

## University of Missouri – Columbia

### CRR 110.015 Facilities Needs and Reporting

CRR 110.015 was established to keep the facilities of the University of Missouri system in good condition to ensure the needs of the University’s education and research missions are met. CRR 110.015 requires an annual investment to maintain a Campus Facilities Condition Needs Index (FCNI) of 0.30 or lower for Education and General (E&G) facilities. Auxiliary (Non-E&G) facilities have a target of 1% of the building current replacement value.

#### Current status of Education and General (E&G) Facilities

| <b>E&amp;G Facilities</b><br><i>(Dollars shown in Millions)</i> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> |
|---|-------------|-------------|-------------|-------------|-------------|
| Target Spend  | \$52.4      | \$55.9      | \$59.0      | \$60.2      | \$60.9      |
| Actual Spend  | \$29.9      | \$21.6      | \$28.5      | \$13.9      | \$23.9      |
| Recurring   | \$17.2      | \$16.3      | \$12.7      | \$8.1       | \$6.4       |
| One-Time  | \$12.7      | \$5.3       | \$15.8      | \$5.8       | \$17.5      |
| Difference in Actual and Target                                 | (\$22.5)    | (\$34.3)    | (\$30.5)    | (\$46.3)    | (\$37.0)    |
| <b>FCN Backlog</b>  | \$811.8     | \$840.9     | \$867.8     | \$881.6     | \$958.4     |
| Deferred Maintenance  | \$419.4     | \$442.0     | \$443.4     | \$446.8     | \$502.2     |
| Plant Adaption  | \$108.8     | \$115.0     | \$118.3     | \$120.5     | \$129.2     |
| Capital Renewal   | \$283.6     | \$283.9     | \$306.1     | \$314.3     | \$326.9     |
| Recommended Target for next year                                | \$55.9      | \$59.0      | \$60.2      | \$61.0      | \$68.4      |
| <b>Campus FCNI</b>  | <b>0.30</b> | <b>0.31</b> | <b>0.31</b> | <b>0.30</b> | <b>0.31</b> |

MU currently has a campus FCNI of 0.31 which is higher than CRR 110.015 allows, and a \$958.4M facilities needs backlog. Currently, thirty-eight (38) facilities need major renovations and twenty-five (25) facilities need total renovations or replacements. For details, please see the list of buildings on page 3 of this report.

MU spent \$23.9 million for CRR 110.015 for FY 2022, next year, the backlog is expected to grow to \$1.0 billion in FY23, an increase of \$75 million. To curb the growth, the recommended target for FY22 is \$68 million dollars. MU has received \$20.1 million from the Federal Budget Stabilization Fund (FBSF) that was used for M&R projects such as fire alarm replacements and exterior repairs.

#### Current status of Auxiliary (Non-E&G) Facilities

In 2020, MU met the spending goal for Non-E&G facilities.

| <b>Non-E&amp;G Facilities</b><br><i>(Dollars shown in Millions)</i> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> |
|---|-------------|-------------|-------------|-------------|-------------|
| Target Spend  | \$28.8      | \$32.2      | \$33.1      | \$34.4      | \$35.9      |
| Actual Spend  | \$38.0      | \$43.7      | \$35.1      | \$35.5      | \$35.2      |
| Difference in Actual and Target                                     | \$9.2       | \$11.5      | \$2.0       | \$1.1       | (\$0.6)     |

