

Appendix 7: Costs and Projected Payback Period for Recommended AMH System at Children's Library

Years to Payback from Install Date	2007/8	2011/12	2	3	4	5	6	7	8
Annual Circulation	281,069	325,373	325,373	325,373	325,373	325,373	325,373	325,373	325,373
Open days per year	351	351	351	351	351	351	351	351	351
Open hours per week	48	48	48	48	48	48	48	48	48
Weekly Circ	5,605	6,489	6,489	6,489	6,489	6,489	6,489	6,489	6,489
Daily Circ	801	927	927	927	927	927	927	927	927
Hourly Circ	117	135	135	135	135	135	135	135	135
Current Time Spent on Check-In	39	45	45	45	45	45	45	45	45
Circ Staff Hourly Rate	\$24.00	\$26.23	\$27.02	\$27.83	\$28.66	\$29.52	\$30.41	\$31.32	\$32.26
Current Staffing Costs (annual)	\$48,672	\$61,378	\$63,220	\$65,116	\$67,070	\$69,082	\$71,154	\$73,289	\$75,487
Total Sorter Capacity		600	600	600	600	600	600	600	600
Adjusted Sorter Capacity (50%)		300	300	300	300	300	300	300	300
Sorter Induction Speed (items/min)		20	20	20	20	20	20	20	20
Hours to reach adjusted capacity		2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Required Staff Time (hrs/wk)		21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
Induction hours - maximum (hrs/wk)		5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Staffing Costs (annual)		\$29,502	\$30,387	\$31,299	\$32,238	\$33,205	\$34,201	\$35,227	\$36,284
Annual Savings		\$31,876	\$32,832	\$33,817	\$34,832	\$35,877	\$36,953	\$38,062	\$39,204
Sorter Cost/Maintenance		\$179,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Cumulative Savings		-\$147,124	-\$123,292	-\$98,474	-\$72,642	-\$45,765	-\$17,812	\$11,249	\$41,453
Assumptions: System goes in in 2011/12 and that year's circulation is based on Library estimates, circulation remains flat as of 2011/12; staff wages increase 3% annually.									