Preventive Maintenance

Importance of scheduled systems up-keep, programs and PHAS

Du & Associates, Inc.

Quadel

Preventive Maintenance

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Preventive Maintenance Overview (1 of 2)

- Preventive maintenance is a forward-thinking approach to keeping your properties healthy, safe and appealing to residents, neighbors and the community.
- Preventive Maintenance is key to maintaining a high occupancy rate.
- It is about keeping the cost of maintaining your properties in check, by preventing smaller issues from becoming larger more expensive issues.
- PM includes actions which extend the life of equipment and avoid unnecessary failures by substituting selective programmed effort for “fix it when it fails” maintenance.

Preventive Maintenance Overview (2 of 2)

- Preventative maintenance, which includes scheduled, is a program of inspections, routine upkeep and repairs to reduce the frequency and severity of breakdowns and service interruptions. Preventative Maintenance is usually performed on an established schedule and may include:
- Assessment of current conditions through a comprehensive system of inspections and review of units, equipment, buildings, and common areas.
- Seasonal servicing of equipment; replacing filters; following manufacturer recommended routine maintenance testing and serving systems for fire and other hazards.

Asset Management

Under asset management, each project will be evaluated on its financial and management performance in addition to its physical condition. A central part of this performance measurement structure is a system of on-site management reviews of each project. PHAs are also assessed in the obligation and expenditure of Capital Fund dollars.

The Six Elements of a Maintenance Program

All public housing programs must address how to accomplish the basic work activities to maintain the land, building and housing units in a safe, decent and sanitary condition. Maintenance activities can be grouped into the following categories:

Routine or Periodic

Many of these tasks involve the Janitorial and Landscaping work activities and are usually repeated on a daily or weekly basis, to maintain the cleanliness and appearance of the property. Tasks may include:

- Cleaning of building common areas
- Cleaning of vacant dwelling units for new tenants
- Trash handling
- Pick up of litter
- Maintenance of plants, grass, trees and landscaping
- Cleaning of sidewalks and paved surfaces, including removal of graffiti

Corrective Maintenance

These tasks are performed in response to service requests generated by residents or staff. Requests are assigned priorities for work scheduling. Priorities include:

- Emergency requests. Situations that immediately threaten the life, health or safety of residents or the integrity of the property.
- Non-emergency requests. There are two types:
  - Urgent requests. Situations that are a major inconvenience or hardship to residents and/or could result in health or safety risks to residents or further deterioration of the property if left unattended.
  - Routine requests. Conditions that warrant repair but are not of an emergency or urgent nature.

Capital Improvements

These are the work activities to improve the baseline condition and economic viability of the property, to modernize or improve the efficiency of systems, enhance the services delivered to residents or to increase staff productivity. In the public housing program, responsibility for capital improvements is generally assigned to modernization staff, often in a department that is organizationally separate from the day-to-day responsibilities of the maintenance team. In spite of this, it must be emphasized that capital improvements remain one aspect of property maintenance. PHAs must consider, when establishing capital improvements programs, whether to use staff or contractors to complete the work. It should also balance the increased cost of upgraded materials against the labor and materials cost of frequent repairs or replacement due to wear and tear.

Deferred Maintenance

This is the required maintenance that is not completed due to constraints of Time; Budget or Resources. Some maintenance may be delayed because of poor planning or lack of proper organization or supervision. Ideally, however, deferring maintenance should be a conscious choice on the part of management as an economic decision or to better meet the goals set for the property. Indefinitely deferred maintenance will ultimately result in deterioration of the property. It should not be allowed to continue for an extended period of time.

Resident Upkeep

Work items may be assigned to residents such as:

- Maintaining yards or common halls
- Appropriate trash disposal
- The costs to repair damage caused by neglect or abuse
- Reporting dangerous conditions inside or outside of their unit Fines may be imposed for failing to comply with upkeep requirements and policies are needed to levy fines and damage charges

Preventive Maintenance Definition

Scheduled and preventive Maintenance is a program of inspections, routine upkeep and repairs to reduce the frequency and severity of breakdowns and service interruptions. Preventative Maintenance is usually performed on an established schedule and may include:

- Assessment of current conditions through a comprehensive system of inspections and review of units, equipment, buildings, and common areas.
- Seasonal servicing of equipment; replacing filters; following manufacturer recommended routine maintenance testing and serving systems for fire and other hazards

Partners in the Successful Execution of a Preventive Maintenance plan

Roles and Responsibilities

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The Executive Director

The executive director sets the tone and level of commitment to a solid maintenance program, including a preventive maintenance strategy.

