Appendix B

Operations and Maintenance: Facility Management Software System (FMSS)

Classroom Training Student Manual

September 2013

Institute for Parks and Public Lands
INDIANA UNIVERSITY

APPENDIX B: NPS GLOSSARY

- General Terminology
- Facility Management Software System (FMSS) Terminology
- Acronym List

Asset Deficiencies – A facility's defect that occurs when maintenance and repair tasks are not performed in a timely manner. Deficiencies may not have immediately observable physical consequences, but when allowed to accumulate uncorrected, they inevitably lead to deterioration of performance, loss of asset value, or both. An accumulation of such uncorrected deficiencies is a backlog that represents a liability (in both physical and financial terms) for an asset. (DOI, FMAR 2/98)

Asset Management – A systematic process of maintaining, upgrading, and operating physical assets cost-effectively. It combines engineering principles with sound business practices and economic theory, and it provides tools to facilitate a more organized, logical approach to decision-making, providing a framework for handling both short- and long-term planning. (*Asset Management: Advancing the State of the Art into the 21st Century Through Public-Private Dialogue,* Society of State Highway and Transportation Officials, 1996.), DO-80

Asset Management Process – A process representing the primary steps required to properly maintain and account for assets utilizing best business practices: Mission, Needs Assessment, Inventory of Assets, Work Identification, Work Planning, Work Performance, and Evaluation. (AMP/FMSS Student Manual 1/02)

Asset Priority Index (API) – An asset evaluation process that quantifies the value of an asset in relation to the mission of the park. The API utilizes a numeric rating system whereby assets are ranked. (Facility Management Program 04/02), DO-80

Authorization – A separate Act that authorizes appropriations to be made. (NASA Facilities Mgmt 10/94)

Backlog – The unfunded facilities deficiencies work required to bring facilities and collateral equipment to a condition that meets accepted codes, laws, and standards to achieve expected life. (DOI, FMAR 2/98)

Backlog of Maintenance and Repair (BMAR) – The unfunded facilities maintenance work required to bring facilities and collateral equipment to a condition that meets acceptable facilities maintenance standards. (NASA Facilities Mgmt 10/94)

Base Operations – Annual maintenance and operations paid for by normal NPS appropriations. Base included no special funding for regular cyclic, cultural cyclic, repair/rehab, line item construction, youth programs, etc.

Benchmark – The continuous process of measuring a product, service, or process against the best practices of recognized leaders in the field in order to achieve superior performance. (NASA Facilities Mgmt 10/94), DO-80

Benchmarking – A well-defined, widely accepted standard of performance that is used to measure an individual's progress toward a specific level of competency. (DO-80, draft 2004)

General Terminology

Accountability – The obligations to report, explain, or justify to primary stakeholders. (AMP/FMSS Student Manual, 01/02)

Alterations – Changes to the interior arrangements or other physical characteristics of an existing facility or installed equipment so that it can be used more effectively for its currently designated purpose or adapted to a new use. Alterations may include work referred to as improvement, conversion, remodeling, and modernization but is not maintenance. (Committing to the Cost of Ownership)

Annual Maintenance – Maintenance performed to repair failures during the year in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it is scheduled to occur. (DOI 2003 Budget Request Formulation Guidance Attachment G)

Annual Maintenance and Repair (M&R) Budget – An annual maintenance and repair budget will in general be the sum of two components:

- Routine expenditures for maintenance, repairs, and planned replacement; and
- Expenditures for correction of deferred deficiencies (i.e., backlog reduction).

  An M&R budget should not include operations or alterations expenditures. (Committing to the Cost of Ownership)

Annual Work Plan (AWP) – A plan prepared on an annual basis prior to the start of the applicable fiscal year that systematically lays out the maintenance and repair work to be accomplished within the budget constraints of the area. (NASA Facilities Mgmt 10/94)

Appropriation – Authority by an act of Congress to make payments out of the Treasury for specified purposes. (NASA Facilities Mgmt 10/94)

- Annual Appropriation – An appropriation that is available for incurring obligations only during the one fiscal year specified in the Appropriation Act.
- Current Appropriation – An appropriation that is available for obligation during the current fiscal year.

Appropriation Year – In the case of an annual appropriation, that fiscal year in which obligations were authorized to be incurred. (NASA Facilities Mgmt 10/94)

Assessment – The process of comparing and evaluating an entity against established standards, and documenting the differences. (ICAP Ver. 2.0 Reference Manual 1993)

Asset – Real or personal property that the NPS desires to track and manage as a distinct identifiable entity. It may be a physical structure or grouping of structures, land features, or other tangible property that has a specific service or function such as a farm, cemetery, campground, marina, or sewage treatment plant. In the FMSS, assets are recorded as Location Records.

