

Appendix 6: Costs and Projected Payback Period for Recommended AMH System at Mitchell Park

Years to Payback From Install Date	2007/8	2012/13	2	3	4	5	6	7	8
Annual Circulation	623,853	935,780	982,568	1,031,697	1,083,282	1,137,446	1,171,569	1,206,716	1,242,918
Open days per year	351	351	351	351	351	351	351	351	351
Open hours per week	58	58	58	58	58	58	58	58	58
Weekly Circ	12,442	18,662	19,595	20,575	21,604	22,684	23,365	24,066	24,788
Daily Circ	1,777	2,666	2,799	2,939	3,086	3,241	3,338	3,438	3,541
Hourly Circ	215	322	338	355	372	391	403	415	427
Current Time Spent on Check-In	76	114	120	126	132	139	143	147	151
Circ Staff Hourly Rate	\$24.00	\$27.01	\$27.82	\$28.65	\$29.51	\$30.40	\$31.31	\$32.25	\$33.22
Current Staffing Costs (annual)	\$94,848	\$160,115	\$173,599	\$187,747	\$202,588	\$219,731	\$232,836	\$246,529	\$260,835
Total Sorter Capacity		1560	1560	1560	1560	1560	1560	1560	1560
Adjusted Sorter Capacity (50%)		780	780	780	780	780	780	780	780
Sorter Induction Speed (items/min)		20	20	20	20	20	20	20	20
Hours to reach adjusted capacity		2.4	2.3	2.2	2.1	2.0	1.9	1.9	1.8
Required Staff Time (hrs/wk)		23.9	25.1	26.4	27.7	29.1	30.0	30.9	31.8
Induction hours - maximum (hrs/wk)		15.6	16.3	17.1	18.0	18.9	19.5	20.1	20.7
Staffing Costs (annual)		\$33,605	\$36,343	\$39,305	\$42,509	\$45,973	\$48,773	\$51,743	\$54,894
Annual Savings		\$126,511	\$137,255	\$148,442	\$160,079	\$173,758	\$184,063	\$194,786	\$205,940
Sorter Cost/Maintenance		\$345,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Cumulative Savings		-\$218,489	-\$101,234	\$27,208	\$167,287	\$321,045	\$485,108	\$659,894	\$845,835
Assumptions: New library opens in summer of 2012, circulation is expected to increase 50% after 2007/8 circulation in opening year, then 5% annually for four years, then 3% annually; staff wages increase 3% annually.									