

People counters have been applied to North Campus as part of the university's building automation systems, operational management, environmental targets and long-term facilities planning. Knowing which areas are frequently used and which are not allows the university to reduce energy, allocate staff resources to higher use areas, minimize unnecessary costs and identify space opportunities.



Thermal sensors monitor movement to determine how frequently a space is used



ENVIRONMENTAL IMPACT

Reduced cleaning of unused rooms reduces chemical use and redirects staff resources

Lighting, heating, cooling and ventilation is lowered in empty rooms, reducing GHG emissions

Data helps inform how the university can reduce its physical footprint, which results in positive local and global impacts



INNOVATION & TECHNOLOGY

Data is collected by detecting a person's body heat against the background temperature and the direction it moves—in or out of the space

Meaningful patterns in the data paired with projected campus needs allows for improved facilities planning and possible reductions in capital costs for new buildings



ESTIMATED SAVINGS

Reduction in mechanical system use extends the equipment life and lowers the number of small maintenance costs which add up significantly over time

Payback periods vary with each building depending on the age of the heating, ventilation and air conditioning (HVAC) system

PROJECT TEAM | • Energy Management and Sustainable Operations
• Building Operations

LESSONS LEARNED | Sensors in confined spaces or at entrances require calibration to work correctly in those conditions.