Budget – A formal estimate of future revenues, obligations to be incurred, and outlays to be made during a definite period of time and, when determined to be appropriate, upon the basis of accrued expenditures and costs to be incurred. (NASA Facilities Mgmt 10/94)

Budget Authority – The right, provided by law, to enter into obligations that will result in immediate or future outlays involving Government funds, except that such term does not include authority to ensure or guarantee the repayment of indebtedness incurred by another person or the Government. The basic forms of budget authority are appropriations, contract authority, and borrowing authority. Budget authority may be classified by the period of availability (one year, multiple year, no year), by the timing of Congressional action (current or permanent), or by the manner of determining the amount available (definite or indefinite). (NASA Facilities Mgmt 10/94)

Budget Cycle – The period of time that elapses from the initiation of the budget process to the completion thereof for a particular fiscal year. (NASA Facilities Mgmt 10/94)

Budget Execution – The processes involved at every level in budgetary administration subsequent to passage of an appropriation act. This includes preparation of operating budgets, apportionments, funding actions, review and approval of operation budgets, fund reporting, and report reviews. (NASA Facilities Mgmt 10/94)

Budget Formulation – The processes in preparation, review, and establishment of the annual budget presented to the Congress as a basis for appropriations. (NASA Facilities Mgmt 10/94)

Budget Guidelines – Both general and specific instructions furnished by a higher level of management as a basis for budget formulation and execution. (NASA Facilities Mgmt 10/94)

Budget Process – The process embracing all the stages through which the budget passes, namely, the formulation stage, the review and enactment stage, and the execution stage. (NASA Facilities Mgmt 10/94)

Budget Year – The fiscal year for which estimates are submitted, which is the period including Oct. 1 through the following Sept. 30 (see Fiscal Year). (NASA Facilities Mgmt 10/94)

Business Plan – A written document that clarifies park needs, identifying areas for improvement and measuring current work against the standard that parks must maintain to fulfill their mission. (NPCA.org 2003)

Business Practices – or, Business Process. Any series of steps that are followed in order to carry out some task in a business. (Managerial Accounting, 1997) DO-80, draft 2004

Call for Work – Work requested by other park divisions, cooperating associations, concessions, and other park-related interests.

Capital Improvements (Alterations) – Changes to the interior arrangements or other physical characteristics of an existing facility or installed equipment so that it can be used more

effectively for its currently designated purpose or adapted to a new use. Alterations may include work referred to as improvement, conversion, remodeling, and modernization. Such alterations are not maintenance. (Committing to the Cost of Ownership) DO-80, draft 2004

Capital Improvements (New Construction) – Construction that adds to the existing footprint of an asset, or creates a new asset. (AME, 2003), DO-80, draft 2004

Components – A building subsystem, major item of equipment, or of a major facility. (Instruction Memorandum No. C)-98-040, U.S. Department of Interior, Bureau of Land Management, 1998), DO-80, draft 2004

Component Renewal (CR) – Also known as Recapitalization. The planned replacement of a component or system that will reach the end of its useful life based on condition and life cycle analysis within the facility's lifetime. Examples of component renewals include roof systems, utility components, pavement, and other major dynamic equipment. (AME, 2003), DO-80, draft 2004

Component Renewal Deferred Maintenance (CR-DM) – A component renewal work type that has been tracked in the system and facility management practice and is not funded when identified as Deferred Maintenance will then move into the Component Renewal Deferred Maintenance work type category. *Note:* This allows for long-term business practices to be documented and reported. AME, 2003, DO-80, draft 2004

Condition Assessment – The inspection and documentation of the condition of the features of an asset as measured against the applicable maintenance or condition standards. It provides the basis for long-range maintenance planning as well as annual work plans and budgets. (ICAP Ver. 2.0 Reference Manual 1993), DO-80, draft 2004

Condition Assessment, Annual (INCAA) – The inspection of an asset identifying obvious and apparent deficiencies, documenting the condition as measured against the applicable maintenance or condition standards. It provides the basis for annual work plans and budgets. Develops verifiable deficiency cost estimates and determines the asset's Facility Condition Index for a simple measurement of a facility's relative condition at a particular point in time. Reviewing the API / FCI Relationship assists managers in determining appropriate action. The Annual Assessment identifies the deferred maintenance for a specific asset. (Facility Management Program 04/02), DO-80, draft 2004

Condition Assessment, Comprehensive (INCAC) – The review and validation of the inventory inspection of an asset identifying in-depth deficiencies and documenting the condition as measured against the applicable maintenance or condition standards. It provides the basis for long-range maintenance planning as well as annual work plans and budgets. Develops verifiable deficiency cost estimates and determines the Facility Condition Index for a simple measurement of a facility's relative condition at a particular point in time. The Comprehensive Assessment identifies the deferred maintenance for a specific asset. The CA Comprehensive is to be performed on an asset every five (5) years. If conditions warrant or regulations require, a

