

CAMPUS DEFERRED MAINTENANCE EXAMPLES

(Submitted by Institution)

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THE UNIVERSITY OF KANSAS MEDICAL CENTER

Lied De-Ionized Water Piping:

The Lied building was built in 1994 but has already experienced several piping failures on the laboratory de-ionized water system. The pipe and the fittings in this system have developed cracks from what is believed to have been UV exposure that occurred during the construction of the building. While there has not been a major failure that has caused extensive damage, there is piping throughout the building located in the walls that poses significant potential problems in the building that houses the Medical Center's principle cancer research laboratories.

Aging Transformers:

There are 40 electrical distribution transformers on the campus. Almost one-half of these transformers are in service beyond their useable life expectancy. There have been three transformer failures in the past five years that required additional expenditures above a normal transformer change-out. These costs include generator and temporary transformer rental costs until the permanent equipment is procured and installed. While the Medical Center invests a portion of its R&R funding each year in transformer replacement, there is not sufficient funding to replace all of the transformers nor is it possible to predict which unit will fail. Each failure is costly not only in dollars but in their disruptive impact on the Medical Center's education, research, and patient care missions.

13.8 kV Link Boxes and Cable:

There are eight electrical link boxes and more than six miles of high voltage cable that are part of the electrical distribution system of the Medical Center. The link boxes and cable vary in age, but are all beyond their life expectant age. An additional challenge is created because the link box technology has been replaced by a switching system which requires major modification for installation. On a couple of the link boxes that have already been changed, there was insulation deteriorating at the connections that could have lead to a catastrophic failure affecting patient care and research buildings. The campus has already experienced power outages due to cable failures. This has required the redistribution of power loading on the system in a less then optimal manner so that power could be restored in a reasonable time frame and in year resource reallocation to address the emergency that causes the deferred maintenance backlog to grow.

Delp/Dykes Tuck Pointing:

These buildings are from two different eras (1954 and 1983) but have a common problem. The buildings are in need of tuck pointing. The Delp building is in such a need that it appears the brick are separating from the curtain wall. This separation will require a more involved solution than just tuck pointing. It will require a roofing modification and a re-bricking of some of the sections.