Management and Growth Plan for Utilities and Infrastructure

Strategic Management of Existing Systems and Accommodation of Campus Growth



Division of Finance and Operations Campus Development

EXECUTIVE SUMMARY

The Division of Finance and Operations maintains the following report on the Strategic Management and Growth of Campus Utilities and Infrastructure. The purpose of this report is to provide a framework for the Division to meet and support the dynamics of a thriving campus, and to recognize the challenges and opportunities involved. The Division is providing the 2024 update to reflect work accomplished in accordance with the previous plan, the impact of projects that are in planning or development (both long and short term), programmatic considerations, technology changes, emerging opportunities, strategic partner dynamics, the current status of the Peter Bryce Campus and the current status of the University Services Campus (formerly known as Partlow Campus).

Staff continues to analyze and evaluate previous engineering assumptions, system performance and system age to ensure optimization of systems, efficiency, and financial return. This information is also beneficial to project long term system needs as related to expected functional service life (along with the associated capital renewal cost) and to provide more accurate budgeting information as additional demands are added to the system.

The Division of Finance and Operations is unique in that its support functions touch every aspect of campus activity for students, faculty, staff, and visitors. These aspects include, but are not limited to safety, security, facility comfort, campus appearance, employee/vendor/student payments, collections, dining, housing, purchasing, or employment. These aspects of campus activity are in turn all directly supported by the utility and infrastructure systems of the campus.

As necessary for efficient management of university systems, the Division of Finance and Operations has prepared this summary to convey the future campus needs relative to the utilities and infrastructure systems of the campus. The topics include electrical distribution, campus lighting, sanitary sewer, storm water control, thermal energy, energy management, natural gas, potable water, roadways and parking, pedestrian amenities, and network infrastructure. Each section details pertinent information such as general background information, current efforts, system constraints and issues, and long-term plans. Information is provided on work which has been completed since the last update in support of maintenance or expansion of the campus systems. Projects included have been executed with the approval of the University of Alabama Board of Trustees, as part of a capital works project or the Annual Capital Development Plan (ACDP). This report also addresses risk management measures and protocols that are being taken to protect the systems, as well as electronic management systems, which are suggested to be or are currently being implemented, to facilitate management of the systems.

Note: Opportunities to partner with the City of Tuscaloosa, Alabama Department of Transportation (ALDOT), Alabama Power Company (APCO), Spire, and other strategic partners must continue to be pursued to provide additional project funding and support. Almost every area listed below has either a direct benefit or the realization of a financial benefit to external partners.

