet, dried over 3 days, very curled/wrinkled and stiff
TOTALS (regular tests)															

Dates	System	New/Old paper?	Start Ballot Num [21]	End Ballot Num	Number of Sheets	Number of Misfeeds	Types of misfeeds	Misfeed Rate [22]	Tester	MSD notes	Notes, general	Used auto paper feeder?	.env misfeed time (s) [23]	timeRunning (s) [24]	distance threshold
7/8/24	VxScan v4.0 Buil	old & new			11	1	generic error, retracted, no jam; worked 2nd try	9.09%	Pius Wong	MSD enabled	no jams	no			
TOTALS (regular tests)					11	1		9.09%		Accuracy comments?					

Dates	System													
7/8/24	VxScan v4.0 Buil													
TOTALS (regular tests)														

Dates	System	
7/8/24	VxScan v4.0 Buil	
TOTALS (regular tests)		

Paper types

https://www.oki.com/us/printing/support/understanding-paper-weight/index.html

Test ballots for 8.5x11 ballots July 1:

https://github.com/votingworks/election-definitions/blob/main/2024-06-24-austin-testing/nh-test-election-with-shoeshine-mode-enabled.zip

US Basis Weights				Caliper	Metric
Bond	Text	Cover	Index	1 Point = 0.001"	GSM (g/m²)
20	50				75
24	60				90
28	70				105
32	80				120
36	90	50			136
38	100	55		6.0	140
43	110	60	90		162
47	120	65	97	8.0	177
54		74	110		199
58		80	120	10.0	218
		90	135		245
		93	140	12.0	253
		100	150		271
		115	170	14.0	310
		130	200	16.0	350

Jams / misfeeds:

1 When a strip of paper with painter's tape fell into the infeed with a ballot

2 When a ballot was already scraped at leading edge and mwas detected -- artifact of auto paper feeder (see photo)

[1] measure on edge, or nominal

[2] measure on edge, or nominal

[3] folded 1x middle, folded 2x thirds, torn, dirty, wet, curled, etc

[4] these are just working numbers -- the starting and ending ballots are just for a single session, and the total ballots might be for multiple sessions

[5] misfeeds for regular ballots without excessive paper disruptions (scraping, tears, soaked, etc) or abnormal operating conditions (hotter than 95F, pulling on paper with hand, etc)

[6] aiming for <= 1/500 or <= 0.2%

[7] these are settings for the autofeeder software

[8] another setting for the autofeeder software

[9] out of spec of VxScan

[10] out of spec of VxScan

[11] measure on edge, or nominal

[12] measure on edge, or nominal

[13] folded 1x middle, folded 2x thirds, torn, dirty, wet, curled, etc

[14] these are just working numbers -- the starting and ending ballots are just for a single session, and the total ballots might be for multiple sessions

[15] aiming for <= 1/500 or <= 0.2%

[16] these are settings for the autofeeder software

[17] another setting for the autofeeder software

[18] measure on edge, or nominal

[19] measure on edge, or nominal

[20] folded 1x middle, folded 2x thirds, torn, dirty, wet, curled, etc

[21] these are just working numbers -- the starting and ending ballots are just for a single session, and the total ballots might be for multiple sessions

[22] aiming for <= 1/500 or <= 0.2%

[23] these are settings for the autofeeder software

[24] another setting for the autofeeder software