The University of Kansas wants to thank the Legislature for the continued support of the deferred maintenance program and the preservation of these valuable state assets at the University. With the Legislature’s support, the University has been able to complete the top priorities on the deferred maintenance list, helping to ensure the safe ongoing operation of the university’s teaching, research and service missions.

**State Deferred Maintenance Funding**

**Utility Tunnel Improvements** – The poor structural integrity of the tunnels and the unsafe work environment for maintenance personnel made the tunnels the University’s top priority. During the bidding process on the first phase, the University was able to compare the cost of cast-in-place concrete to precast concrete tunnel sections. By going with precast tunnel sections, the University was able to save a million dollars. The first two phases of tunnel improvements replaced 1900 linear feet of tunnel at a cost of $12 million and was completed the last two summers.

The balance of funding will be reallocated to the Bailey Hall mechanical and electrical improvements.

**Wescoe Hall Improvements** – This was a complicated project that replaced an undulated floor slab on the first floor, and mechanical systems on 1st, 2nd and 3rd floors, as well as fire and life safety improvements throughout the building. The work was implemented in phases, by floor, to minimize the number of faculty and staff displaced at any one time. Phase 1 started in January 2008 and the three phases of the project was completed in July 2009 at a cost of $4.4 million.

The balance of project funding will be reallocated to the Bailey Hall mechanical and electrical improvements.

**Haworth and Malott Hall Improvements** – The University quickly moved forward with replacing antiquated and failing fume hoods to improve the laboratory safety. The fume hood replacements were completed in 2009.

At the request of the Legislature, the University was encouraged to look at the FCIP as a way to leverage deferred maintenance dollars to accomplish more deferred maintenance improvements and reduce energy costs. Through the FCIP the University contracted with Energy Solutions Professionals (ESP) to conduct an investment grade audit campus wide and specifically Haworth and Malott Hall.
The University has finalized a $25 million contract with ESP to install more energy efficient lighting, water conserving fixtures and valves and steam optimization improvements. Included in the energy performance contract is the replacement of failing air handling (AHU) equipment in Haworth and Malott at a cost of $4 million. Coordinated with the AHU replacements will be energy management controls. The AHU replacement work will start in April 2010 and is projected to complete in November 2010. The energy conservation improvements will be completed by June 2011.

**Murphy Hall Electrical Improvements** – With the reduction of available deferred maintenance funds, the electrical improvements at Murphy Hall are the only portion of the critically needed improvements funded for this facility at a budget of $1.3 million. A consultant was selected in December 2009 and design has started. The project will bid in late spring with construction starting this summer. Completion is scheduled for December 2010.

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**Federal Stimulus Funding (ARRA) for Deferred Maintenance**

The University utilized the original deferred maintenance priority list of February 2007 and the current 5-year Maintenance Plan to continue to identify the critical needs on campus.

**FY 2009 (funds received June 2009)**

**Anschutz Science Library Fire Code Improvements** – The electronic fire alarm system was failing and required immediate attention. This $273,000 project has been designed and construction is scheduled to start in March 2010.

**Carruth O’Leary Hall Reroof** – This is a project that was originally funded by R&R funds but because of other critical deferred maintenance needs on campus, the project was deferred. Bids were received in late November 2009 and construction on this $200,000 project will start as soon as the weather permits. Completion is anticipated by June 2010.

**Military Science Reroof** – Bids were received January 11, 2010, and the $105,000 project has been awarded. As soon as contracts are finalized and weather permits, construction is ready to start. Completion is anticipated by June 2010.

**Dyche Hall HVAC and Electrical Improvements** – The continued deterioration of the 50+ year-old mechanical and electrical systems has elevated this project on the priority list. Consultant was selected in October 2009 and design has started. The project budget is $1.15 million. Construction will start late spring 2010 and be completed in late fall 2010.

**Jayhawk Blvd. Storm Sewer Replacement** – Jayhawk Blvd. has a limited storm sewer system. The storm sewer pipe from the road to Potter’s Lake is in poor condition and periodically collapses. This $200,000 project is in design and will bid late spring 2010 with construction to start after commencement and will complete by August 2010.
FY 2010

**Murphy Hall Mechanical Improvements** – This project replaces 50+ year old mechanical system air handlers at a cost of $3.1 million. The project is being designed in coordination with the Deferred Maintenance (IMP) Murphy Hall Electrical Improvements. A same consultant is being used for both projects. The mechanical system replacements will start in late spring and complete before the start of the heating season in the fall.

**Spencer Museum of Art Chiller Replacement** – The existing chillers are in poor condition and need to be replaced. Design has started and construction is projected to start on this $874,000 project in September 2010 after the cooling season.

**Utility Tunnel Waterproofing** – This is the last phase of utility tunnel improvements identified in the tunnel condition analysis. The tunnel section east of Robinson is severely leaking, causing damage to the steam pipe supports and the concrete structure. Repairs will cost $1.1 million. The design is complete and the project bids February 11, 2010. Construction is scheduled to start in late spring and be completed in early fall 2010.

**Repair and Rehabilitation Funds (EBF)**

**Lippincott Hall Mechanical and Electrical Improvements** – This project was originally scheduled to be on the deferred maintenance five-year-plan funding schedule. The infrastructure systems continue to deteriorate and it has become critical to identify funding to accomplish this work. Funds were reallocated from the replacement of water lines on Jayhawk Blvd. and other project balances to provide $1.2 million for urgently needed repairs to the mechanical and electrical infrastructure in Lippincott Hall.

*Note: The deferred maintenance backlog is nearly $200 million and funding for critical infrastructure improvements remains a high priority for the university. Lindley Hall, Watson Library, Learned Hall, Strong Hall and the Art and Design Building remain unfunded on the five-year deferred maintenance plan.*
By 2008, KUMC had accumulated a total of $90.5 million in deferred maintenance. Nearly $30 million of this amount were in building systems that had been rated as poor or unsatisfactory by the campus Facilities Management staff.