CA – Comprehensive may occur more frequently. (Facility Management Program 04/02), DO-80, draft 2004

Condition Assessment Surveys – See also Facility Condition Assessment Survey. Periodic inspections of PP&E to determine their current condition and cost to correct any deficiencies. It is desirable that condition assessment surveys be based on generally accepted methods and standards consistently applied. (Accounting for Property, Plant, and Equipment 11/30/97)

Construction – The erection, installation, or assembly of a new or replacement facility, or an addition in area, volume, or both to an existing facility. (NASA Facilities Mgmt 10/94)

Construction Project – A facility project relating to the erection, installation, or assembly of a new facility, replacement facility, or an addition in area, volume, or both to an existing facility. (NASA Facilities Mgmt 10/94)

Contracting Officer – Any person who, by appointment in accordance with procedures prescribed by the Procurement Regulation (see appendix C. reference 36, Part 1, Subpart 4), has the authority to enter into and administer contracts and make determinations and findings with respect thereto, or has any part of such authority. (NASA Facilities Mgmt 10/94)

Contractor – The supplier of the end item and associated support items to the Government under the terms of a specific contract. (NASA Facilities Mgmt 10/94)

Contracts – All types of agreements and orders for the procurement of supplies or services. Includes awards and notices of award; contracts of a fixed price, cost, cost-plus-a-fixed-fee, or incentive type; contracts providing for the issuance of job orders, task orders, or task letters thereunder; letter contracts; and purchase orders. It also includes supplemental agreements with respect to any of the foregoing. (NASA Facilities Mgmt 10/94)

Corrective Maintenance – Unscheduled reactive repairs that would not be estimated and planned, but accomplished by local staff or existing service contractors. ***Note:*** Not part of the condition assessment process, but a facility maintenance function relating to service calls. (AME ,2003), DO-80, draft 2004

Cost Estimate – An educated guess of what an item would cost to repair or replace. The estimate is based on previous experience with like assets in similar condition and/or developed using a cost-estimating program. (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01)

Cost-Estimating Software System (CESS) – (Timberline™ Precision Estimating Tool) A software program used as a tool to assist in determining the cost of repairing identified asset deficiencies.

Cost of Ownership – Cost of ownership of a building is the total of all expenditures an owner will make over the course of the building's service lifetime. (Committing to the Cost of

Ownership) Expenditures include Planning, Acquisition, Design, Construction, Operations & Maintenance, Recapitalization and Disposal. (DO-80, draft 2004)

Current Replacement Value (CRV) – Standard industry costs and engineering estimates of materials, supplies, and labor required to replace a facility at existing size and functional capability. This cost includes current costs for planning / design, construction, and construction management. (DOI, FMAR 2/98), DO-80, draft 2004

Current Year – The fiscal year immediately preceding the budget year. (NASA Facilities Mgmt 10/94)

Cyclic Maintenance – Work activities that recur on a periodic cycle of greater than one year. Typical projects include re-roofing or re-painting buildings, overhauling engines, and refinishing hardwood floors. (GAO Parks and Recreation Report, March 1988)

Deferred Maintenance – Maintenance that was not performed when it should have been or was scheduled but was put off or delayed. Continued deferment of maintenance will result in deficiencies. (DOI, FMAR 2/98) In practice, this means actions that are required to correct existing deficiencies that are a result of unaccomplished past maintenance, repairs, and replacements. (AME, 2003)

Deficiencies – A facilities defect that occurs when maintenance and repair tasks are not performed in a timely manner. Deficiencies may not have immediately observable physical consequences, but when allowed to accumulate uncorrected, they inevitably lead to deterioration of performance, loss of asset value, or both. An accumulation of such uncorrected deficiencies is a backlog that represents a liability (in both physical and financial terms) for a building. (DOI, FMAR 2/98)

Demolition – Removal of an asset that has been determined to be unsafe or no longer meets, or is not required to meet, mission goals. Removal of an NPS asset is determined by management in conjunction with the NPS planning and compliance procedures. (AME, 2003, DO-80, draft 2004)

Electric Distribution – The delivery of electric energy to customers on the distribution system. Electric energy is carried at high voltages along transmission lines. It is reduced in voltage at a substation and delivered over primary distribution lines. For users needing even lower voltages, the voltage is reduced once again by a distribution transformer. At this point it changes from primary to secondary distribution voltage. (Condition Assessment Incident Command, Utility Terms 03/01)

Emergency Maintenance – A maintenance task carried out in order to avert an immediate hazard or to correct an unexpected failure (e.g., responding to a utility spill, rockslide, etc.). (AME, 2003, DO-80, draft 2004)

