



Building Maintenance Service Level

Maintenance Mission

Proactively and cost-effectively maintaining and caring for our infrastructure to ensure that our assets provide their maximum service potential in a sustainable manner - *ultimately creating an enriching and inviting environment that supports exceptional learning and research.*

The AMO team subscribes to the following aspects of service as being fundamental to our success:

- Safety
- Integrity and quality of service
- Sustainability
- Continuous improvement
- Teamwork
- Balancing responsiveness to client requests with long term asset stewardship

Objectives

The university's objectives in maintaining and operating buildings, plant and equipment are to:

- Ensure the safe, efficient and continued operation of the University's assets
- Ensure compliance with legislated requirements
- Create enriching, effective and inviting spaces
- Optimize the life cycle costs of assets

Maintenance of our broad spectrum of assets is carried out with available funding to provide their maximum service potential to meet our Institution's needs. This is achieved by providing the optimum level of maintenance and care in a sustainable manner. **Budget constraints are weighed against priorities that are established based on our APPA Level 5 (CRISIS RESPONSE) maintenance funding. Good stewardship planning and practices continually compete with client satisfaction metrics.**

The physical assets of the University will be maintained in order to deliver their maximum service potential in the following order of priority:

1. Maintenance required by legislation in accordance with regulations and as further set out in codes of practice and preventive maintenance schedules;
2. High priority emergency and reactive maintenance to protect health, life and safety as well as short term customer satisfaction, while not compromising the integrity of our assets;
3. Critical service areas by the use of predictive or preventive maintenance techniques; and
4. Any deferred maintenance which accrues in priority as determined to eliminate or mitigate risk.

Preventive, emergency and unplanned maintenance is provided through in-house and



outsourced vendor contracts. The University of Alberta currently maintains a number of contracts for services that include elevator maintenance, pest control, air filters, emergency generator load testing, and fire safety. These vendors are selected through a competitive tendering process based upon qualifications, experience, and the ability to provide services, appropriate staffing levels, and overall value to the University. F&O staff oversee the performance of the outsourced vendors and are responsible to ensure the quality of services and **regulatory compliance are met** with the vendor contracts.

Maintenance - Work required to preserve or restore buildings and base building system equipment to their original conditions or to such a condition that they can be effectively used for their intended purpose, ensuring ongoing operation of the campus.

Planned Maintenance: Historical maintenance records help predict when specific base building system equipment parts need to be replaced.

Preventive Maintenance (PM) – a planned and controlled program of periodic inspection, adjustment, lubrication, and replacement of base building system equipment and components, as well as performance testing and analysis.

Corrective Maintenance (CM) – the repair or replacement of obsolete, worn, broken, or inoperative subcomponents or subsystems of physical infrastructure to an appropriate condition. Can be planned or unplanned maintenance that is performed in response to repeated requests for reactive maintenance. CM also includes the replacement of base building system equipment that is intentionally operated to the point of failure.

Unplanned Maintenance: Activity that comes out of a triaged response to a need that has usually been identified and reported by facilities users and staff, evidence of base building system equipment malfunction or failure through the building automation system (BAS).

Emergency Maintenance (EM) is unscheduled corrective activities that require immediate attention to restore a critical piece of base building system equipment whose failure could threaten the safety of personnel or cause damage to other base building equipment or systems.

Reactive Maintenance (RM) is unscheduled work that requires expedient action to restore services or to remove issues that could interfere with activities or property.

Support Maintenance (SM) is discretionary work that is not directly related to base building systems equipment, components, and systems but is necessary to preserve the mission of the University.

MAINTENANCE RESPONSE STANDARDS

Response times and completion standards are achieved based on the AMO Maintenance Service Level.



A [quarterly dashboard](#) showing all maintenance work orders and their respective compliance rates under the Service Level will be posted publicly. **(Note that with APPA 5 (CRISIS RESPONSE) funding level, this remains an aspirational goal and there will continue to be a maintenance backlog of Priorities 3, 4, and 5 work orders that will ultimately add to our growing Deferred Maintenance (DM) liability until they meet triage criteria).**

Maintenance Response standards are measured from when a client reports the maintenance fault to the Maintenance Desk or when a maintenance request is made via [Fixit](#), until the time a maintenance worker attends site to inspect, make initial repairs, isolate services and minimize hazard to personnel and property as required.

Action	Response Parameters	Target
Priority 1 – Burst water pipes, major energy outages (e.g. reset the circuit breaker, loss of power), issues with essential air-conditioning (e.g. animal houses, main computer room), and essential ventilation, failure of low-temperature freezers/fridges, gas leaks, passengers trapped in lifts, fires, broken glass (constituting a safety issue), blocked sewerage, building heating systems (winter), toilets (where there is accessibility constraints or limited number of facilities in a building), soil lines, electrical faults (identified as potentially dangerous), cold room failures, life safety systems that are in trouble mode, accessibility points/entrances/exits. FMNet failure, scheduled event access failure, critical door left in unsecure state due to system failure.	Priority 1 – <u>within 2 hours of notification</u>	85%
Priority 2 – Blocked stormwater drains, broken doors (external), major roof leaks, broken glass (internal/external), broken locks (external), broken door handle, the door jammed, air-conditioning failures (in buildings with inoperable windows), air-conditioning failures (lecture theatres), fume hood failures, water leaks, reverse osmosis equipment/de-ionisers, flooring issues that cause tripping hazards, malfunctioning whiteboards/blackboards, running taps (hot water), no water, non operating fixtures in areas which present a safety concern (e.g.: stairwells, emergency lighting, exit lighting). Elevator intercom failure, card access issues, intrusion system issues, emergency notification issues, video surveillance issues.	Priority 2 – <u>within one (1) working day of notification.</u>	75%