| <b>MU FY22 E&amp;G Building M&amp;R Project List</b> |  |                     |
|--|--|---------------------|
| <b>Building</b>                                      | <b>Project Description</b>   | <b>Cost</b>         |
| Ellis Library  | Masonry Repairs and Window Restoration   | \$4,448,601         |
| Strickland Hall                                      | Exterior Masonry Repairs   | \$1,196,204         |
| MURR   | Exterior Repairs and Roof System Replacement                                     | \$1,175,417         |
| Memorial Student Union                               | Masonry and Building Envelope Repairs  | \$1,028,568         |
| Clark Hall   | 3rd & 4th Floor Renovations  | \$955,807           |
| Various Locations                                    | Roof Replacements  | \$754,999           |
| Animal Science Research Center                       | Central Fume Hood Exhaust System   | \$746,027           |
| University Hall                                      | AHU Replacements   | \$672,269           |
| Memorial Student Union                               | Masonry and Building Envelope Repairs  | \$624,800           |
| Fine Arts Building (Art)                             | AHU Replacements   | \$622,286           |
| Ellis Library  | Fire Alarm System Study  | \$423,104           |
| McReynolds Hall                                      | Renovate Floors 2-4  | \$412,177           |
| Various Locations                                    | Replace Fire Alarms  | \$369,580           |
| Chemistry Building                                   | Replace Switchgear   | \$346,709           |
| Various Locations                                    | Jesse Hall and Med Sci   | \$291,025           |
| Chemistry Building                                   | Upgrade Phoenix Valves 3rd Floor   | \$291,000           |
| Schweitzer Hall & Schweitzer Addition                | Flooring Replacement   | \$276,876           |
| Ellis Library  | Update Auditorium  | \$243,863           |
| Lewis & Clark Halls                                  | Relocate Radiography & Nuclear Medicine  | \$220,907           |
| Locust Street Building                               | Modify Space for A&S Relocation  | \$215,459           |
| Various Locations                                    | Building System Component M&R  | \$202,932           |
| Lee Hills Hall                                       | Modify Space on 3rd Floor  | \$171,992           |
| Various Locations                                    | Roof Replacement   | \$165,937           |
| Gentry Hall  | Replace elevator jack  | \$154,203           |
| MU Research Reactor                                  | Lab Building Main AHU Cooling and Heating Coil Replacements                      | \$153,564           |
| Chemistry Building                                   | Replace Chilled Water Coils AHU 1 & 2  | \$114,332           |
| Hitt Street Parking Structure                        | Replace 40 Ton Condensing Unit   | \$111,461           |
| Various Locations                                    | Electrical Engineering Consulting Services                                       | \$108,680           |
| Various Locations                                    | Various routine maintenance, repair and renovation projects (<\$100,000/project) | \$7,352,057         |
| <b>Total</b>   |  | <b>\$23,959,118</b> |

| <b>MU FY22 Non-E&amp;G Building M&amp;R Project List</b> |  |             |
|--|--|-------------|
| <b>Building</b>  | <b>Project Description</b>                                     | <b>Cost</b> |
| Power Plant  | TURBINE 9 OVERHAUL   | \$1,433,475 |
| Power Plant  | GT Overhaul Agreement  | \$1,367,649 |
| Mizzou Arena   | Renovate Basketball Spaces                                     | \$1,335,389 |
| Stankowski Field   | Turf Replacement and Track Resurfacing                         | \$1,103,415 |
| Various Locations  | Research Commons - Replace Lead Covered Cable                  | \$932,173   |
| Various Locations  | Replace SS Water mains in 5 St (312') & Life Sci (50') Tunnels | \$528,000   |
| Power Plant  | GT Plant Exterior Repairs                                      | \$501,827   |
| Various Locations  | Tuckpoint E & S Brick Arch tunnels                             | \$495,692   |
| Tiger Avenue Parking Structure                           | Structure Repairs  | \$446,042   |
| Kadlec Field #2  | Replace Turf   | \$354,115   |
| Various Locations  | Steam System Civil Repairs Summer 22                           | \$350,084   |
| Power Plant  | Turbine 7 T&T and Valve Maintenance                            | \$294,210   |
| Power Plant  | Repair Projects  | \$282,547   |
| Various Locations  | Replace CI water pipe - Mizzou N, west side (1005')            | \$251,234   |
| Memorial Stadium   | Repair Trip Hazards  | \$250,898   |
| Various Locations  | Summer Paving  | \$240,493   |
| Turner Avenue Parking Structure                          | Structure Repairs  | \$235,777   |
| Research Reactor   | Replace Switchgear   | \$218,840   |