Estimated Cost – A calculated anticipated amount, as distinguished from an actual outlay, based upon related cost experience, prevailing wages and prices, or anticipated future

conditions, usually for the purposes of contract negotiation, budgetary control, or reimbursement. (NASA Facilities Mgmt 1/94)

Facilities Condition Assessment Survey (FCAS) – See also Condition Assessment Surveys. This is used to establish the overall condition of an asset through the development of the asset's replacement cost and the calculation of the total deferred maintenance cost. This information is then used to develop the FCI for the asset. (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01)

Facilities Management Program (FMP) – The management systems and support computer software for planning, organizing, directing, and controlling park maintenance. (ICAP Ver. 2.0 Reference Manual 1993)

Facilities Work Controls/Evaluation – The analysis of planned versus accomplished work. Includes the review and updating of asset/feature condition and provides a review and refinement of the work process for future cycles. Implementation of this process includes integration of mission resources and organization with overall asset strategies. (DO-80, draft 2004)

Facilities Work Plan – The process of taking each individual work statement or qualified work request and developing the scope of work, estimating costs, determining the need for engineering or compliance approvals, determining the relationships with associated independent work orders, and determining funding, resources, and priorities. (DO-80, draft 2004)

Facility – A term used to encompass land, buildings, other structures, and other real property improvements, including utilities. (NASA Facilities Mgmt 10/94)

Facility Condition Index (FCI) – A measure of a facility's relative condition at a particular point in time to other similar facilities. The FCI rating is a ratio of the cost of repair of the asset's deficiencies (deferred maintenance, recurring maintenance that has been deferred, component renewal that has been deferred, and immediate personal hazard life safety repairs) divided by the current replacement value for the asset.

$$FCI = \frac{\text{FM sub-worktypes: DM + RM-DM + CR-DM + IPH}}{\text{CRV}}$$

The following ratings are baseline indicators that will be reviewed and adjusted by asset category as data is evaluated:

> Good ≤ .100 – Assets in good condition are typically maintained with ONPS funds. Preventive Maintenance (cyclic) funds are used to maintain systems or features with a recurrence of more than one year to 25 years.
> Fair = .101 – .150 – Assets in fair condition typically require Preventive Maintenance funds or other special emphasis funds to bring systems or features back to good condition. Repair Rehab funds may be used for more expensive/complex deferred maintenance items.

Poor = .151 – .500 – Assets in poor condition typically require Repair Rehab funds to bring them in to good condition. Line-Item funds may be used to reduce the more expensive/complex deferred maintenance items.
Serious = > .500 – Assets in serious condition: Heritage assets – Strongly consider stabilization / restoration. Non-heritage assets – Strongly consider replacement. (Facility Management Program 04/02), DO-80, draft 2004

Facility Maintenance – The day-to-day activities as well as the planned work required to preserve facilities (buildings, structures, grounds, and utility systems) in such a condition that they may be used for their designated purpose over an intended service life. Facility maintenance includes all activities not included in facility operations and capital improvements. (NASA Facilities Mgmt 10//94)

Facility Management – The planning, prioritizing, organizing, controlling, reporting, evaluating, and adjusting of facility use to support NPS activities based upon customers' facility needs and the Servicewide and Area's mission requirements. (NASA Facilities Mgmt 10/94), DO-80, draft 2004

Facility Management Software System (FMSS) – This software meets all the National Park Service criteria for a relational database to manage assets at the individual park level. (AMD/FMSS Student Manual 10/02), DO-80, draft 2004. FMSS (Maximo™) is an asset-based work identification, work management, and work analysis program. This "cradle to grave" asset and work management system allows a park, region, or WASO to track all aspects of work related to a specific asset, such as planning and design, construction, operations/maintenance, and rehabilitation or removal.

Facility Operations – Work activities performed on a recurring basis throughout the year that intend to meet routine, daily park operational needs. Typical work performed under operations includes janitorial and custodial services, snow removal, operation or purchase of utilities (water, sewer, and electricity), grounds keeping, etc. (GAO Parks and Recreation report March 1988), DO-80, draft 2004

Fair – See also Facility Condition Index. A facility condition. Facility meets minimum standards, but requires additional maintenance to prevent further deterioration, increase operating efficiency, and to achieve normal life expectancy. (DOI, FMAR 2/98)

Financial and Business Management System (FBMS) – System of record for Financials, Total Cost of Facility Management, Real Property and Fleet.