- Broad support from the Board of Directors
- Communicates agency plans, direction and forecasting
- Demonstrates a desire to place residents needs foremost in planning

Agency Resolve

The E.D. assists the maintenance supervisor/manager, property managers and finance director with creating a comprehensive "doable" plan.

- Evaluates information from Maintenance supervisor
- Reviews budgetary issues and allocates sufficient funding

The E.D. supports the level of funding necessary to provide tools equipment and third-party services.

- Reviews budget and agency goals
- Admin plan reflecting the funding mechanism and funding priorities
- Gets board approvals

Resident Services and Satisfaction

- Creative resident services sustains a healthy environment and increases resident participation and satisfaction
- Happy residents means a lower vacancy rate
- Fosters a “community “ environment
- A clean, healthy building and apartment effects rental payment timeliness

Community Awareness and Acceptance

The E.D. understands the importance of well-kept buildings and grounds and the connection with "curb appeal", functioning services and occupancy

- **Frequent system failures**
- **Lack of overall maintenance**
- **Persistent infestations**
- **Crime**

Community Acceptance

The E.D. relies in part, on the condition of the property to sustain community support

- **Municipal government, which is sometimes necessary to secure project**
- **Funding and development/zoning approvals**
- **Neighbors and community businesses**
- **School systems and programs for residents**

Finance Director (1 of 2)

- Budget creation, approval and support
- Important to the PM plan as the enabler
- Understands at the necessary level, the ebb and flow
- Supply and need
- Seasonal changes
- Loss prevention

Finance Director (2 of 2)

- Communication with Finance Office, is in the “loop” and aware of repair, supply needs, and scheduled maintenance programs
- Assists with Capital improvement schedules and recommendations
- Understands and supports prompt and fair payment to third party vendors
- Supports pre-emptive rather than “fix when it breaks” strategy

Maintenance Director/Supervisor (1 of 2)

Assuring that Preventive Maintenance is part of the maintenance staff routine

- Daily charges and operational awareness
- Designated times for systems checks and reporting
- Discussing continuous awareness of common areas and grounds
- Documenting service equipment function during unit turns
- Provide informational sessions to property managers, residents and management partners
- Specifically assigned tasks and scheduled review of systems and equipment
- Control of work order process. Quick response and standardized record keeping
- Effective communications with vendors, such as HVAC, vermin control

Maintenance Director/Supervisor (2 of 2)

Provide training to staff assuring understanding of systems, equipment and processes

Thorough training on the use of service vehicles and how to maintain

- Introduce staff to all service equipment, mechanicals and vehicles
- Staff must demonstrate understanding and proficiency in the use of service equipment
- Staff must demonstrate an understanding of the concept of "time determinant" wear and tear

Maintenance Personnel

- Understand the purpose and value of preventive maintenance
- Trained, proper and consistent daily maintenance of systems and equipment (lawn, painting, plumbing supplies and equipment)
- Prompt and accurate documentation of findings related to systems and equipment
- Execute assigned responsibility related to reporting
- Effective and timely resolutions to work order requests

Document, Document, Document

Property Managers

- Know/be familiar with the properties they manage
- Prompt reporting of mechanical and other maintenance issues
- Participate in system checks and other scheduling of services
- Facilitate resident education related to responsibilities as a resident, including lease compliance
- Enforcement of lease
- Good customer service

Resident Services/Council

Playing a role as a Liaison between residents and management

- Keep managers informed of resident issues and complaints
- Assist managers and tenants with constructive meetings
- Informed of upcoming maintenance scheduling that may impact day to day living
- Provide needed information and education on use of agency provided equipment such as unit air conditioners, garbage disposal and heating control

