

Wright State University Facilities Deferred Maintenance

Introduction

The physical campus of Wright State University includes nearly 700 acres of land and a variety of buildings encompassing over 3.7 million square feet under roof. Construction of our physical facilities began in 1964 when ground was broken for Allyn Hall while the ribbon cutting for newly constructed Neuroscience Engineering Collaboration building took place in 2015.

Taking care of these physical assets is fundamental to supporting the university's mission. As buildings age they are categorized for risk of failure of the systems which make them operational. Buildings over 25 years old are considered "high" risk for major failures of these systems. At Wright State, approximately 2.6 million square feet fall into this category.

Deferred Maintenance

Like most institutions of higher education, Wright State has a history of underfunding and/or postponing the care and maintenance of its' physical campus due to lack of funds or competing budget priorities. This underfunding results in Deferred Maintenance. This lack of investment results in minor repair work evolving into more serious conditions. The failure to take care of major repairs and/or restore building components that have reached the end of their useful lives results in a deferred maintenance backlog.

Addressing this backlog is not limited a single approach to corrective action. The issue must be addressed through a systematic plan to eliminate the deferred maintenance backlog, accompanied by a commitment to routine and preventative maintenance evidenced through changes to the budgeting model.

Deferred Maintenance

Facilities Management & Services has collected an initial list of existing deferred maintenance items currently facing campus. Utilizing industry standards individual buildings and systems have been prioritized based on the risk posed by not taking corrective measures:

Priority 1: (WSU Total: \$24,400,000) These needs and/or projects significantly impact the mission of the University and require immediate action to return a facility to normal operation, stop accelerated deterioration, or correct a cited safety hazard, especially those conditions which potentially impact an entire Campus or pose a significant risk to health and safety.

Priority 2: (WSU Total: \$49,100,000) These needs and/or projects will become critical within a year if not corrected expeditiously. Situations in this category include intermittent interruptions, rapid deterioration, and potential safety hazards. The significance of these conditions to the mission of the University should be a factor.

Priority 3: (WSU Total: \$46,500,000) These needs and/or projects include conditions requiring reasonably prompt attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further. Conditions which do not significantly impact the mission of the University should be placed in this category.

The following pages represent a breakdown of existing deferred maintenance items within these categories.

Priority 1 Campus Reinvestment**Grand Total****\$24,400,000****Amount Currently Funded****\$3,675,000****Scope****Allyn Hall**

- Pool filter room - drain back-up and odor
- Tunnel to Oelman - Leaks and Repairs
- Tunnel to Rike - Leaks and Repairs

Athletics

- Alumni Field Concession Stand
- Lights out on Stadium Poles at Alumni, Nischwitz, Softball
- Nischwitz Concession Stand

Biological Sciences I&II

- Exhaust Fan convert to DDC
- Roof Repair/Replacement
- Replace exterior penthouse doors and hardware

Brehm Lab

- Roof Repair/Replacement

Campus Services

- Roof Repair/Replacement

Cox Heart

- Chillers
- Elevators

Creative Arts Center

- Elevators*
- Fire doors at Festival Theater - hold opens
- Move water pipes at electrical room
- Roof Repair/Replacement

Diggs Lab

- Concrete step repair - exposed rebar
- Exterior façade is leaking - damaging lobby
- Fall protection needed - no tie offs or parapets

Dwyer/Andrews

- Chiller Replacement*
- Roof Repair/Replacement*

Fawcett Hall

- Exterior stairs show signs of differential movement
- FumeHood exhaust system - 24 hoods tied together (life safety)*
- Leak at entrance to electrical vault - concern for power grid (tunnel to Bio)
- Leak at tunnel to Brehm
- Leaking skylight
- Plaza Replacement between Fawcett and Library
- Replace corroded cable tray supports (to Oelman)
- Stairways at entryways are in need of concrete patch/repair and handrails