Fire and Life Safety Annual – An annual fire and life safety inspection conducted by a trained person. This annual inspection will be a follow-up to the INFPCA; it is not a substitute for it. These inspections shall be conducted in accord with the Annual Fire Protection Condition Assessment as set in RM-58. (DO-80, draft 2004)

Fire Protection Condition Assessment (INFPCA) – A comprehensive fire and life inspection of a facility conducted by a Registered Fire Protection Engineer, Certified Fire Inspector, or other

person approved by the Regional Structural Fire Management Officer. Each occupied building is required to be inspected initially and then again when there are any changes in the occupancy or to the building. All buildings that are critical to the operation of the park shall also be inspected. These inspections shall be conducted in accord with the Fire Protection Condition Assessment as set in RM-58. (DO-80, draft)

Fiscal Year – In the Federal Government, it is the 12-month period from Oct. 1 of one calendar year through Sept. 30 of the following year. (NASA Facilities Mgmt 10/94)

Funding – The issuance of allotments that provides authority to incur commitments and obligations and make payments within appropriations made by the Congress, within the apportionment limitations established by the Office of Management and Budget, and within the approved resources authorization. (NASA Facilities Mgmt 10/94)

Funding Availability – The amount of obligating authority provided by appropriations, contract authorizations, actual transfers to or from other appropriations, and anticipated reimbursements. (NASA Facilities Mgmt 10/94)

GAO – Government Accounting Office

Good – See also Facility Condition Index – A facility condition. Facility meets established maintenance standards, operates efficiently, and has a normal life expectancy. See Facility Condition Index. (DOI, FMAR 2/98)

Government-Furnished Equipment (GFE) – Equipment in the possession of, or acquired directly by, the Government and subsequently delivered or otherwise made available to a contractor. A more detailed definition may be found in FAR, Part 45. (NASA Facilities Mgmt 10/94)

GPRA – Government Performance and Results Act of 1993

Gross Square Footage – The sum of floor areas within the outside faces of the exterior walls for all building levels that have floor surfaces. Covered walkways, open roofed-over areas that are paved, porches, and similar spaces shall have the architectural area multiplied by an area factor of 0.50.
{References include AIA D101, *Architectural Area and Volume of Buildings*; BOMA, *Standard Method for Measuring Floor Area in Office Buildings*, and IFMA's "Definitions" (web page)}.

Inspections – The documentation of the condition of the features of an asset as measured against applicable maintenance, condition, or other standards. (DO-80, draft 2004)

Interim Control Measures – RAC – Steps being taken in the interim to protect employees from being injured as a result of the unsafe or unhealthful working condition.

Inventory – The enumeration and identification of the assets and their functions that are to be managed and maintained by a park. The inventory is the foundation for effective facilities management. The inventory should permit identifying maintainable items including those

subject to preventative maintenance. (ICAP Ver. 2.0 Reference Manual 1993, DO-80, draft 2004)

Inventory Condition Assessment Program (ICAP) – A legacy computer software program no longer supported by the NPS.

ISO – International Standards Organization

Legislatively Mandated – Accessibility, EPA, lead-based paint, etc., deficiencies that must be corrected in response to regulatory requirements. These activities include retrofitting for code compliance and accessibility and removing hazardous materials, such as asbestos and underground storage tanks. (Stewardship of Federal Facilities), DO-80, draft 2004

Life Cycle Analysis Trade-off – An Alternatives Analysis used to consider the benefits of renovating, disposing, or replacing an existing asset. (DO-80, draft 2004)

Life Cycle Assessments – An analytical process for determining subsystem replacement needs based on expected design life and expert judgment. (DO-80, draft 2004)

Life Cycle Asset Management – A systematic process of maintaining, upgrading, and operating physical assets cost effectively. It combines engineering principles with sound business practices and economic theory, and it provides tools to facilitate a more organized, logical approach to decision-making. In the broadest sense, life cycle asset management is a strategic approach to managing physical infrastructure.

Life Cycle Costing – An acquisition or procurement technique that considers operating, maintenance, and other costs in addition to the acquisition cost of assets. Since it results in a forecast of maintenance expense, these forecasts may serve as a basis against which to compare actual maintenance expense and estimate deferred maintenance. (Accounting for Property, Plant, and Equipment 11/30/97)

Life Cycle Costs (LCC) – A form of economic analysis that considers the total cost of owning, operating, and maintaining a building over its useful life. Life cycle costs are the sum of the present value of:

- Investment costs, less salvage values, at the end of the study period;
- Nonfuel operation and maintenance costs;
- Replacement costs, less salvage costs, of replaced building systems; and
- Energy costs.

