



Beyond Opening Day

A facility ownership cost plan | Worked indoor school-pool example

The upgrade is complete. What comes next?

A new facility brings new equipment, service needs, and future obligations. This plan helps facilities directors turn the project handover into a costed operating plan they can discuss with the business office and district leadership.

BUILT AROUND YOUR ASSETS AND RECORDS

Use your asset register, equipment manuals, commissioning records, actual invoices, utility data, and service quotes. The example figures are invented to demonstrate the method. They are not pool cost benchmarks, vendor quotes, or equipment-life recommendations.

Pages 2-3 | Establish the cost baseline

Reconcile the original upgrade and separate maintenance from the full annual operating budget.

Pages 4-5 | Connect work, warranties, and assets

Cost the maintenance plan, identify responsibilities, and record what coverage actually includes.

Pages 6-7 | Look beyond the first year

Build a renewal schedule, funding view, ten-year cash forecast, and sensitivity check.

Pages 8-9 | Put it into practice

A 90-day handover plan, reusable asset worksheet, and source links.



What did the upgrade actually cost?

Worked example | Renovation of an existing indoor six-lane school pool and associated systems

Model boundary: existing pool building; 300 program days/year, 8 program hours/day. Mechanical runtime follows the approved design, not program hours. No building addition. Amounts are USD; Year 0 is project completion.

Year 0 final project cost	Illustrative amount
Pool shell, finishes, deck and associated building work	\$1,500,000
Water treatment, circulation, heating and controls	\$500,000
Natatorium ventilation and dehumidification upgrade	\$600,000
Design, permits, commissioning and staff training	\$250,000
Final approved change orders, not included above	\$150,000
Total final project expenditure	\$3,000,000

KEEP THE ORIGINAL RECORD AND THE FORECAST SEPARATE

Record approved budget, final expenditure, funding sources, completion date, and contract references. Unspent contingency is not expenditure. Do not add equipment purchase values again if they are already inside a construction contract.

For your facility

Original approved budget: _____ Final expenditure: _____

Variance and reason: _____

In-service date / records location: _____

Scope note: this example excludes financing interest, land, program revenue, depreciation, and residual value. It is a cash-planning illustration, not a full discounted lifecycle appraisal. Project principal is counted once in Year 0.



What does a normal year require?

Worked Year 1 baseline | Replace every quantity and rate with facility evidence

Cost area	Example basis	Annual
Maintenance labor	1,000 hours x \$40 loaded hourly rate	\$40,000
Planned specialist service	Written scope; excludes work below	\$18,000
Routine parts and minor repairs	Allowance; excludes planned renewal	\$12,000
Maintenance subtotal	Labor + service + routine repairs	\$70,000
Electricity	300,000 kWh x \$0.16 blended rate	\$48,000
Heating fuel	30,000 therms x \$1.20	\$36,000
Water and sewer	1,000,000 gallons x \$0.015	\$15,000
Chemicals and test supplies	Consumption estimate x supplier prices	\$18,000
Custodial labor	1,000 hours x \$30 loaded rate	\$30,000
Operator training, fees and testing	Local requirements and quotes	\$5,000
Cleaning supplies	Annual consumption allowance	\$3,000
Total facility operation + maintenance	Maintenance subtotal counted only once	\$225,000
Aquatic supervision / program staffing	3,000 staff-hours x \$25 loaded rate	\$75,000
Total annual ownership operating cost	Facility costs plus program staffing	\$300,000

Budget ownership matters

The staffing line is a cost placeholder, not a safe staffing plan. Confirm coverage, qualifications, and hours with the aquatic program lead. Include allocated existing staff time for full cost visibility; identify new cash needs separately. Check utility demand charges, taxes, shared meters, and avoid duplicate custodial or operator hours.



Turn maintenance work into a budget

Planning categories | Exact tasks and intervals come from approved manuals, conditions, and requirements

System / work package	Evidence and planning questions	Cost owner / basis
Circulation and filtration	Asset IDs; inspection and service tasks; consumables; isolation and outage needs. Which work is in the service contract?	Facilities / specialist; hours + parts + visits
Treatment and controls	Calibration, probes, feed components and records. Confirm tasks and replacement triggers with the operator and supplier.	Qualified operator / vendor; scope + consumables
Ventilation and dehumidification	Commissioned settings, filters, coils, corrosion observations and controls. Coordinate with the design professional and service provider.	HVAC specialist; scope + access + parts
Shell, deck and wet areas	Condition observations, joints, finishes, drainage and cleaning. Separate daily care from capital renewal.	Facilities / custodial; labor + materials
Access and safety equipment	Inventory installed lifts, barriers and related equipment; locate manufacturer instructions, inspections and service records.	Assigned qualified provider; task-specific quote

COST ONE TASK WITHOUT COUNTING IT TWICE

Example only: an approved quarterly specialist visit at \$750 = $4 \times \$750 = \$3,000/\text{year}$. If it is part of the \$18,000 service contract on page 3, allocate \$3,000 within that total; do not add it again. For in-house work: occurrences x hours x loaded rate + parts.

For each work order: asset ID, source/manual revision, task, interval or trigger, qualified owner, estimated hours, parts, contract coverage, due date, completion evidence, and actual cost.

This is a budgeting framework, not a pool operating procedure. Water-quality limits, staffing, technical maintenance, shutdowns, and reopening follow applicable requirements and qualified guidance.



What is covered, and what is not?

A handover and warranty record for each major asset

Asset identity and installed cost

Asset ID; manufacturer/model/serial; location; installed cost allocation; contract reference.

Warranty dates and coverage

Actual start/end dates; parts, labor, travel and exclusions; commissioning/registration conditions.

Maintenance obligations and evidence

Required service, authorized provider, records needed, and where manuals and reports are stored.

