

Appendix 5: Costs and Projected Payback Period for Recommended AMH at Main Library

Years to Payback from Install Date	2007/8	2013/14	2	3	4	5	6	7	8
Annual Circulation	474,856	567,003	584,013	601,533	619,579	638,167	657,312	677,031	697,342
Open days per year	351	351	351	351	351	351	351	351	351
Open hours per week	62	62	62	62	62	62	62	62	62
Weekly Circ	9,470	11,308	11,647	11,996	12,356	12,727	13,109	13,502	13,907
Daily Circ	1,353	1,615	1,664	1,714	1,765	1,818	1,873	1,929	1,987
Hourly Circ	153	182	188	193	199	205	211	218	224
Current Time Spent on Check-In	67	80	82	85	87	90	93	96	98
Circ Staff Hourly Rate	\$24.00	\$27.81	\$28.64	\$29.50	\$30.39	\$31.30	\$32.24	\$33.21	\$34.20
Current Staffing Costs (annual)	\$83,616	\$115,690	\$122,139	\$130,406	\$137,479	\$146,486	\$155,910	\$165,767	\$174,297
Total Sorter Capacity		1160	1160	1160	1160	1160	1160	1160	1160
Adjusted Sorter Capacity (50%)		580	580	580	580	580	580	580	580
Sorter Induction Speed (items/min)		20	20	20	20	20	20	20	20
Hours to reach adjusted capacity		3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6
Required Staff Time (hrs/wk)		19.5	20.1	20.7	21.3	21.9	22.6	23.3	24.0
Induction hours - maximum (hrs/wk)		9.4	9.7	10.0	10.3	10.6	10.9	11.3	11.6
Staffing Costs (annual)		\$28,194	\$29,911	\$31,732	\$33,665	\$35,715	\$37,890	\$40,198	\$42,646
Annual Savings		\$87,496	\$92,229	\$98,674	\$103,814	\$110,771	\$118,020	\$125,570	\$131,652
Sorter Cost/Maintenance		\$285,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Cumulative Savings		-\$197,504	-\$120,276	-\$36,602	\$52,212	\$147,983	\$251,003	\$361,572	\$478,224

Assumptions: Main Library is remodeled in 2013/14 which is when new system is installed, 2013/14 circulation is based on Library estimates, circulation increases 3% annually; staff wages increase 3% annually.