Residents

As consumers of housing services, residents expect safe and decent housing. Repairs finished in a timely fashion and grounds free of hazards. In turn residents can help by:

- Complying with terms of the lease
- No alterations to the unit
- Maintain family size as stated in the lease
- Maintain a healthy living environment
- Prompt notification of any system failure within their apartment
- Call maintenance for appliance/system failures or breakdowns
- Prompt notation of any observed items in need of repair in common areas

The Community and Local Government

Knowing the community and it's needs, and concerns should be a factor in any decision that may affect their quiet enjoyment of their homes or hinder the operation of their business

- Inviting community leaders to comment on any capital improvement is a requirement to gain funding
- Provide guidance with regulatory issues and adopt physical plant and property care practices that support decent, safe and affordable housing

PHAS, PASS, HQS, UPCS, INSPIRE

- Provide oversite and constructive direction regarding the SEMAP scoring system and how to maintain high scores

HUD

Become acquainted with and utilize the regional office supports

- Provide guidance with regulatory issues and adopt physical plant and property care practices that support decent, safe and affordable housing

PHAS, PASS, HQS, UPCS,

- Provide oversite and constructive direction regarding the SEMAP scoring system and how to maintain high scores

Developing Your Preventive Maintenance Plan

Preventive Management Goals

Factors Influencing Goals (1 of 2)

Property factors:

- Age of the building(s)
- Management of PHA Maintenance Staff
- Structure types
- Health and safety UPCS issues
- Local environmental conditions

Population factors:

- Special requirements of the population (elderly; disabled; family; etc)
- Occupancy and Turn Over (impacting the financial stability of the property)

Factors Influencing Goals (2 of 2)

- Surrounding community concerns
- Resident concerns

PHA factors

- PHA Goals and Strategic Plan
- Existing Modernization Plans
- Legal Memorandum of Agreement;
- Improvement Plans
- Resource availability (financial; staff capacity)

HUD factors

- Performance on PHAS physical indicators – REAC scores – Funding for Capital Plan

Preventive Maintenance Plans for Buildings and Structures

Prevent costly damage with scheduled checks of these areas and increase your inspection scores

<u>Roofing:</u>

- Flashing, water intrusion/damage, gutter connections

<u>Windows:</u>

- Broken panes, window mechanicals
- Ineffective or broken weather seals on doors and windows
- Mold/mildew control

PM Structural (1 of 2)

Facades

- Evidence of peeling siding, brick deterioration, peeling paint
- Evidence of water infiltration of foundation or walls
- Evidence of vermin infiltration

Grounds

- Preventing overgrowth of shrubs/grass
- Monitoring resident behaviors/improper use of common space
- Prevent creation of vermin habitats (trash, standing water vacant units)

PM Structural (2 of 2)

Fire and safety :

- Routinely check emergency light and exit lighting
- Daily check for obstructions due to improperly operating exit ways
- Create Routine communication with health, fire and policing

PM Equipment

Lawn equipment , Vehicles, tools:

- Create and maintain a schedule for cleaning and repair of vehicles, tools, Appliances
- Rotate out before fails
- Keep an accurate inventory of all supplies and appliance
- Rotate out before fails
- Properly train staff on the use, maintenance and care of equipment and vehicles

PM Services & Third Party contracts

Create and maintain service contracts that include scheduled checks of:

- Electrical service
- Water, both intake and waste
- Gas and oil service
- HVAC systems

PM for Units/Apartments & Common Areas

Agency owned appliances:

- Keep track of service life of appliance and replace before they breakdown
- Routinely check for leaks, drips and other potential plumbing issues
- Maintain an effective vermin control schedule
- Maintain a schedule for painting, carpet replacement appliance replacement, including unit turn checklist
- Resident education

PM Units & Common Areas

Common areas

- Areas of heavy resident use should be cleaned/inspected for breaks, tears, excessive or improper use of furniture, fixtures.
- Floor , walls and ceiling
- As a daily routine, check these areas for deterioration and abuse

