

University of Missouri

**Guidelines for
FY17 Facilities Repair, Replacement and Renovation, and Ten Year
Facilities Needs Forecast Report**
As required for Executive Order 28



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1. Facilities Needs Funding and Reporting

Executive Order 28 (EO 28) establishes annual funding and reporting Facilities Needs (see Exhibit 1). Funding is established by each campus to move towards a ten year Facilities Condition Needs Index (FCNI). Industry standards recommend a FCNI goal of 0.30. FCNI rating is based on a calculation that totals all projects divided by the current replacement value. EO 28 funds shall be used to prevent deterioration of facilities and facilities-related fixed equipment. Funds shall also be used to repair, replace, or renovate facilities and facilities-related fixed equipment. Expenditures from Funds may include preventative maintenance, routine repair, major repair and replacement, and renovation to meet program modernization needs and changing standards. Annually, each campus will report on EO 28 expense including a major repair projects, for the report year.

2. Qualifying Building EO 28 Work

- 2.1 Routine Building Repair and Maintenance – Work to restore campus facilities and systems to a usable condition. This includes minor emergency requests for service. The list below contains more specific descriptions of maintenance and repair work. Also included is Preventive Maintenance: the periodic scheduled work planned to provide adjustment, minor repair, routine inspection, and cleaning of equipment to reduce service interruptions and prevent deterioration before the normal life-cycle of the equipment or facility.
- 2.2 Major Repair and Replacement - Non-annual work necessary to keep the physical plant in reliable condition for its present use based on the normal life cycle of plant equipment and facilities. This includes emergency repair work. Work that significantly increases capacity is not included. The list below contains more specific descriptions of repair work.
 - 2.2.1 Roofs: repair or replacement of roof membranes, shingles, supports, decking, drainage systems, parapets, and insulation.
 - 2.2.2 Building Exteriors: repair or replacement of windows, doors, steps, walks, and walls (including tuck-pointing and waterproofing).
 - 2.2.3 Building Interiors: repair or replacement of walls, partitions, floors, floor coverings, ceilings, doors, stairways, and major fixed equipment.
 - 2.2.4 Mechanical and plumbing: repair or replacement of mechanical and plumbing systems within a building.
 - 2.2.5 Electrical: repair or replacement of electrical distribution systems and lighting systems within a building, both low and high voltage.
 - 2.2.6 Life Safety and Security Systems: repair or replacement of existing life safety and security systems.
 - 2.2.7 Exterior Site Work: repair or replacement of drainage systems, sidewalks, retaining walls, steps, and roads greater than five feet from a building perimeter.
 - 2.2.8 Utility Distribution Systems: repair or replacement of University operated utility distribution systems greater than five feet from a building perimeter.
 - 2.2.9 Power Plant: Repair or replacement of fixed equipment at the power plants.
- 2.3 Plant Adaptation - Work to adapt, or renovate, the physical plant to the changing programmatic needs and to changing standards. Programmatic adaptation includes renovation for changes in programs of study or technology, such as adapting labs and classrooms, similar changes in administrative functions, and changes to enhance competitive attractiveness, such as updating labs and offices to attract new faculty. Plant adaptation may include work done for gaining

efficiencies, cost savings, and/or when the payback is attractive. Renovations to meet changing standards include asbestos removal, energy conservation; animal welfare, life safety, and access (ADA) are also included.

3. Non-Qualifying Work

- 3.1 New Construction
- 3.2 Building Custodial and Grounds keeping
- 3.3 Utilities Generation, Fuel, and Purchased Utilities
- 3.4 Administration (except that necessary to support qualifying work)

4. Report Requirements

UM Facilities Planning and Development (FPD) will set the reporting requirements and provide worksheets for the campuses to complete for the EO 28 Report. The report will contain information regarding Education and General (E&G) and Non-E&G facilities for both the current fiscal year as well as historical analysis. The specified data below for the report will be submitted from the campus by August 31.