Fine Arts Building

- Envelope*
- Replace both AHU
- Roof Repair/Replacement*

Forest Lane

Exterior Ramp - new rails and resurfacing

Hamilton Hall

Elevators*

Fire Alarm System Upgrades

Replace Generator

Roof Repair/Replacement

Health Sciences

Repair broken fire shutters

Replace HVAC associated with Tunnel Wash

Replace leaking skylights

Roof Repair/Replacement

Lake Campus

Exterior Lighting - 13 fixtures along walkpath

Utility Survey

Library and Annex

Elevators*

Relocate restroom above data center

Re-route water piping out of electrical room

Math and Micro

Replace stone coping and missing seals

Roof Repair/Replacement

Medical Sciences

Install emergency circuits to archives freezers

Install temp and humidity controls for archives spaces

Repair Fire shutters

Replace exterior penthouse doors and hardware

Roof Repair/Replacement

Millett Hall

Large windows are leaking, need sealing

Leaking at Entrance of Tunnel to Oelman

Pan gutter missing, tunnel deteriorated at its location (towards Fawcett)

Replace corroded pipe hangers - Tunnel to Fawcett

Tunnel leaking - Tunnel towards Library

Uneven Tunnel deterioration (towards Fawcett) - possibly due to location of walk and lawn above

Nutter Center

Add emergency circuits in suites ILO battery packs

Brine system leak detection

Brine system leak repair

Concourse doors and tie in to alarm system - gate 1,2,3,6,7,8

Condensor and chilled water pumps

Elevators*

Fall protection in the rafters - OSHA/BWC

Roof top hydrant on mclin gym

Seals on victolic fittings

Oelman Hall

Flashpoint for lab stores
FumeHood exhaust system - 41 hoods tied together (life safety)
Patch Exposed Rebar - Tunnel to Millett
Repair Pan Gutters (+/- 15) - Tunnel to Millett
Replace Corroding Pipe and Cable Tray supports - Tunnel to Millett
Rework exhaust - safety on roof, add more isolation

Research Park

Add Transfer Switch to existing Generator for Life Safety

Rike Hall

Internal Duct insulation removed
Re-hang unsecured art squares in the basement

Russ and Joshi

Heating lines replaced
Overduty panels
Rework glass block around stairwells
Roof safety upgrades (railings and ladder)

Student Success Center

First floor corner window facing Community Center leaking

Student Union

Have fireplaces checked (Hearth and Pathfinder)
Install larger grease trap in W001 kitchen servicing area
New pool deck
Overduty panels
Repair trench drain at golf cart door
Rework area under pool
Waterproof 023 (address kitchen floor)

Transportation Building

Iron filter tank hole

Trenary Hall

Trenary Hall Wall Leaks*

University Hall

Flashing repair
Replace leaking louvers
Replace sump pumps in 072
Tunnel leak at Rike and Uhall
Window leaks

White Hall

Roof Repair/Replacement
Wall leaks

*Currently funded

Priority 2 Campus Reinvestment	\$ 49,100,000
100 Projects	

Priority 3 Campus Reinvestment	\$ 46,500,000
203 Projects	

Examples of Deferred Maintenance Items



Deteriorated sump pump and mechanical area at swimming pool.



Absorbent socks on the window sills to deal with repetitive leaks, Russ Engineering.



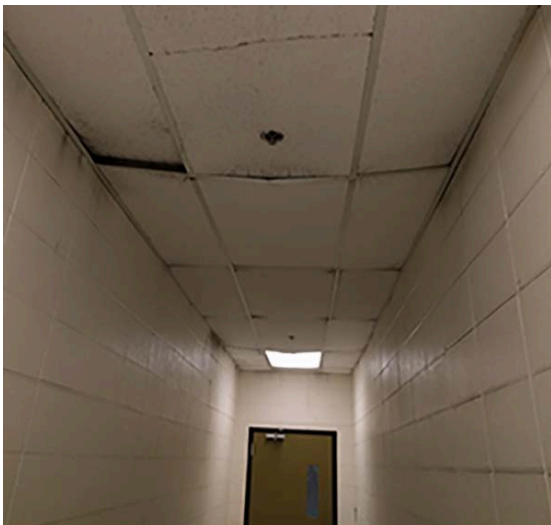
Water damage in Russ Engineering stair tower.



Deterioration of sidewalk at accessible building entrance.



Water infiltration in glass block, Medical Sciences.



Deterioration of corridor, Fawcett Hall.