How a claim gets handled

Contact, notice process, response expectations, district owner, and claim record location.

BEFORE THE COVERAGE ENDS

A diary reminder before expiry gives the team time to review defects and documentation. Use the actual contract notice periods. A warranty may cover a component but exclude diagnosis, labor, transport, consumables, or consequential costs.

Budget connection

Record gross cost, possible recovery, and confirmed recovery separately. Keep unconfirmed warranty recoveries out of the base funding plan. Coverage does not eliminate routine maintenance costs.



What will need renewal later?

Illustrative events only | These years and amounts are not equipment-life or cost recommendations

Renewal package	Today's installed estimate	Model event	Nominal event cost
Selected controls / treatment components	\$40,000	End of Year 5	\$46,371
Selected major HVAC components	\$150,000	End of Year 10	\$201,587

Nominal event cost = current installed estimate x (1 + escalation rate)^years. Here, 3% escalation is an arbitrary scenario input. Quotes should include design, access, removal, installation, commissioning, taxes and outage-related costs where applicable.

AN INVENTORY IS MORE IMPORTANT THAN A GENERIC LIFESPAN

Build an event list for every significant system: pumps, filters, heaters, controls, treatment, HVAC, shell/finishes, deck, roof/envelope, lifts and other installed assets. Use condition, service history, manufacturer guidance, duty, and qualified assessment to choose a review window. "Not yet assessed" remains a visible gap.

WHAT MIGHT WE SET ASIDE?

With no opening balance and no investment return, the two example events need $\$46,371 / 5 + \$201,587 / 10 =$ about **\$29,433 per year for Years 1-5**. After the Year 5 event, about **\$20,159 per year for Years 6-10** remains for the Year 10 event. Contributions are assumed available before each event.

Avoid counting the same funding twice

Reserve contributions fund later expenditure; they are not an additional lifecycle cost on top of that expenditure. Page 7 counts renewal spending when it occurs and excludes reserve transfers. The example provision covers only these two events, not the full pool asset base or the next replacement cycle.



The ten-year cash view

Nominal dollars | No discounting, financing, income, reserve transfers, or residual value

Year	Project / operating cost	Renewal spending	Total cash cost
0	\$3,000,000	\$0	\$3,000,000
1	\$300,000	\$0	\$300,000
2	\$309,000	\$0	\$309,000
3	\$318,270	\$0	\$318,270
4	\$327,818	\$0	\$327,818
5	\$337,653	\$46,371	\$384,024
6	\$347,782	\$0	\$347,782
7	\$358,216	\$0	\$358,216
8	\$368,962	\$0	\$368,962
9	\$380,031	\$0	\$380,031
10	\$391,432	\$201,587	\$593,019

Ten-year operation: \$3,439,164 | Renewal: \$247,958

Project + ten operating years + listed renewals: \$6,687,122

Operating cost grows 3% each year from the Year 1 base. Renewal estimates escalate from Year 0. Totals use unrounded values; displayed rows may differ slightly when added.

HOW SENSITIVE IS YEAR 1?

If electricity and fuel rates are 20% higher: +\$16,800.

If all listed labor rates are 10% higher (\$145,000 labor base): +\$14,500.

Combined illustrative Year 1 cost: **\$331,300**, before any other changes.

A 20% overrun on the two renewal events would add about **\$49,592** at their event years.



The first 90 days after handover

Suggested planning milestones | Your actual opening and operating requirements take priority

Handover | Make the records usable

Facilities and project leads reconcile final costs, asset IDs, as-builts, manuals, commissioning reports, training, warranties and open defects. The aquatic lead confirms operating responsibilities. A document handover does not itself establish readiness to open.

First 30 days | Establish the baseline

Facilities and finance confirm who pays each line, which existing hours are allocated, and which costs are additional cash. Match preventive tasks to manuals and service scopes. Identify missing quotes, unmetered usage, staffing gaps and unfunded renewal items.

Days 31-60 | Compare plan with evidence

Review available utility bills, program hours, work orders, consumables and invoices. Check unusual usage with the operator and qualified service team. Confirm whether contract work overlaps with in-house time or parts allowances.

Days 61-90 | Update the forward plan

Refresh the operating estimate and renewal list with verified costs. Present funding gaps, open warranty issues, and any service or outage implications. Obtain approval through the district's usual route and assign the next review date.

A SHORT MONTHLY VIEW FOR LEADERSHIP

Budget / actual / committed / forecast to year-end / variance / reason / next action. Keep maintenance, utilities, program staffing, and capital renewal distinct. Forecast = actual to date + unpaid commitments + remaining uncommitted work; do not count commitments again inside the remaining estimate.



One asset, one forward plan

Reusable planning record | Copy for each significant asset or renewal package

Asset, project cost and evidence

Asset ID / location; original installed cost allocation; in-service date; records / quote date.

Annual work and cost

Task source; interval/trigger; owner; hours x rate; parts; contract coverage; annual total.

Renewal window and installed estimate

Condition evidence; likely window; estimate basis; escalation; outage need; next assessment.

Coverage, funding and next action

Warranty status; confirmed recovery; existing reserve; gap; action owner and review date.

Sources and local checks

CDC: Current Model Aquatic Health Code

CDC: Operating and managing public pools

Michigan EGLE: Public swimming pools

ASHRAE: Indoor swimming pools

Reviewed October 23, 2026. CDC guidance supports maintenance planning and records; ASHRAE discusses indoor-pool environmental systems. The MAHC is model guidance, not automatically local law. Confirm applicable Michigan and local requirements, permits, operating conditions, and manufacturer instructions with the responsible authorities and professionals.

Original planning model and templates. No source above supplies or endorses the example costs, escalation, renewal years, or staffing assumptions.