- 4.1 The building replacement value data is supplied by FPD from the Facilities Inventory Report for two prior fiscal years for both E&G and Non-E&G. For the FY 2017 report, the 2015 building replacement values will be used for the report (see Exhibit 2).
- 4.2 Total amount of Expense for both E&G and Non-E&G.
- 4.3 Breakout of Expense for E&G only
 - 4.3.1 One-Time Funding vs. Recurring Funding.
 - 4.3.2 Proactive Spending vs. Reactive Spending.
 - 4.3.2.1 Proactive
 - 4.3.2.1.1 Planned Facility Critical Needs Projects.
 - 4.3.2.1.2 Planned Capital Repairs.
 - 4.3.2.1.3 Preventative Maintenance.
 - 4.3.2.1.4 Removal of Buildings.
 - 4.3.2.2 Reactive is defined as anything that is not considered planned.
- 4.4 Building Report for both E&G and Non-E&G
 - 4.4.1 Projects greater than \$100,000 will be listed by building, project description, and the expense for the current fiscal year. If a project spans over more than one year, list the corresponding amount for the current fiscal year.
 - 4.4.2 Total amount of routine expenses will be reported as a separate line.
 - 4.4.3 Other expenses that are not associated with routine expenses or a major project that is greater than \$100,000 will be reported as a separate line.
- 4.5 ISES Reports from the database as of June 30, 2017 for E&G only.
 - 4.5.1 Executive Summary Reports 2.1: FCNI Report.
 - 4.5.2 Matrix Reports 2.1: System Code – Priority Class Matrix.
 - 4.5.3 Matrix Reports 2.1.2: System Code – Project Class Matrix.
 - 4.5.4 Matrix Reports: 2.1.3: Project Class – Priority Class Matrix.
- 4.6 Ten Year Projection Model based on IS ES information. Historical data will be maintained by FPD based on previous years' reports.

Exhibit 1: Executive Order No. 28

Chapter 110: Use of Facilities and Equipment 110.015 Facilities Needs Funding and Reporting

Executive Order No. 28, 4-12-94, Revised 6-26-08, Revised 12-4-12

The University of Missouri recognizes the value of its buildings. To assure that buildings are renewed, that deferred maintenance is addressed, and that modernization occurs, an industry best practice requires an annual investment that supports the maintenance of a Facilities Condition Needs Index (FCNI) of 0.30 or lower. The FCNI is calculated as the sum of the total cost of capital renewal, deferred maintenance, and plant adaption divided by the estimated replacement cost of the buildings.

- A. Each campus will annually establish its facilities needs funding (hereinafter "Funds") by calculating the investment required to achieve and maintain the campus FCNI goal (0.30 or lower is recommended) for its Education & General (E&G) facilities within the following ten years. The required annual investment based on the FCNI goal will be stated in dollars and as a percent of the estimated replacement value. If the campus budget amount is less than the established goal, the campus will identify the funding difference and the impact on its FCNI and on its total facility needs (backlog). Non-E&G (Auxiliary supported) facilities will also budget for annual facilities needs funds but may use another campus approved reinvestment goal. A minimum expenditure of 1.0% of building replacement value is required.
- B. Funds shall be used to prevent deterioration of facilities and facilities-related fixed equipment. Funds shall also be used to repair, replace, or renovate facilities and facilities-related fixed equipment. Expenditures from Funds may include preventative maintenance, routine repair, major repair and replacement, and renovation to meet program modernization needs and changing standards.
- C. Annually, each campus shall submit to the Vice President for Finance and Administration the list of projects using Funds for the previous fiscal year and specifically identify the amount funded for preventative maintenance programs. From this information, a report will be compiled for review by the President.

Exhibit 2: Facilities Inventory Summary FY 2015

2014 Facilities Inventory Summary		E&G		Non E&G		Total	
		GSF	Replacement Cost	GSF	Replacement Cost	GSF	Replacement Cost
MU	Campus	6,934,357	\$2,513,526,961	8,628,329	\$1,879,294,877	15,562,687	\$4,392,821,838
MU	AG Station Hospital & Clinics	1,094,243	\$118,142,205	0	\$0	1,094,243	\$118,142,205
MU	System	0	\$0	2,284,360	\$881,824,117	2,284,360	\$881,824,117
MU		64,813	\$18,890,031	96,887	\$18,358,623	161,700	\$37,428,654
MU	Total	8,093,413	\$2,650,559,197	11,009,576	\$2,779,477,617	19,102,990	\$5,430,036,815
UMKC	Campus	3,034,306	\$1,319,199,589	2,264,103	\$269,292,732	5,298,408	\$1,588,492,321
S&T	Campus	1,909,419	\$694,116,938	839,526	\$256,553,121	2,748,943	\$950,670,059
UMSL	Campus	2,139,570	\$916,261,892	1,632,001	\$407,082,671	3,771,571	\$1,323,344,563
Total		15,176,708	\$5,580,137,617	15,745,204	\$3,712,406,141	30,921,912	\$9,292,543,758