Vermin control

- Maintain scheduled extermination services for common areas and exterior locations. Note any changes decrease or increase of specific problems

PM Unit & Common Areas

Mold control

- Provide educational opportunities for staff and residents
- report unexplained water intrusion
- maintain air exchange systems in good order

Unit turnaround repairs

- Create and maintain a routine that includes a thorough check of *all* systems during unit turn work

Sample Preventative Maintenance Schedule With REAC Specific Areas of Attention

Preventative Maintenance Plan (1 of 3)

January Task Check outdoor lighting weekly	**Date Completed**
Check parking lot lights weekly Check snow removal pellets	
Check roofs for ice/leaks	

February Task	**Date Completed**
Check outdoor lighting weekly Check parking lot lights weekly	
Check snow removal pellets weekly Change furnace filters	

March Task Check outdoor lighting weekly	**Date Completed**
Check parking lot lights weekly Check ice melt and winter equipment Exterminating services	

April Task	**Date Completed**
Check outdoor lighting weekly Check parking lot lights weekly Fertilize lawn	
Weed control of lawn	

Preventative Maintenance Plan (2 of 3)

May Task Check outdoor lighting weekly Check garbage shut weekly	**Date Completed**
Check parking lot lights weekly	
Unit turn checklist Check roofing Check exterior Control shrub growth Check grounds for hazards	
Check common areas for hazards	
Check site drainage Check fencing Checking parking lots	

June Task Check outdoor lighting weekly	**Date Completed**
Check parking lot lights weekly	
Replace damaged sidewalks	
Check signage Cycle painting Fertilize lawns	

July Task	**Date Completed**
Check outdoor lighting weekly	
Check parking lot lights weekly	

August Task Check outdoor lighting weekly Check parking lot lights weekly Clean furnaces/inspect/replace filters Check irrigation heads weekly	**Date Completed**

Preventative Maintenance Plan (3 of 3)

September Task Check outdoor lighting weekly Check parking lot lights weekly	**Date Completed**
Order ice melt	
Exterminating (contractor)	
Replace furnace filter Clean and check furnaces bi-annually Check and make ready seasonal equipment	

October Task Check outdoor lighting weekly Check parking lot lights weekly **Prune trees**	**Date Completed**
Winterize exterior faucets/turn off from units Drain and remove hoses	

November Task	**Date Completed**
Check outdoor lighting weekly	
Check parking lot lights weekly	
Check furnace filters Check ice melt	

December Task Check outdoor lighting weekly Check parking lot lights weekly	**Date Completed**
Check emergency lighting	

PM and Resident Education

Resident education

- Provide education before move-in on how to use appliances and reporting potential problems
- Caring for pets
- Preparing for inspections
- Make sure residents are heard
- Provide good customer service

PM & Workplace Safety

The first step in writing a safety plan is to identify the most likely risks in the workplace.

- Promote safe working conditions
- Provide critical safety training
- Share emergency plans and practice drills
- Training and drills should be backed by up yearly training

Putting it All Together
PHAS and Preventive Maintenance

As stated earlier, one of the goals of a good maintenance program is to facilitate the delivery of descent safe and affordable housing.

Our focus for Property Maintenance Management will focus on PASS and MASS, as these two indicators are the most dependent on the performance of maintenance staff. These indicators comprise 65% of the total PHA score.

§ 5.703 Physical Condition Standards for HUD Housing

HUD housing must be decent, safe, sanitary and in good repair.

Owners of housing described in § 5.701(a), mortgagors of housing described in § 5.701(b), and PHAs and other entities approved by HUD owning housing described in § 5.701(c), must maintain such housing in a manner that meets the physical condition standards set forth in this section in order to be considered decent, safe, sanitary and in good repair. These standards address the major areas of the HUD housing: the site; the building exterior; the building systems; the dwelling units; the common areas; and health and safety considerations.

