



The Need for Federal Investment in Campus and Research Infrastructure July 2021

As Congress considers new investments in infrastructure, it should address the needs of the country's public universities. Reductions in state funding for higher education over the past decade, including capital investment, have resulted in lengthy deferred maintenance backlogs at many public universities. The problem has worsened during the COVID-19 pandemic, as construction projects have been delayed or cancelled and university budgets have suffered. Federal funding is needed to help make up the difference and ensure public universities can continue to meet the needs of their diverse student bodies.

The University of Illinois System supports the proposal in the Biden Administration's American Jobs Plan (AJP) for a \$40 billion investment "in upgrading research infrastructure in laboratories across the country, including brick-and-mortar facilities and computing capabilities and networks." In addition, further investments in non-research campus infrastructure—from classrooms to HVAC and electrical systems—are needed to ensure universities can continue to provide a safe, welcoming and productive environment for our students, faculty and staff. [Upgrading facilities at colleges of agriculture alone will require \\$11.5 billion.](#) Unfortunately, while the AJP proposes \$12 billion to address community college infrastructure, it does not include public four-year colleges and universities. We urge Congress to support [infrastructure funding that addresses the needs of all public colleges and universities.](#)

The U of I System's deferred maintenance backlog is *\$2.16 billion* and growing (including "soft costs" such as architect and engineering fees). Note that this total does not include infrastructure related to auxiliary services such as parking, housing and athletics.

University of Illinois Chicago (UIC)



- UIC's current deferred maintenance backlog is \$1.082 billion, and is expected to grow each year by \$22 million–\$32 million.
- There have been numerous instances over the past 15 years where portions of facades have fallen down (see image at left). Fortunately, falling debris has not struck pedestrians. UIC has stabilized critical facades, but funding is needed to fix the problems.
- In some buildings, UIC is unable to provide code-required ventilation and fresh outside air to all spaces, requiring the use of portable HEPA filtration units as a short-term solution.

- In some research buildings, UIC is not able to provide necessary temperature and humidity control to research labs, thus jeopardizing research activity. Temperatures can fluctuate as much as +/- 5 °F on a daily basis and humidity levels routinely drop below 20% in the winter.

University of Illinois Urbana-Champaign (UIUC)

- UIUC has an estimated deferred maintenance backlog of \$1.034 billion. If not addressed, this backlog is expected to grow to more than \$2 billion in 2030. Annual investments of approximately \$130 million are required just to keep that backlog from increasing.
- 23% of UIUC's total research space is in need of renovation, and 29% is in need of replacement.
- Over 1/5th of academic facilities on campus are 75 years or older; UIUC has the largest percentage of pre-World War II academic facilities in the Big Ten, and has fewer new buildings than its Big Ten peers.
- Numerous buildings on campus have building envelope deficiencies, including deteriorated masonry, failing and inefficient windows (pictured at right), and other aging components.



University of Illinois Springfield (UIS)



- UIS has over 40 projects totaling approximately \$43 million on its deferred maintenance list. The total amount of funding required to address deferred maintenance exceeds 10% of the plant replacement value.
- Water infiltrates four of the largest academic buildings through leaking windows, roofs, and foundations. This has resulted in damage to the interior spaces and equipment, and routinely disrupts operations.
- Deteriorated sanitary sewer systems sporadically fail, presenting a potential public health risk (corroded and deteriorated sewer pipes are pictured at left).
- The campus' IT infrastructure is antiquated and does not provide the reliability and redundancy required of a modern university.