

Western Kentucky University
Capital Construction and Major Equipment Budget Request
1986-88

1. Renovation of Chemistry Laboratories (1986-87) \$1,430,000

The third floor of the Thompson Complex - North Wing was equipped with used laboratory benches and exhaust hoods originally installed in Cherry Hall in 1937. The exhaust hoods have deteriorated due to chemical fumes and the number of hoods is inadequate to meet current program needs. Project funds will be used to replace existing exhaust hoods, add additional hoods, replace laboratory benches, and renovate and modernize the laboratories in the building.

2. Roof Replacement of Academic-Athletic Building #1 (1986-87) \$330,000

The roof is 22 years old and has been recoated and repaired numerous times. The roof must be replaced to effectively protect the building.

3. Replacement of Air Conditioning Equipment (1986-87) \$440,000

Air conditioning units in campus buildings are showing a high rate of failure. Four units required major repairs in 1984-85. An additional four units will soon require major repairs or replacement.

4. Structural Repairs - Wilson Center and Academic-Athletic Building #2 (1986-87) \$200,000

The purpose of the project is to correct conditions causing damage to concrete from structural movement and water infiltration, repair current damage and waterproof the occupied areas of Academic-Athletic Building #2. Western received \$140,000 from the Council on Higher Education major maintenance pool for these repairs, but the amount is not adequate to complete the project.

5. Replacement of Underground Steam and Electrical Distribution Lines (1986-87) \$800,000

The utility distribution system was initiated in phases in 1961 and the latest phase was constructed in 1970. Records indicate that major failures are occurring frequently and the condition of the steam lines and high voltage electric lines needs updating with a systematic plan. Segments of the distribution system are scheduled for replacement in 1985-86 from an allocation of \$122,600 from the Council's major maintenance and repair pool.

6. Storage Building for Hazardous Materials (1986-87) \$197,000

Inspection from both the Department of Housing, Building and Construction, and the Department for Environmental Protection have found the University out of compliance with their regulations on the storage of hazardous materials. The University has allocated \$45,000 for the construction of a small detached structure adjacent to the science laboratories for the storage of flammable and combustible materials and chemicals used for instruction. A larger detached structure is needed for bulk storage of other flammable and combustible materials and chemicals used in the Physical Plant, Print Shop, Central Stores, and other administrative units.

7. Life Safety Improvements (1986-87) \$500,000
The need for life safety improvements has been documented by the State Fire Marshal and an architect who assisted in earlier fire safety improvements in the dormitories. Funds will be used to correct deficiencies in dormitories, assembly areas and other buildings as recommended by the Fire Marshal.
8. Replacement of Coal Boilers Nos. 1 and 2 (1986-87) \$950,000
Two of the coal fired boilers in the Central Heating Plant should be replaced because of age and general condition. The two boilers which generate 70,000 pounds of steam per hour are recommended to be replaced by one boiler which will generate 100,000 pounds of steam per hour.
9. Asbestos Removal Campus Buildings (1986-87) \$400,000
Friable asbestos has been found in the ceiling plaster of six buildings on the campus. Air samples taken by the State Occupational Safety and Health Program indicate the exposure level of asbestos fiber is below the permissible limit in all buildings. Authorization for the project is requested in the event a decision is reached to have the asbestos removed.
10. Roof Replacement Jones-Jaggers Building (1987-88) \$155,000
A recent inspection reveals that the roof is failing and should be replaced.
11. Replacement of Air Conditioning Units (1987-88) \$440,000
Air conditioning units in campus buildings are showing a high rate of failure. Four units required major repairs in 1984-85. Additional funds in 1987-88 will permit a systematic replacement of the units.
12. Ivan Wilson Center for Fine Arts - Humidity Control (1987-88) \$235,000
All wooden musical instruments are adversely affected by fluctuations of humidity due to the lack of humidity control equipment in the building.
13. Industrial Technology Building (1986-87) \$4,485,000
A facility is needed to provide support in instruction for current and emerging technologies. Students enrolled in industrial and engineering technology programs need exposure to state-of-the-art equipment to be able to cope with technical production and managerial problems faced by business and industry and to make them competitive for jobs in high technology industries. The University is attempting to increase linkages with business and industries in order to share in both the knowledge and the cost of emerging technologies.
14. Real Time Image Processor (1986-87) \$62,000
Will be used primarily in Physics for signal and image processing.
15. Hughes Liquid Crystal Light Valve (1986-87) \$62,000
Will be installed in the Physics laboratories for signal and image processing.