PHAS Interim Rule

- In February, 2011 HUD announced the PHAS Interim Rule. The PHAS interim rule is the first rule to assess and score PHAs under the asset management model. The goals of the interim rule are:
- Better management and oversight of public housing
- Provide improved information about the operating costs of and the performance of housing projects
- Reduce the administrative reporting requirements of both PHA and HUD
- Align PHAs with Asset Management

Asset Management Model and PHAs

- HUD designed the Public Housing Assessment System (PHAS)
- to improve the delivery of services in public housing
- enhance trust in the public housing system among public housing agencies (PHA's), public housing residents, and the general public.
- PHAS provides HUD with a management tool to uniformly measure the performance of housing authorities in essential housing operations of projects, on a program-wide basis and individual project basis

PHAS Indicators

Each PHA receives an overall PHAS score (out of 100 total possible points), rounded to the nearest whole number, based on the four indicators:

- Physical condition
- Financial condition
- Management operations
- The Capital Fund program

Each of these indicators contains sub-indicators, and the scores for the sub-indicators are used to determine a single score for each of these PHAS indicators. All PHAs that receive a PHAS assessment receive a performance designation. The performance designation is based on the overall PHAS score and the four indicator scores.

PHAS Point System

- Financial Assessment Sub System (FASS) – 25 Points
- Physical Assessment Sub System (PASS) based on Uniform Physical Condition Standards (UPCS) – 40 Points
- Management Operations (MASS) – 25 Points
- Capital Fund – 10 Points

Performance Measures (1 of 2)

The total score is used to determine the PHA's designation under PHAS.

- Designation Points
- High Performer 90-100
- Standard Performer 60-89
- Troubled Performer 59 or less

REAC & PASS

- Physical Assessment Subsystem (PASS) The Office of Public and Indian Housing-Real Estate Assessment Center (PIH-REAC), Physical Assessment Subsystem (PASS) develops and manages the protocol and processes required to assess public housing and Federal Housing Administration (FHA) multifamily insured and noninsured properties.
- PASS assesses the physical condition of the Department of Housing and Urban Development (HUD) properties through periodic inspections conducted by independent inspectors certified in Uniform Physical Condition Standards (UPCS).

Performance Measures (2 of 2)

High Performer

Percentage of Points	Indicator
60%	PASS, FASS and MASS
50%	CFP
90%	Overall PHAS Score

Standard Performer

Percentage of Points	Indicator
60%	PASS, FASS and MASS
50%	CFP
60%	Overall PHAS Score

Troubled Performer

Percentage of Points	Indicator
Less than 60%	Under any one PASS, FASS or MASS
60%	Overall PHAS Score

PASS: Physical Assessment Subsystem

The purpose of the PASS is to determine whether public housing units are decent, safe, sanitary and in good repair, and to determine the level to which the PHA is maintaining its public housing in accordance with housing condition standards.

PHAS Scoring

If a PHA achieves a total PHAS score of at least 60 percent and achieves a score of less than 60 percent under one or more of the physical condition, financial condition, or management operations indicators, they will be designated as substandard physical, substandard financial, or substandard management, respectively.

The HUD office will require the PHA to prepare a Corrective Action Plan (CAP) if the deficiencies have not already been addressed in a current Corrective Action Plan

PASS Performance

How can a PHA do well under PASS?

- **Focus on the basics**
- **Understand and comply with Uniform Physical Condition Standards (UPCS) Inspect 100% of units annually using UPCS protocols**
- **Examine Capital Fund use and prioritization**
- **Compare maintenance to new development resources.**
- **Is maintenance underfunded?**

UPCS Inspection

HUD's Uniform Physical Condition Standards (UPCS) is the inspection protocol intended to assure there is uniformity and objectivity in the evaluation of the physical condition of HUD properties. Major inspection areas under UPCS are:

- Site
- Building Exterior
- Building Systems (*preventive maintenance plays a major roll in all*)
- Common Areas
- Unit

UPCS Inspections take place every three years for AMPs with a high performer status, every two years for AMPs with a score above 80 but less than 90, and annually for troubled performers.