All life cycle cost analysis of energy-related projects should be performed using the energy cost projections and discount rates provided by the National Institute of Standards and Technology in support of department of energy responsibilities under 10 CFR, part 436, Subpart A. (NASA Facilities Mgmt 10/94)

PMIS – See Project Management Information System

Poor – See also Facility Condition Index – A facility condition. Facility does not meet most maintenance standards and requires frequent repairs/rehabilitation to prevent more costly repairs, provide a minimal level of operating function, and to prevent significant loss of life expectancy. (DOI, FMAR 2/98)

Preventive Maintenance – Regularly scheduled periodic maintenance activities (within a year) on selected equipment; typically includes inspection, lubrication, and minor adjustment. (AME, 2003), DO-80, draft 2004

Program Year – A concept of accounting for funds, obligations, and outlays under a no-year appropriation by the identification of transactions in fiscal year segments identified by the fiscal year in which the individual items were obligated. (NASA Facilities Mgmt 10/94)

Project Management Information System (PMIS) – The web-based program developed by the Perk Service to track program needs and deferred maintenance throughout the service.

Property, Plant and Equipment (PP&E) – Consists of tangible assets, including land that meets the following criteria:

- They have estimated useful lives of two years or more;
- They are not intended for sale in the ordinary course of operations; and
- They have been acquired or constructed with the intention of being used, or being available for use by the entity. (Accounting for Property, Plant and Equipment 11/30/95)

Assets acquired through capital leases, including leasehold improvements. Property owned by the reporting entity in the hands of others (e.g., state and local governments, colleges and universities, or Federal contractors); and lands rights. (Accounting for Property, Plant and Equipment 11/30/95, DO-80, draft 2004) Excludes items/assets: (1) held in anticipation of physical consumption, such as operating materials and supplies and (2) that the Federal entity has a reversionary interest in. (Accounting for Property, Plant and Equipment 11/30/95)

Real Property – Any interest in land and anything permanently attached to it, including structures, fixtures, and their improvements. (NASA Facilities Mgmt 10/94)

Recapitalization – The planned replacement of facility subsystems such as roofs, utilities, heating, ventilation, and air conditioning. (Creating a Defensible Recapitalization Program, 2002), DO-80, draft 2004

Recurring Maintenance (RM) (Cyclic in nature) – Work activities that recur based on normal wear patterns on a periodic cycle of greater than one year and less than 10 years. Typical work includes painting, caulking, sealing, carpet replacements, etc. *Note:* A few RM activities may have cycles greater than 10 years, such as repointing of bricks. (DO-80, draft 2004)

Recurring Maintenance Deferred Maintenance (RM-DM) – Recurring maintenance that has been identified and tracked in the system and facility management practices, and is not

Life Cycle Planning – Means of budgeting for the cost of replacing subsystems based on their expected design life, or expected time of failure. (Creating a Defensible Recapitalisation Programme, 2002), DO-80, draft 2004

Line Item Construction (LI) – Includes the reconstruction or replacement of park facilities, the preservation of historic and cultural resources, and the repair and reconstruction of park roads. In general, projects fitting this category are major projects that require more than one year to complete. (GAO Parks and Recreation Report March 1988)

List of Classified Structures (LCS) – A National Park Service list of important/historic structures/assets, which are nationally recognized.

Maintenance – See Facility Maintenance.

Metrics – Meaningful measures. For a measure to be meaningful, it must present data that encompasses the right action. In the context of this handbook, metrics refers to management and performance measures. (NASA Facilities Mgmt 10/94)

Minor deficiency – FCAS – Exists where standard preventive maintenance practices and conservation methods have not been followed; or there is a reduced life expectancy of affected or related materials or systems; or there is a condition with long-term impact beyond five years. (Condition Assessment Incident Command 03/01)

Needs Assessment – A process to determine that facilities are constructed, operated, and maintained only when they provide the best protection or preservation of park resources; provide essential visitor services; support critical operations or functions in the park areas; or where absence of those facilities would substantially decrease the ability of the National Park Service to meet its mission. (Instructor Manual: Facility Condition Assessment Survey, 2002), DO-80, draft 2004

OMB – Office of Management and Budget

Operating Formulation System (OFS) – A web-based system used to formulate all programs of the NPS budget, with the exceptions of land acquisition, construction planning, and line-item construction. OFS allows field managers and central office personnel to develop, maintain, and access a current and complete inventory of the program needs, while at the same time providing a basis for the annual budget formulation process. (DO-80, draft 2004)

Operating Plan – A budget plan, when approved, that is the basis for funding and financial control of obligations, costs, and disbursements.

Operations – See Facility Operations.

Past Year – The fiscal year immediately preceding the current year. (NASA Facilities Mgmt 10/94)

funded when required, will move into this work type category. *Note:* This allows for long-term business practices to be documented and reported. (AME), DO-80, draft 2004

Regional Directors Office (RDO) – Office responsible for providing support and direction over the System Support Offices and Field units (Park Service Areas) assigned to them.