Action	Response Parameters	Target
Priority 3 – Flickering fluorescent lamps (open areas), minor roof leaks, external lighting (external), faulty toilet cisterns, toilets running constantly, signage requests through the repair shop, non-essential air conditioning, toilet seat broken. Card access and intrusion user processing.	Priority 3 – <u>within three (3) working days of notification.</u>	65%
Priority 4 – Dripping taps, failed lamps, flooring issues that do not present a safety concern, pipework insulation, broken door closer, electrical faults (non-dangerous), redundant lighting outages (e.g.: areas where one fixture outage does not impact workable lighting), rusted box gutters, leaking (external downpipes), building security system estimates.	Priority 4 – <u>within two (2) weeks of notification.</u>	65%
Priority 5 – Resurfacing benchtops, repairs to caulking, internal painting, external painting, non safety related road resurfacing, non safety related curb and channeling repairs, painting repairs. BSS battery replacements, internal painting (essential), external painting (essential), domestic hot water systems, building heating systems (summer).	Priority 5 – <u>work to be programmed</u>	N/A

COMPLETION STANDARDS

Action	Response Parameters	Target
Completion of Reactive/Emergency Maintenance Work Orders - Priorities 1 and 2	Priorities 1 and 2 – Upon responding to initial call, completion within five (5) working days given availability of parts, otherwise within five (5) working days of availability of parts.	75%
Completion of Reactive/Emergency Maintenance Work Orders - Priorities 3 and 4	Priorities 3 and 4 – Upon responding to initial call, completion within ten (10) working days given availability of parts, otherwise within ten (10) working days of availability of parts.	50%
Completion of Reactive/Emergency Maintenance Work Orders - Priority 5	Priority 5 – Completion in accordance with the program set for this work after appraisal and planning.	N/A

ACCOUNTABILITIES & RESPONSIBILITIES



The University of Alberta's building portfolio comprises a wide variety of mixed use spaces which support teaching, administration, recreation, operations, and research. The accountabilities and responsibilities identified to distinguish between Faculty and Asset Management and Operations (AMO) involvement is built around the definition of 'base building systems.' Systems that are directly related to services described by mechanical, gas, utilities, sanitary, heating, air conditioning, ventilation, elevators, plumbing, sprinklers, cabling, wiring, and life-safety belong to the realm of base building systems which are within the purview of Asset Management and Operations. Program equipment that is owned by Faculty and is directly related to their activities is within the purview of Faculty in all aspects of purchasing, installation, licensing, validation, maintenance, replacement, and operation.

Asset Management and Operations is often involved with assessment and guidance related to the installation of Faculty equipment at their request where it has significant impact to the base building structure and its base building systems. Asset Management and Operations also participates in maintenance agreements with Faculty where it is mutually beneficial to do so. In such cases, Faculties remain accountable and responsible for their equipment.

Examples of Faculty equipment that is not supported by Asset Management and Operations are as follows:

- A clean room complete with a packaged air-conditioning unit, special filtration, and uninterrupted power source in place to support a specific type of research.
- Freezers or refrigerators for storing laboratory research and/or materials.
- Air compressors or vacuum pumps, even when installed in an AMO mechanical room, that serve one lab or research area.
- Specialized water systems (e.g. temperature, filtration, or purifying).
- Air conditioning units for server rooms, environmental chambers, or laboratory equipment such as microscopes, incubators, ovens, chromatographs, scales, sterilizers, glass washers, and cage washers.
- Fume hoods, biosafety cabinets, and laminar flow hoods.
- Recreational equipment.
- Pressure vessels used for research.
- Office furniture and equipment owned by a Faculty or portfolio.
- Appliances owned by Faculty (e.g. coffee machines, dishwashers, refrigerators, microwaves).

Please refer to the [joint memorandum and FAQs signed by the Vice Presidents of Facilities and Operations and Research](#) on 18 October 2018 outlining the responsibilities associated with research equipment and research support systems.

Note - Departments may be responsible for premature replacement of building equipment as a result of abuse, vandalism or misuse that they could reasonably have predicted or controlled.

APPA MAINTENANCE STANDARDS

Under the Association of Physical Plant Administrators (APPA) there are five levels of maintenance. Please reference below for standards for each level.



Level 1: Showpiece Facility - Maintenance activities appear highly focused. Typically, equipment and building components are fully functional and in excellent condition. Service and maintenance calls are responded to immediately. Buildings and equipment are regularly upgraded, keeping them current with modern standards and usage.

Level 2: Comprehensive Stewardship - Maintenance activities appear to be somewhat organized, but they remain people dependent. Equipment and building components are usually functional and in operating condition. Service and maintenance calls are responded to in a timely manner. Buildings and equipment are regularly updated, keeping them current with modern standards and usage.

Level 3: Managed Care - Maintenance activities appear to be somewhat organized, but they remain people-dependent. Equipment and building components are mostly functional, but they suffer occasional breakdowns. Service and maintenance call response time are variable and sporadic without apparent cause. Buildings and equipment are periodically upgraded to current standards and usage, but not enough to control the effects of normal usage and deterioration.

Level 4: Reactive Management - Maintenance activities appear to be somewhat chaotic and are people-dependent. Equipment and building components are frequently broken and inoperative. Service and maintenance calls are typically not responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present usage needs.

Level 5: Crisis Response - Maintenance activities appear chaotic and without direction. Equipment and building components are routinely broken and inoperative. Services and maintenance calls are never responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present usage needs.