REAC Pre-Inspection (1 of 3)

- REAC Pre-Inspection Checklist
- Inspecting the property for these items will help you when you are preparing for a REAC inspection:
- Inspect for any trip hazards
- Inspect parking lots for ponding water
- Inspect basement area for settlement
- Check roof for any holes or openings, and check the ballast on flat roofs to be sure it's even
- Check all brick and concrete buildings for any exposed reinforcing bar, missing mortar or any holes

REAC Pre-Inspection (2 of 3)

- Inspect cable television and telephone wiring
- Check all satellite television dishes for proper mountings
- Check the disconnects for large equipment and make sure all disconnects have padlocks
- Check all breaker boxes for missing covers or plates
- Check all windows for cracked or fogged window panes
- Check all elevator control panels, signal panels and hoist controls
- Inspect all fire extinguishers in public areas, common areas and units

REAC Pre-Inspection (3 of 3)

- Remove any unused items that are abandoned and have wiring
- Check for deficiencies in units and repair them
- Check battery-powered emergency lights
- Inspect all sprinkler heads
- Inspect seals on all exterior doors
- Test every GFI with a GFI tester (GFCI testers help determine whether electrical receptacles are providing power and that they are properly wired for safe operation)
- Check smoke detectors

UPCS Inspection Frequency (1 of 3)

Multifamily Frequencies Are Based On Prior Inspection Score

- Property scoring greater than or equal to 90 - Inspection every 3rd year
- Property scoring 80-89 - Inspection every 2nd year
- Property scoring less than 80 - Inspection every year
- For a new or refinanced property, the first inspection is 2 years after:
- For new assisted property - Date of assistance contract
- For newly insured or refinanced properties - Final endorsement
- The last inspection date and score determine the ideal future date (IFD).
- A property's next inspection will be between 3 months before or after the IFD.
- But the inspection should be no later than end of the calendar year of its IFD.UPCS Inspection Frequency

UPCS Inspection Frequency (2 of 3)

Public Housing

- For PHAs with 250 or more units:
- Project scoring greater than or equal to 90 - Inspection every 3rd year
- Project scoring 80-89 - Inspection every 2nd year
- Project scoring less than 80 - Inspection every year
- Troubled PHAs scoring less than 60 or Capital Fund Troubled Inspections of all projects every year

UPCS Inspection Frequency (3 of 3)

Public Housing

For PHAs with less than 250 units:

- **High Performer PHAs scoring greater than or equal to 90 - Inspections every 3rd year**
- **Standard & Substandard PHAS scoring 60-89 - Inspections every 2nd year**
- **Projects scoring less than 80 - Inspections every year**
- **Troubled - PHAS scoring less than 60 or Capital Fund Troubled Inspections every year**

Minimum Unit Sample Size Reference Chart

Units on the Property	Minimum Unit Sample Size
1	1
2	2
3	3
4	4
5-6	5
7	6
8-9	7
10-11	8
12-13	9
14-16	10
17-18	11
19-21	12
22-25	13

Units on the Property	Minimum Unit Sample Size
26-29	14
30-34	15
35-40	16
41-47	17
48-56	18
57-67	19
68-81	20
82-101	21
102-130	22
131-175	23
176-257	24
258-449	25
45-1461	26
1462-9999	27

Components of UPCS Inspections

Site.

- The site components, such as fencing and retaining walls, grounds, lighting, mailboxes/project signs, parking lots/driveways, play areas and equipment, refuse disposal, roads, storm drainage and walkways must be free of health and safety hazards and be in good repair.
- The site must not be subject to material adverse conditions, such as abandoned vehicles, dangerous walks or steps, poor drainage, septic tank back-ups, sewer hazards, excess accumulations of trash, vermin or rodent infestation or fire hazards.

Building Exterior

- Each building on the site must be structurally sound, secure, habitable, and in good repair.
- Each building's doors, fire escapes, foundations, lighting, roofs, walls, and windows, where applicable, must be free of health and safety hazards, operable, and in good repair.

Building Systems

Each building's domestic water, electrical system, elevators, emergency power, fire protection, HVAC, and sanitary system must be free of health and safety hazards, functionally adequate, operable, and in good repair.