Facility: **Allyn Hall**
 Built: 1964
 GSF: 131,809
 Floors: 5 plus penthouse
 Replacement Value: \$ 39,542,700.00

Priority	Construction Costs	
1	\$	40,000
2	\$	1,865,000
3	\$	1,615,000
Total	\$	3,520,000



Primary Tenant: College of Education and Human Services
 Primary Use: Classrooms, Instructional Labs and Faculty Offices, Dining

Facility: **Millett Hall**
 Built: 1966
 GSF: 162,433
 Floors: 5 plus penthouse
 Replacement Value: \$ 45,481,240.00

Priority	Construction Costs	
1	\$	130,000
2	\$	1,655,000
3	\$	2,075,000
Total	\$	3,860,000



Primary Tenant: College of Liberal Arts
 Primary Use: Classrooms, Instructional Labs and Faculty Offices

Facility: **Oelman Hall**
 Built: 1966
 GSF: 107,760
 Floors: 5 plus penthouse
 Replacement Value: \$ 32,328,000.00

Priority	Construction Costs	
1	\$	1,030,000
2	\$	100,000
3	\$	2,140,000
Total	\$	3,270,000



Primary Tenant: College of Science and Mathematics
 Primary Use: Classrooms, Instructional and Research Labs, Faculty Offices

Facility: **Fawcett Hall**
 Built: 1967
 GSF: 140,079
 Floors: 6
 Replacement Value: \$ 42,023,700.00

Priority	Construction Costs	
1	\$	2,486,000
2	\$	640,000
3	\$	4,625,000
Total	\$	7,751,000



Primary Tenant: College of Science and Mathematics
 Primary Use: Classrooms, Instructional and Research Labs, Faculty Offices

Facility: **Dunbar Library and Annex**
 Built: 1973/1988
 GSF: 244,825
 Floors: 5
 Replacement Value: \$ 67,326,875.00

Priority	Construction Costs	
1	\$	1,593,750
2	\$	665,000
3	\$	2,405,000
Total	\$	4,663,750



Primary Tenant: University Library
 Primary Use: Library, Special Collections, Computer Labs, Offices

Facility: **Creative Arts**
 Built: 1973/1990
 GSF: 252,971
 Floors: 7
 Replacement Value: \$ 82,215,575.00

Priority	Construction Costs	
1	\$	1,210,000
2	\$	350,000
3	\$	20,000
Total	\$	1,580,000



Primary Tenant: College of Liberal Arts
 Primary Use: Classrooms, Instructional Labs, Performance Spaces, Faculty Offices

Facility: **Biological Sciences**
 Built: 1975/1976
 GSF: 110,113
 Floors: 3
 Replacement Value: \$ 33,033,900.00

Priority	Construction Costs	
1	\$	429,500
2	\$	457,500
3	\$	1,319,500
Total	\$	2,206,500



Primary Tenant: College of Science and Math
 Primary Use: Instructional and Research Labs, Faculty Offices

Facility: **Medical Sciences**
 Built: 1976
 GSF: 99,751
 Floors: 3 plus penthouse
 Replacement Value: \$ 28,927,790.00

Priority	Construction Costs	
1	\$	817,000
2	\$	1,683,500
3	\$	1,175,000
Total	\$	3,675,500



Primary Tenant: General Purpose Classrooms
 Primary Use: Classrooms, Instructional and Research Labs, Faculty Offices

Facility: **Tom Hanks Center**
 Built: 1973
 GSF: 14,348
 Floors: 2 plus penthouse
 Replacement Value: \$ 3,945,700.00

Priority	Construction Costs	
1	\$	-
2	\$	-
3	\$	187,500
Total	\$	187,500



Primary Tenant: College of Liberal Arts
 Primary Use: Instructional Labs, Faculty Offices

Facility: **White Hall**
 Built: 1981/2007
 GSF: 878,220
 Floors: 2 plus penthouse
 Replacement Value: \$ 26,166,000.00

Priority	Construction Costs	
1	\$	450,000
2	\$	250,000
3	\$	685,000
Total	\$	1,385,000



Primary Tenant: Boonshoft School of Medicine
 Primary Use: Classrooms, Instructional Labs, Faculty Offices

Facility: **Rike Hall**
 Built: 1981
 GSF: 85,046
 Floors: 3
 Replacement Value: \$ 23,387,650.00