16. Copper Laser (1986-87) \$60,000
This equipment will be used for basic research for development of advanced frequency selectivity techniques, excitation of novel pulsed dye laser oscillators, and in applied research for a versatile source for cancer phototherapy and a tool for other photosensitive biological processes.
17. Nuclear Magnetic Resonance Spectrometer (1986-87) \$112,500
Will be used to expand resources for instruction, research, and public service support in Chemistry and Biology.
18. Optical Character Reader (1986-87) \$89,400
This equipment would be used to enter large blocks of information into the computer in a short period of time. An example would be the entering of grades at the end of a semester. The equipment could also be used for test scoring and reading of survey responses.
19. Roof Replacement Downing University Center (1986-87) \$225,000
The roof on the upper deck of the building was replaced in 1983. The roof on the lower deck of the building is failing and needs to be replaced.
20. Instructional Television Station (1986-87) \$275,000
This project involves the establishment of an instructional television station to provide college credit courses, in-service teacher training, continuing education service and general educational programming to South Central Kentucky. The low power station would reach approximately a 30 mile radius and would be carried by all cable television systems within that radius. The station would also provide local public television service to South Central Kentucky.
21. Roof Replacement - Environmental Science and Technology Building (1986-87) \$180,000
The roof is failing due to moisture under the roof membrane. The University may have to bear all or a portion of the cost, depending on discussions with the Celotex Corporation which has the roof under a roof inspection and service contract.
22. Computer Processor (1987-88) \$310,000
By 1987-88 an additional mainframe (computer) will be needed to support instruction and research.
23. Computer Storage Control (1987-88) \$60,000
Will enhance the performance of equipment in the administrative computing operation.
24. Computer Processing Unit and related equipment (1987-88) \$498,600
The computer used for administrative and instructional computing will need to be replaced by 1987-88.
25. Local Area Network (1987-88) \$152,300
The purchase of equipment and software to link the computers together on campus will expand the capability.

26. Helm-Cravens Library Humidity Control (1987-88) \$220,000

Library materials in the Helm Library and Cravens Graduate Center and Library have been damaged and are endangered by the continuing problem of mold and mildew growth. During dry periods the low humidity causes further deterioration.

27. Renovation of Academic-Athletic Building
#1, Addition of Physical Education and
Recreation Wing (1987-88) \$12,500,000

Academic-Athletic Building #1, constructed in 1962, is a multi-purpose facility containing classrooms and faculty offices; recreation facilities for students, faculty and staff; an arena for intercollegiate athletics; and offices for the Athletics staff. The building is also used for concerts, commencements, high school athletic events, and other University and community events.

The purpose of this project is to install air conditioning and improve the acoustics, sound system, and lighting in the arena portion of the building. The interior of the existing building would also be renewed. The building addition of 100,000 gross square feet of space will provide multi-purpose floor areas for the recreational, intramural and physical education needs of students, faculty, and staff.

28. Alteration of Dairy Barn and
Construction of Milking Parlor (1987-88) \$210,000

The present dairy facility was constructed around 1932 to provide a modern training center for students enrolled in agriculture at Western Kentucky University. It is proposed that the present stanchion area be converted to a tie-stall arrangement to provide more space per cow (the barn was originally designed for 800-pound Jersey cows, whereas, it is being used for 1600-pound Holsteins) and enhance it's use as a teaching and applied research facility. The addition of a modern milking parlor is proposed, in conjunction with the above renovation project, to enable us to provide our students with training and experience in line with the present state of the industry. This addition will also increase the overall efficiency of the milking operation and reduce operating cost.

29. Library Building (1987-88) \$9,000,000

There is a need to bring together on the campus all library materials, in a single unit, to increase the effectiveness and efficiency of library resources. Collections for the physical sciences, nonprint educational resource materials, and audio-visual materials and equipment are currently housed in academic buildings. Expansion will be required to accommodate resources in the emerging technologies such as computers, computer software, video discs and related resources. Demand is also increasing for production of audio-visual materials for instruction and public service programs.

The institutional self-study report completed in February, 1984, indicates that 70 percent of the 75,600 linear feet of shelving is currently being utilized. Book volume has been increasing between four and five percent each year and the rate of growth will increase if inflation of printed materials continues to decline and budget position improves. The number of volumes added annually should be in a range of 25,000 to 40,000. Documents are one of the most rapidly growing collections in the library due in part to Western's depository agreement with the Government Printing Office.

30. Renovation and Reconstruction of Snell Hall (1987-88) \$1,263,000

Snell Hall is a 55 year old building that should be renovated and reconstructed to modernize classrooms, offices, laboratory space and an auditorium for the departments of Biology, Mathematics, Agriculture and other research and service programs of the Ogden College of Science, Technology and Health. New mechanical and electrical systems are needed and the renovation will bring the building into compliance with current life safety requirements.

31. FM Repeater Radio Station - Henderson (1987-88) \$154,000

This project will complete the coverage of the State of Kentucky with Kentucky-originated public radio service, drawing upon the existing cultural and informational resources of Western and Murray. The station will rebroadcast the existing programming of Western's WKYU-FM and Murray's WKMS. The programming will include information tailored to the needs of western Kentuckians and will provide them access to a public radio station.