Dwelling Unit (1 of 2)

- (1) Each dwelling unit within a building must be structurally sound, habitable, and in good repair.
- All areas and aspects of the dwelling unit (for example, the unit's bathroom, call-for-aid (if applicable), ceiling, doors, electrical systems, floors, hot water heater, HVAC (where individual units are provided), kitchen, lighting, outlets/switches, patio/porch/balcony, smoke detectors, stairs, walls, and windows) must be free of health and safety hazards, functionally adequate, operable, and in good repair.

Dwelling Unit (2 of 2)

- (2) Where applicable, the dwelling unit must have hot and cold running water, including an adequate source of potable water (note for example that single room occupancy units need not contain water facilities).
- (3) If the dwelling unit includes its own sanitary facility, it must be in proper operating condition, usable in privacy, and adequate for personal hygiene and the disposal of human waste.
- (4) The dwelling unit must include at least one battery-operated or hard-wired smoke detector, in proper working condition, on each level of the unit.

Common Areas

The common areas must be structurally sound, secure, and functionally adequate for the purposes intended.

- The basement/garage/carport, restrooms, closets, utility, mechanical, community rooms, day care, halls/corridors, stairs, kitchens, laundry rooms, office, porch, patio, balcony, and trash collection areas, if applicable, must be free of health and safety hazards, operable, and in good repair.
- All common area ceilings, doors, floors, HVAC, lighting, outlets/switches, smoke detectors, stairs, walls, and windows, to the extent applicable, must be free of health and safety hazards, operable, and in good repair.
- These standards for common areas apply, to a varying extent, to all HUD housing, but will be particularly relevant to congregate housing, independent group homes/residences, and single room occupancy units, in which the individual dwelling units (sleeping areas) do not contain kitchen and/or bathroom facilities.

Health and Safety Concerns (1 of 2)

All areas and components of the housing must be free of health and safety hazards. These areas include, but are not limited to:

- air quality, electrical hazards, elevators, emergency/fire exits, flammable materials, garbage and debris, handrail hazards, infestation, and lead-based paint. For example, the buildings must have fire exits that are not blocked and have hand rails that are undamaged and have no other observable deficiencies.
- The dwelling units and common areas must have proper ventilation and be free of mold, odor (e.g., propane, natural gas, methane gas), or other observable deficiencies.

Health and Safety Concerns (2 of 2)

- The housing must have no evidence of infestation by rats, mice, or other vermin, or of garbage and debris.
- The housing must have no evidence of electrical hazards, natural hazards, or fire hazards.
- The housing must comply with all requirements related to the evaluation and reduction of lead-based paint hazards and have available proper certifications of such (see 24 CFR part 35).

Compliance With State and Local Codes

- The physical condition standards in this section do not supersede or preempt State and local codes for building and maintenance with which HUD housing must comply.
- HUD housing must continue to adhere to these codes.

Management Operations Indicator MASS

The Role of PM and the MASS Score

- **The purpose of the management operations indicator is to assess the AMP's and PHA's management operations capabilities.**

PM & MASS

- PHAS measures the overall health of a PHA through physical, operational, financial and capital fund management indicators. Maintenance plays a significant role in both the physical and the operational components.
- As mentioned above, the physical condition of a housing agency buildings and units are evaluated in PASS using the UPCS criteria. Operational effectiveness is determined by the Management Assessment Subsystem (MASS) which measures such elements as unit turnover and occupancy rate

MASS: Management Assessment Subsystem

- The purpose of the management operations indicator is to assess the AMP's and PHA's management operations capabilities.
- How is it Scored?
- MASS is determined by data reported to HUD by the PHA in the Financial Data Schedule (FDS). A score is calculated for each AMP. Scores roll up to a composite PHA score. The FDS is a required report that is sent by the PHA to HUD/REAC both 60 days after the end of the fiscal year for unaudited financial data and nine months after the end of the fiscal year with the audited data.
- The MASS scores can be generated from either submission, but if there is a discrepancy in data, the Audited submission data will be used. MASS is 25 points of the PHAS score. Scores are assigned by the following sub-indicators:

MASS Indicators

Occupancy:

- Emphasizes and measures the AMP's performance in keeping available units occupied. The higher the occupancy rate, the higher the score. The maximum points assigned for this sub-indicator is 16 points.