|                                   |  |                     |
|-----------------------------------|--|---------------------|
| Power Plant                       | Repair 204 BFB METERING BIN SCREW AND BOTTOM                                     | \$215,421           |
| Virginia Avenue Parking Structure | Repair Joint Separation  | \$214,995           |
| Energy Mgt Building               | Roof Replacement   | \$204,286           |
| 1601 Old Highway 63               | Resurface Parking Lot  | \$198,564           |
| Memorial Stadium                  | Replace Turf   | \$193,716           |
| Power Plant                       | Repair chiller with Belzona Coating  | \$173,483           |
| Various Locations                 | Replace 3 Transformers   | \$139,950           |
| Missouri Orthopedic Institute     | Replace Cooling Coil AHU2  | \$130,526           |
| Power Plant                       | Update - Boiler 12 BMSPLC  | \$128,948           |
| Various Locations                 | Various routine maintenance, repair and renovation projects (<\$100,000/project) | \$23,025,344        |
| <b>Total</b>                      |  | <b>\$35,247,093</b> |

| Education and General Building List |  |     |      |
|-------------------------------------|--|-----|------|
| Building Number                     | Building Name                            | Age | FCNI |
| 37002                               | AGRICULTURE BUILDING                     | 63  | 0.39 |
| 37003                               | AGRICULTURE LABORATORY                   | 72  | 0.47 |
| 37004                               | STUDENT SUCCESS CENTER                   | 59  | 0.22 |
| 37006                               | LABORATORY ANIMAL CENTER                 | 57  | 0.90 |
| 37007                               | MUSEUM SUPPORT CENTER                    | 27  | 0.20 |
| 37010                               | 1105 CARRIE FRANCKE DRIVE                | 45  | 0.30 |
| 37011                               | MELVIN H. MARX BUILDING                  | 57  | 0.32 |
| 37012                               | ARTS AND SCIENCE BUILDING                | 61  | 0.48 |
| 37014                               | MIDDLEBUSH HALL                          | 62  | 0.38 |
| 37015                               | PICKARD HALL                             | 129 | 0.47 |
| 37017                               | CONNAWAY HALL                            | 111 | 0.05 |
| 37018                               | CROWDER HALL                             | 83  | 0.62 |
| 37019                               | CURTIS HALL                              | 82  | 0.83 |
| 37020                               | ECKLES HALL                              | 120 | 0.57 |
| 37021                               | TOWNSEND HALL                            | 86  | 0.09 |
| 37022                               | NAKA HALL                                | 61  | 0.44 |
| 37024                               | COLUMBIA PROFESSIONAL BUILDING           | 97  | 0.71 |
| 37025                               | CONLEY HOUSE                             | 152 | 0.16 |
| 37026                               | FINE ARTS - ARTS                         | 63  | 0.42 |
| 37027                               | GEOLOGICAL SCIENCES BUILDING             | 58  | 0.44 |
| 37039                               | LOWRY HALL                               | 117 | 0.38 |
| 37048                               | BOTANY GREENHOUSE                        | 52  | 0.35 |
| 37051                               | HILL HALL                                | 71  | 0.42 |
| 37052                               | LONDON HALL                              | 64  | 0.57 |
| 37053                               | JESSE HALL                               | 128 | 0.27 |
| 37055                               | LEFEVRE HALL                             | 108 | 0.42 |
| 37056                               | ELLIS LIBRARY                            | 107 | 0.39 |
| 37058                               | NATIONAL SWINE RESOURCE AND RESEARCH CTR | 14  | 0.02 |
| 37059                               | MCALESTER HALL                           | 119 | 0.71 |