Priority	Construction Costs	
1	\$	120,000
2	\$	195,000
3	\$	820,000
Total	\$	1,135,000



Primary Tenant: Raj Soin College of Business
 Primary Use: Classrooms, Instructional Labs, Faculty Offices

Facility: **Brehm Lab**
 Built: 1973/1980
 GSF: 41,894
 Floors: 3
 Replacement Value: \$ 12,568,200.00

Priority	Construction Costs	
1	\$	160,000
2	\$	65,000
3	\$	490,000
Total	\$	715,000



Primary Tenant: College of Science and Mathematics
 Primary Use: Instructional and Research Labs, Faculty Offices

Facility: **Student Union**
 Built: 1967/1972/1973/1994
 GSF: 338,985
 Floors: 4
 Replacement Value: \$101,695,500.00

Priority	Construction Costs	
1	\$	785,000
2	\$	1,062,500
3	\$	2,508,000
Total	\$	4,355,500



Primary Tenant: Student Activities
 Primary Use: Recreation Center, Admissions, Conference Center, Dining

Facility: **Math and Micro**
 Built: 1984/1995
 GSF: 51,385
 Floors: 3
 Replacement Value: \$ 15,415,500.00

Priority	Construction Costs	
1	\$	600,000
2	\$	1,210,000
3	\$	530,000
Total	\$	2,340,000



Primary Tenant: College of Science and Mathematics
 Primary Use: Classrooms, Instructional and Research Labs, Faculty Offices

Facility: **University Hall**
 Built: 1999
 GSF: 108,997
 Floors: 4 plus penthouse
 Replacement Value: \$ 29,974,175.00

Priority	Construction Costs	
1	\$	175,000
2	\$	350,000
3	\$	1,010,000
Total	\$	1,535,000



Primary Tenant: College of Nursing and Health
 Primary Use: Instructional Labs, Classrooms, Offices

Facility: **Nutter Center**
 Built: 1990
 GSF: 435,021
 Floors: 4 plus penthouse
 Replacement Value: \$174,008,400.00

Priority	Construction Costs	
1	\$	948,000
2	\$	8,850,000
3	\$	2,200,000
Total	\$	11,998,000



Primary Tenant: Intercollegiate Athletics
 Primary Use: Multipurpose Arena, Instructional Labs, Classrooms, Offices

Facility: **NEC**
 Built: 2015
 GSF: 98,490
 Floors: 4 plus penthouse
 Replacement Value: \$ 32,009,250.00

Priority	Construction Costs	
1	\$	-
2	\$	-
3	\$	5,000
Total	\$	5,000



Primary Tenant: College of Engineering and Computer Science, COSM, BSOM
 Primary Use: Research Labs, Offices

Facility: **Student Success Center**
 Built: 2015
 GSF: 67,787
 Floors: 3 plus sub basement
 Replacement Value: \$ 18,641,425.00

Priority	Construction Costs	
1	\$	15,000
2	\$	10,000
3	\$	-
Total	\$	25,000



Primary Tenant: General Classrooms
 Primary Use: Classroom, Academic Support, Offices

Facility: **Russ Engineering and Joshi**
 Built: 1992/2006
 GSF: 234,761
 Floors: 5 plus penthouse
 Replacement Value: \$ 70,428,300.00

Priority	Construction Costs	
1	\$	915,000
2	\$	150,000
3	\$	3,870,000
Total	\$	4,935,000



Primary Tenant: College of Engineering
 Primary Use: Classrooms, Instructional and Research Labs, Faculty Offices

Facility: **Diggs Lab**
 Built: 2007
 GSF: 48,380
 Floors: 3
 Replacement Value: \$ 14,514,000.00

Priority	Construction Costs	
1	\$	105,000
2	\$	-
3	\$	-
Total	\$	105,000



Primary Tenant: College of Science and Mathematics
 Primary Use: Research Labs, Faculty Offices

Facility: **Health Sciences**
 Built: 1984
 GSF: 46,456
 Floors: 3
 Replacement Value: \$ 13,936,800.00

Priority	Construction Costs	
1	\$	570,000
2	\$	225,000
3	\$	1,546,250
Total	\$	2,341,250



Primary Tenant: School of Professional Psychology
 Primary Use: Classrooms, Faculty Offices, Lab Animal Holding