Repair – Work to restore damaged or worn-out property to a normal operating condition. Repairs are curative, while maintenance is preventative. (Committing to the Cost of Ownership)

Repair Rehabilitation (RERE, R&R) – Work activities (projects) designed to restore or extend the life of an asset. Examples include replacing sewer lines, repairing building foundations, and rehabilitating campgrounds and trails. (GAO Parks and Recreation Report March 1988)

Replacement – Exchange or substitution of one fixed asset for another that has the capacity to perform the same function. (Committing to the Cost of Ownership)

Replacement Cost – See Current Replacement Value.

Scope of Work – A very thorough breakdown of the best method for remediating a deficiency. (Facility Condition Assessment Survey Student Manual, 2002), DO-80, draft 2004

Service Level – For a specific work activity, the annual rate or frequency of work performed. (MMP Computer User Manual)

Service Lifetime – The period of years over which the building provides shelter and an environment supportive of the activities it houses. (Committing to the Cost of Ownership)

SMAC – Servicewide Maintenance Advisory Council

Specifications – A document that stipulates methods, materials, performance, testing, limitations, or other criteria that must be adhered to during the construction of a facility. (NASA Facilities Mgmt 10/94)

Standard – Maintenance standards are defined as the expected condition or degree of usefulness of a facility or equipment item. A maintenance standard may be stated as both a required condition and a minimum acceptable condition beyond which the facility or equipment is deemed unsatisfactory. (NASA Facilities Mgmt 10/94)

Standard Industry Practices – Accepted published practices by peer organizations or associations.

Subsystems – A major portion of a system that performs a specific function in the overall operational function of a system; a major functional subassembly or grouping of items or equipment that is essential to operational completeness of a system. (Cleland, D.I., & Kerzner, H.) A Project Management Dictionary of Terms, 1998), DO-80, draft 2004

System Rules – Identified standardized requirements for how to operate and use the facility management software system. (AMP/FMSS Student Manual 10/02)

System Support Office (SSO) – Offices that provide support of field units and are managed by regional offices.

Total Life Cycles Cost Method – If used, the following should be presented for each major class of PP&E:

- The original date of the maintenance forecast and an explanation for any changes to the forecast
- Prior year balance of the cumulative deferred maintenance amount
- The dollar amount of maintenance that was defined by the professionals who designed, built, or managed the PP&E as required maintenance for the reporting period
- The dollar amount of maintenance actually performed during the period
- The difference between the forecast and actual maintenance and any adjustments to the scheduled amounts deemed necessary by the managers of the PP&E, and
- The ending cumulative balance for the reporting period for each major class of asset experiencing deferred maintenance. (Accounting for Property, Plant, and Equipment 11/30/97)

Facility Management Software System Terminology

Asset Categories – Identifies eight primary asset categories to track and report resource expenditures against (Site Area, Road, Trail, Grounds, Buildings, Utilities, Marine / Waterway, and Unique Assets). The categories are further defined by asset codes (example – Paved Road, Unpaved Road, Paved Parking Area, Unpaved Parking Area, Bridge and Tunnel). Please reference the specific asset category for a definition. (FMP 04/02)

Asset Codes – Further detail of asset categories (example – Paved Road 1100, Unpaved Road 1200, Paved Parking Area 1300, Unpaved Parking Area 1350, Bridge 1700 and Tunnel 1800). (Facility Management Program 04/02)

Audit Reports – Reports from the FMSS system used to identify erroneous data entries and processes. (Condition Assessment Incident Command, Validation of Data 03/01)

Child Relationship – Assets and work orders have a hierarchical relationship, with Child having a subordinate relationship to the Parent. (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01)

Classification – Classification of asset records is based on the functionality of the component.

Condition Assessment Job Plan – An FMSS application that defines the standard processes or steps involved to perform an inspection of the condition of an asset and its features for the purpose of generating Asset Deficiency Work Orders. (FCAS Student Manual 1/02)

Condition Assessment/Inspection Work Order – A work order created through the Preventive Maintenance application and attached to a specific asset to initiate the condition assessment.

Condition Assessment Work Order – A work order created through the Preventative Maintenance module that lists the necessary steps and tasks to complete inspection of an asset and its features. This standardizes inspections throughout the NPS by creating a work order on which identified deficiencies can be reported against each asset. (FCAS Student Manual 1/02)

Critical Deficiency – There is advanced deterioration that has resulted in the failure of the feature or will result in the failure of the feature if not corrected within one year; or there is accelerated deterioration of adjacent or related materials as a result of the feature's deficiencies; or there is a threat to the health and/or safety of the user; or there is a failure to meet a legislated requirement. (Condition Assessment Incident Command 03/01)

Critical Systems – A subsystem or piece of equipment that is critical to the effective functioning of the asset. Critical Systems are those systems or sub-systems specifically fitted to or employed by [asset code]s to provide the [fundamental function].