| 37060                               | MEDICAL SCIENCE                          | 66  | 0.37 |
| 37061                               | GANNETT HALL                             | 42  | 0.52 |
| 37062                               | MUMFORD HALL                             | 99  | 0.48 |
| 37063                               | NEFF HALL                                | 103 | 0.54 |
| 37064                               | STEWART HALL (Renovated 2017)**          | 109 | 0.05 |
| 37065                               | ACADEMIC SUPPORT CENTER                  | 109 | 0.39 |
| 37066                               | PARKER HALL                              | 122 | 0.58 |
| 37069                               | READ HALL                                | 118 | 0.62 |
| 37071                               | SCHLUNDT HALL                            | 99  | 0.16 |
| 37072                               | SCHLUNDT HALL ANNEX                      | 70  | 0.61 |
| 37073                               | SCHWEITZER HALL                          | 109 | 0.52 |
| 37074                               | REYNOLDS JOURNALISM INSTITUTE            | 129 | 0.07 |
| 37076                               | STANLEY HALL AND ADDITION (37233)        | 63  | 0.59 |
| 37077                               | STEPHENS HALL                            | 85  | 0.14 |
| 37078                               | PHYSICS BUILDING                         | 57  | 0.40 |
| 37086                               | LEE HILLS HALL                           | 26  | 0.16 |
| 37087                               | NURSING SCHOOL                           | 42  | 0.42 |
| 37089                               | ROCK QUARRY CENTER E&G PORTION           | 38  | 0.25 |
| 37090                               | LEWIS HALL                               | 52  | 0.48 |
| 37091                               | CLARK HALL                               | 52  | 0.54 |
| 37099                               | VETERINARY MEDICINE - EAST               | 62  | 0.23 |
| 37100                               | VETERINARY SCIENCE                       | 73  | 0.53 |
| 37101                               | WALTER WILLIAMS HALL                     | 85  | 0.08 |
| 37102                               | WATERS HALL                              | 112 | 0.61 |
| 37103                               | WHITTEN HALL                             | 119 | 0.61 |
| 37104                               | MCKEE GYMNASIUM                          | 99  | 0.73 |
| 37108                               | CHANCELLOR'S RESIDENCE                   | 154 | 0.16 |
| 37115                               | GENTRY HALL                              | 82  | 0.36 |
| 37124                               | LOEB HALL                                | 65  | 0.50 |
| 37126                               | MCREYNOLDS HALL                          | 65  | 0.47 |
| 37129                               | NOYES HALL                               | 98  | 0.67 |
| 37133                               | OLD STUDENT HEALTH CENTER                | 85  | 0.68 |
| 37137                               | TROWBRIDGE LIVESTOCK CENTER              | 53  | 0.49 |
| 37143                               | HEINKEL BUILDING                         | 81  | 0.51 |
| 37144                               | LOTES HEALTH SCIENCES LIBRARY            | 36  | 0.39 |
| 37146                               | MEDICAL SCIENCE ADDITION                 | 36  | 0.20 |
| 37148                               | Gwynn (Renovated 2012-13)**              | 101 | 0.16 |
| 37154                               | AGRICULTURAL ENGINEERING                 | 34  | 0.23 |
| 37156                               | BOND LIFE SCIENCES                       | 17  | 0.08 |
| 37157                               | BOND LIFE SCIENCES MECHANICAL BUILDING   | 17  | 0.12 |
| 37166                               | HULSTON HALL                             | 33  | 0.25 |
| 37167                               | ELLIS LIBRARY ADDITION                   | 34  | 0.23 |
| 37175                               | AB NATURAL RESOURCES BUILDING            | 25  | 0.14 |
| 37221                               | FIRE STATION 3 (Renovated 2012)**        | 56  | 0.19 |

