

Construction professionals tour McGovern Medical School to learn lessons on renovating an occupied building

By Faith Harper, UTHealth

A group of builders strolled through the McGovern Medical School at The University of Texas Health Science Center at Houston (UTHealth), looking at the walls and the infrastructure within.

Along the way, they talked about how UTHealth went about replacing outdated air conditioning, drainage, and plumbing components without disrupting operations at the school, as well as how the building was reinforced after it flooded during Tropical Storm Allison in 2001.



The group from the Construction Owners Association of America (COAA), a trade organization consisting of public and private owners who manage facilities development and capital improvement projects, toured the building with members of UTHealth Department of Facilities, Planning and Engineering on Jan. 23.

It was the first site visit of the year for the group of COAA emerging professionals. The tour group included representatives from the University of Houston, the

University of Houston-Downtown, DPR Construction, Turner Construction, and MD Anderson.

“The biggest benefit for COAA is it offers the ability to look at better ways to manage projects, from construction to time management, with other owners, architects, and engineers,” said Clinton “Brooks” Herman, senior facilities construction project manager for UTHealth and board member for the Texas and national COAA groups. “The benefit to the emerging professionals is that they are able to ask questions that they may not be comfortable asking their boss, and they can ask those questions to someone with the same tenure in the industry.”

Because of the innovative solutions facilities is known for developing, UTHealth is often a destination for building groups like COAA and others to learn best practice.

The medical school was built in two phases in the 1970s.

As part of an \$80 million Tuition Revenue Bond package for UTHealth passed by the 84th Texas Legislature, UTHealth received approval from UT System to use \$65 million of the bonds for renovations to the building, including updating its electrical systems, drainage, and plumbing – and the work has gone on without limiting the activities within the building.

The work is slated to be complete in 2022.

“We wanted to show folks how we’re going through the construction process, some of the things we were doing, and some of the lessons learned through the construction journey over the last three years and the two to come,” said Steven Bennett, senior facilities construction manager over the medical school renovations. “Plus, we wanted to show off McGovern Medical School, our flagship building, and the ways we have worked to make the infrastructure new again.”

To be able to complete infrastructure work, Facilities created about 4,000 square feet of space to temporarily move offices affected by construction.

Bennett said the infrastructure supplying power throughout the building was replaced, a



process that included cutting a 25-foot by 12-foot hole into the penthouse to bring in large amounts of steel. Mechanical rooms on the top floor of commercial buildings are often called the penthouses. Crews also replaced entire air handling units, including the concrete slabs they sit on. Old fluorescent light fixtures are also being replaced with LED-type fixtures. They've cleaned duct work and replaced the compressed air and vacuum systems that serve the laboratories.

Crews have replaced some of the building's major plumbing systems, including its water softener system and the domestic hot water generators, and have refurbished its reverse osmosis systems.

"It's been a well-orchestrated effort from the construction side and on the school administration side," Bennett said. "They have supported our efforts to keep the construction going and making sure everyone is accommodated the best they can be as we tear out the old and bring in new components."

And those lessons learned at UTHealth are beneficial to others.

"Many of the owners in attendance also have older buildings where they need to start upgrading major mechanical, electrical, and plumbing systems (MEP)," said Kiel Hawkins, senior facilities manager and COAA Texas board member. "Our project management team has replaced major MEP systems in three UTHealth buildings – at University Center Tower, the Reuel A. Stallones building, and at the medical school building. In each, our approach to replacing MEP systems was slightly different to ensure operations within the building continued. We've learned lessons along the way, and we are happy to share those lessons with others."