Resident Accounts Receivable:

- Measures the amount of resident accounts receivable against resident revenue (i.e. rent paid). The maximum points assigned for this sub-indicator is 5 points.

Accounts Payable:

- Measures total vendor accounts payable, both current and past due against total monthly operating expenses. The lower the ratio, the higher the score. The maximum points assigned for this sub-indicator is 4 points

MASS Scoring (1 of 2)

AMPs may be eligible for a Physical Condition & Neighborhood Environment (PCNE) score adjustment.

AMPs at least 28 years old are eligible for a 1-point adjustment. Additionally, AMPs located in neighborhoods with 40% or more families living below the poverty line are eligible for a 1-point adjustment.

MASS Scoring (2 of 2)

How can a PHA Improve MASS? Focus on the Basics:

- Increase number of occupied units/reduce vacancies
- Maintain an updated waiting list
- Turn vacant units around quickly
- Collect the rents on time
- Enforce rent collection policies as much as possible
- Increase revenue and lower Tenant Accounts Receivable (TAR) ratio
- Reduce accounts payable by paying bills on time
- Be knowledgeable about your physical conditions
- Review and understand your maintenance reports
- Know the amounts and status of your Capital Fund Program (CFP) grants
- Thoughtfully approve construction contracts

Improving MASS Scores (1 of 2)

Monitor Vacant Unit Turnaround

- Monitor resident move-out/turn-over rate, which indicates resident satisfaction, vacancy loss issues, waiting list sufficiency, marketing and outreach, and changes in local market.
- Monitor property turn-over/turn around time, which indicates the time it takes to reoccupy vacant units
- Track move-out date to re-occupancy date, which of three periods:

Improving MASS Scores (2 of 2)

Down time:

Down time starts on the move out date!

Make ready time:

- Make ready time starts when the housing manager tells the maintenance supervisor the tenant is gone and it's time to prepare the unit. Date is sometimes documented as the date on a move-out inspection form. The form the housing manager uses for security deposit purposes

Lease-up time:

- Lease-up time starts when the maintenance man tells the housing manager the unit is done, the paint is dry, and it's okay to move somebody in. Date is sometimes documented on a work order form or log.

PM & MASS Scoring (1 of 4)

MASS is worth 25 of the 100 points in the overall PHAS score. The threshold for meeting this indicator must be at least 15 points, or 60% of the maximum number of points. The 25 points available in MASS are broken down as follows:

- Occupancy Rate 16
- Tenant Accounts Receivable 5
- Accounts Payable 4
- Total 25

The Occupancy Rate factor in MASS is the one most relevant to maintenance performance. This indicator is greatly affected by the efficiency and timeliness of unit turns once they are vacated.

PM & MASS Scoring (2 of 4)

Occupancy Rate	Points
Greater than or equal to 98%	16
Less than 98% but greater than or equal to 96%	12
Less than 96% but greater than or equal to 94%	8
Less than 94% but greater than or equal to 92%	4
Less than 92% but greater than or equal to 91%	1
Less than 90%	0

PM & MASS Scoring (3 of 4)

Because the occupancy rate is weighted so heavily in PHAS scoring, maintenance must have clear goals and timeframes with respect to preparing units for leasing after they become vacant.

Light maintenance such as painting, changing fixtures or doors can be done in as little as 3 days. Major plumbing, electrical, flooring and carpentry can keep a unit off line for 20 days or more.

PM & MASS Scoring (4 of 4)

- Unit turnover timeframes vary with the availability and capability of staff, unit size and project population, and quality/durability of interior materials such as doors, flooring and plumbing fixtures.
- Scoring well in this indicator also requires regular communication with the leasing department so that the unit can be occupied as soon as it is ready

Conclusion

Preventive Maintenance plays a key role in all aspects of housing viability.

- Measures reflect HUD's expectation of HA's providing safe, decent and affordable housing
- Supports a predicable cost basis which in turn preserves housing units at affordable levels
- Promotes high occupancy rates
- Higher rent collection rates
- Community acceptance by promoting a perception of a well run and community aware property

Thank You for Your Participation Today