| Education and General Building List |  |      |      |
|-------------------------------------|--|------|------|
| Building Number                     | Building Name                            | Age  | FCNI |
| 37224                               | GENERAL SERVICES BUILDING                | 58   | 0.26 |
| 37229                               | VETERINARY MEDICINE - WEST               | 46   | 0.45 |
| 37230                               | VETERINARY MEDICAL DIAGNOSTIC LAB        | 46   | 0.50 |
| 37232                               | FINE ARTS - MUSIC AND DRAMA              | 63   | 0.41 |
| 37243                               | JESSE AUDITORIUM                         | 128  | 0.42 |
| 37251                               | TUCKER HALL                              | 54   | 0.26 |
| 37252                               | MATH SCIENCE                             | 53   | 0.45 |
| 37253                               | DALTON RESEARCH CENTER                   | 54   | 0.37 |
| 37254                               | ANIMAL SCIENCE RESEARCH CTR AND UNIT F   | 53   | 0.28 |
| 37256                               | HEARNES CENTER (EG)                      | 49   | 0.49 |
| 37257                               | CHEMISTRY                                | 52   | 0.45 |
| 37258                               | ARVARH E. STRICKLAND HALL                | 52   | 0.41 |
| 37263                               | NEFF HALL ADDITION                       | 62   | 0.65 |
| 37264                               | LIDR - REGIONAL BIOCONTAINMENT LAB       | 13   | 0.03 |
| 37278                               | CHEMISTRY TEACHING LABORATORY ADDITION   | 24   | 0.28 |
| 37280                               | CORNELL HALL                             | 19   | 0.10 |
| 37286                               | NANO AND MOLECULAR MEDICINE              | 13   | 0.05 |
| 37288                               | RESEARCH ANIMAL DIAGNOSTIC LABORATORY    | 15   | 0.09 |
| 37301                               | LOCUST STREET EAST                       | 59   | 0.27 |
| 37316                               | SCHWEITZER HALL ADDITION                 | 14   | 0.09 |
| 37326                               | TATE HALL (RENOVATED 2011)**             | 97   | 0.18 |
| 37327                               | SWITZLER HALL (RENOVATED 2011)**         | 150  | 0.18 |
| 37343                               | BLACK CULTURE CENTER                     | 23   | 0.19 |
| 37347                               | RRC WASTE STORAGE                        | 25   | 0.18 |
| 37368                               | WILLIAM C. STRINGER WING                 | 25   | 0.07 |
| 37370                               | MURR **                                  | 2021 | 0.20 |
| 37371                               | LOCUST STREET WEST                       | 59   | 0.27 |
| 37375                               | PSYCHOLOGY BUILDING                      | 76   | 0.31 |
| 37376                               | REYNOLDS ALUMNI CENTER                   | 29   | 0.33 |
| 37379                               | CLYDESDALE HALL                          | 28   | 0.16 |
| 37393                               | ERNIE AND LOTTI SEARS GREENHOUSE         | 22   | 0.05 |
| 37395                               | MISSOURI THEATRE FOR THE ARTS            | 94   | 0.21 |
| 37396                               | SWALLOW HALL (Renovated 2014-15)**       | 128  | 0.13 |
| 37474                               | 1110 S. COLLEGE AND 83 ADDITION          | 52   | 0.57 |
| 37484                               | PATIENT CENTERED CARE LEARNING CENTER**  | 4    | 0.05 |
| 37510                               | SINQUEFIELD MUSIC CENTER**               | 2    | 0.03 |
| 41005                               | UNIVERSITY HALL                          | 52   | 0.46 |
| 41008                               | PROVIDENCE POINT                         | 52   | 0.17 |
| 41011                               | UNIV OF MISSOURI LIBRARY DEPOSITORY      | 24   | 0.11 |
| 42000                               | CLINICAL SUPPORT AND EDUCATION (EG)      | 13   | 0.10 |
| 44085                               | MIZZOU NORTH                             | 82   | 0.55 |
| 99000                               | Support & Various Bldgs (Extrapolation)* | 2021 | 0.35 |
| 37023A                              | LAFFERRE HALL - 1892 BUILDING            | 129  | 0.04 |
| 37023B                              | LAFFERRE HALL - 1893 ADDITION            | 128  | 0.12 |
| 37023C                              | LAFFERRE HALL - 1935-44 ADDITIONS        | 86   | 0.02 |
| 37023D                              | LAFFERRE HALL - 1991 ADDITION            | 30   | 0.12 |
| 37023E                              | LAFFERRE HALL - 2009 ADDITION            | 12   | 0.04 |

| FCNI Legend   |  |  |
|---|--|--|
| Excellent Condition, typically new construction (0.000 - 0.100) | Fair Condition, in need of normal renovation (0.201 - 0.300)       | Poor Condition, total renovation indicated (0.501 - 0.600) |
| Good Condition, renovations occur on schedule (0.101 - 0.200)   | Below Average Condition, major renovation required (0.301 - 0.500) | Replacement Recommended (0.600 and Higher)                 |