Deficiency Ratings – See Critical deficiency – FCAS, Serious Deficiency – FCAS, Minor deficiency – FCAS

Deficiency Work Order – A work order generated by the FMSS program, which documents deficiencies discovered while performing a condition assessment on an asset. (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01) See Deferred Maintenance or Component Renewal.

Equipment – A piece of rolling stock or a mechanical device used as part of an asset upon which work is performed. Examples include a boat, a tractor, a generator, or an HVAC system. (AMP/FMSS Student Manual 1/02)

Hierarchical Relationships – Classifies assets or work orders according to various criteria into successive levels or layers. The layers are titled "parent" or "child." (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01)

Job Plan – Describes operational steps, estimated labor, materials, and tools needed to accomplish a specific task. (AMP/FMSS student manual 1/02)

Parent Relationship – Assets and work orders have a hierarchical relationship, with Parent having a higher level than the Child. (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01)

Planned Asset – An asset status where an asset is identified as needed and is being developed but is not completed or linked to FBMS.

Preventative Maintenance Work Order – A work order generated to initiate preventative maintenance on an asset. (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01)

Recommended Field – These fields are not indicated on the screen but will link other NPS programs to FMSS and reduce duplicate entries across park unit disciplines. It is highly recommended that these fields be completed to allow for a smooth transition when this interfacing takes place. (AMP/FMSS Student Manual 1/02)

Required Field – A field that requires a user-entered value before the record can be posted. These fields are indicated by a red asterisk. A record may contain one or more required fields. (Condition Assessment Incident Command, Validation of Data 03/01)

Serious Deficiency – Exists where there is a deterioration, which if not corrected within two to five years, will result in the failure of the feature; where a threat to the health and/or safety of the user may occur within two to five years if the deterioration is not corrected; or where there is deterioration of adjacent or related materials and/or system as a result of the feature's deficiency. (Condition Assessment Incident Command 03/01)

Specification Template – A data collection template used to document specific information and attributes of assets maintained within the National Park Service. (Condition Assessment Incident Command, Facility Needs Assessment Section 03/01)

Value List – A pre-programmed set of values, attached to a field. The field will only allow the user to enter one of the values contained in the value list. (Condition Assessment Incident Command, Validation of Data 03/01)

Work Breakdown Structure (WBS) – Provides a framework in which work is divided into "definable increments from which the statement of work can be developed and technical, schedule, cost, and labor hour reporting can be established." (NASA, 2001).

Work Identification – Process of determining work tasks to be accomplished. Tasks result from a determination that an asset is not at its established standard or a need for a service.

Work Order – Process for documenting work needs and collecting information to aid the work scheduling and assignment process. Information collected should include labor, equipment and material costs, hours, types, and quantities.

Work Type – Standard definitions of work tasks that provide a tool enabling facility managers to strengthen planning, execution, and performance measurement at the park level and to gain stewardship credibility.

Acronyms List

ABC	Activity Based Costing
ADA	Americans with Disabilities Act
AMP	Asset Management Process
AMRS	Asset Management Reporting System
API	Asset Priority Index
AWP	Annual Work Plans
CAP	Condition Assessment Portal
CESS	Cost Estimating Software System
CIP	Capital Investment Plan
CIS	Capital Investment Strategy
CLI	Cultural Landscape Inventory
CM	Corrective Maintenance
COLA	Cost-of-Living Adjustment
CRV	Current Replacement Value
DOI	Department of Interior
FBMS	Financial and Business Management System
FCI	Facility Condition Index
FHWA	Federal Highways Administration
FMP	Facility Management Program
FMSS	Facility Management Software System
FOSP	Facility Operations Standing Parent
FRP	Federal Real Property
FUMP	FMSS User Management Process
GPRA	Government Performance and Results Act
GPS	Global Positioning System
HIP	Housing Information Portal
HLS	Health Life Safety
LCC	Life Cycle Costs
LCS	List of Classified Structures
O&M	Operations and Maintenance
OMB	Office of Management and Budget
PAM	Park Account Manager
PAMP	Park Asset Management Plan
PDA	Personal Digital Assistant
PMIS	Project Management Information System
PP&E	Property, Plant and Equipment
PST	Project Scoping Tool
QA/QC	Quality Assurance/Quality Control
QMIS	Quarters Management Information System
RAC	Risk Assessment Code
R-R AC	Resource Risk Assessment Code
RPSO	Real Property Standing Parent
R&R(RERE)	Repair Rehabilitation
SMAC	Servicewide Maintenance Advisory Council

SPM	Single Platform Maximo
TCFO	Total Cost of Facility Maintenance
WBS	Work Breakdown Structure
WORK	Work Order Reporting Kiosk