KUMC annually receives approximately $1.6 million in Repair and Rehabilitation funding from the Education Building Fund (EBF) the source of which is a one-mill tax on real property across the state that is dedicated to repairing Board of Regents facilities.

In 2008, the Legislature crafted a five-year plan to begin to address the Board of Regents deferred maintenance problem. Under the plan, KUMC received $5.4 million of State General Funds in the first two years.

Year three, FY 2010, was funded from the Educational Building fund; KUMC’s share was $1.5 million. These funds were invested in Applegate Energy Center decreasing the deferred maintenance in this facility by $6.7 million.

The five year plan also provided that interest earnings on university funds, primarily tuition, be used for deferred maintenance also. In FY 2009, $400,000 of interest was available and was invested in Animal Building 37.

Lastly KUMC has been very successful in its efforts to address the deferred maintenance through other funding sources, such as by obtaining grants from the United States Department of Commerce and the Kansas Bioscience Authority (KBA) to fund the $6 million renovation of a 50-year-old research building. In addition, the KUMC Research Institute and the KBA are funding the $34 million remodeling of three 50+ year old research facilities. These projects will reduce the deferred maintenance by $15.5 million.

The University of Kansas Medical Center has utilized funding from:

- Repair and Rehabilitation funds (EBF) FY10 $ 1,687,000
- State Deferred Maintenance FY 2008 and 2009 $ 5,475,000
- State Deferred Maintenance Fund FY 2010 $ 1,500,150
- University Interest funds FY09 $ 400,000
- Federal Recovery Act FY09 / FY10 $ 2,990,082
- KBA / U.S. Department of Commerce $ 2,500,000
- KBA / KUMC Research Institute Bonds $13,000,000

**Total reduction in deferred maintenance** $27,552,232

The following pages summarize the $50 million that is currently being invested in deferred maintenance either directly or as a component of a larger project.
1. FY10 Repair and Rehabilitation Funds

$1,687,000  60% Complete
This annual investment will be used to replace roofs, chilled water piping in the building 14, replace control systems in the Lied Research Building, interior floor and wall repairs throughout campus, purchase of energy saving equipment when equipment failures occur, upgrade systems into code compliance as required by the annual Fire Marshal Plan of Corrections, and repairs to the exterior of Dykes Library.

2. FY10 State Deferred Maintenance Fund

Applegate Energy Center

$5,475,000  State General Fund  100% Complete
This will be invested in the Applegate Energy Center to replace the campus emergency generator system, the campus chilled water pumping system and replace a chiller.

$1,500,150  Educational Building Fund  20% Complete
Replace the remainder of the 13.8 volt electrical distribution within the plant, replace the electrical distribution for Chiller Number 1, re-construct the campus fire pump system to code and remove the abandoned emergency generators.

Animal Research Building 37

$400,000  University Interest Funds  100% Complete
By addressing the deferred maintenance issues, Animal Research Building 37 was brought up to USDA standards by replacing and adding lighting, drains, and temperature and humidity systems. We replaced all flooring with a resin product; we painted all walls in animal rooms and corridors with a hard epoxy paint product and installed guard rails on all walls to prevent damage to the walls. These changes significantly improve the ability to maintain a clean and sterile environment and reduce operating costs.

3. FY09 / FY10 Federal Stimulus Money (ARRA) $2,990,082

Animal Research Building 30

$710,024  90% Complete
By addressing the deferred maintenance issues, Animal Research Building 30 was brought up to USDA standards by replacing and adding lighting, drains, and temperature and humidity systems. We replaced all flooring with a resin product; we painted all walls in animal rooms and corridors with a hard epoxy paint product and installed guard rails on all walls to prevent damage to the walls. These changes significantly improve the ability to maintain a clean and sterile environment and lower operating costs.
Lied Research Facility

$238,000  40% Complete
The Lied Research Building required wall repairs from steam leak damage and the replacement of the building's de-ionized water system.

Campus Elevators

$1,342,058  A/E Selected
Bid in July 2010, Begins Aug 2010
This money will be invested in the repair and renovation of seven elevators in Sudler, Lied, Wescoe, and Miller buildings. These are crucial facilities in that not only do these buildings serve faculty, staff, and students, but also many patients and visitors. The average age of these elevators is 37 years.

6th Floor of Delp Pavilion

$700,000  Begins March 2010
On the 6th floor of Delp Pavilion, this investment will fund the demolition, cleanup, and disposal of all walls containing mold damaged by previous leaks in the walls and roof. The following infrastructure systems will be repaired through replacement: electrical, Heating Ventilation and Air Conditioning, fire alarm, and security. The renovation in this 60-year-old facility will also address fire code and ADA requirements on this floor.

Briedenthal Entrepreneurial Research Institute

$2,500,000  Begins March 2020
The Kansas BioScience Authority and the United State Department of Commerce are investing $6 million to renovate the Briedenthal Research Facility into the BERI complex to assist researchers in developing their new discoveries into viable products for the consumer market. This investment will replace the electrical, HVAC, plumbing systems, add an ADA elevator, and eliminate approximately $2.5 million in deferred maintenance in this building.

4. KBA / Research Institute Bonds

$13,000,000  1% complete
The Kansas BioScience Authority and the Research Institute are investing $34 million in the renovation of the Wahl Hall East, Wahl Hall West, and Hixon research facilities in support of the Cancer Initiative to create state of the art research facilities for the recruitment of world class researchers. This project completely replaces the mechanical, electrical, and plumbing infrastructure for the three buildings eliminating approximately $13,000,000 of deferred maintenance in this building.