

# UAB DISTRICT STEAM SYSTEM PROJECT

## FAQs

❖ Emergency - Call UAB Police Department 934-3535

❖ Project Home - Website: <http://www.uab.edu/steamproject>

- **What is the steam system project?**

The UAB District Steam System Project includes the construction of a state-of-the-art steam-generation plant and steam distribution and condensate recovery network, and purchase of Alabama Power Co.'s existing Southside steam plant and distribution system, which will be decommissioned in 2013.

- **Why is UAB undertaking the project?**

The project is necessary because Alabama Power Co. is taking its existing Powell Avenue and Southside steam plants and distribution system out of service in February 2013.

- **What is the cost of the project?**

It is a \$69 million bond-funded project approved by The University of Alabama System Board of Trustees in June 2010.

- **What will be the result of the project?**

There will be a new steam plant located at the corner of Sixth Avenue South and 13th Street, across from Bartow Arena and adjacent to the existing Alabama Power plant. The new network will replace the existing steam-distribution system and construction of a new condensate-return system will provide high-quality steam service to the campus, research and medical center facilities, including the VA Hospital, Callahan Eye Hospital and Southern Research Institute.

- **Who approved the project?**

The project received multiple approvals from these entities: UAB Executive Administration, The University of Alabama System Board of Trustees, Alabama Department of Transportation, Birmingham Mayor and City Council, Birmingham City Planning Commission, 14<sup>th</sup> Street Design Review Committee, Birmingham Five Points Neighborhood Committee and Jefferson County Department of Health Plant under the guidelines and regulations of the U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM).

- **How long will the project take?**

Active construction on the project is expected to take place from May 2011 through October 2012. The new plant and systems will then go through a period of testing, and be brought completely online in February 2013, to coincide with the shutdown of the existing Alabama Power Co. steam plant.

- **Could inclement weather delay the project?**

No. This is not like some roadway construction projects that experience rain delays. That is because although there will be road excavation work, the open cuts will not be refilled with dirt. Instead, they will be refilled with a special engineered flowable-fill material in conjunction with compacted crushed stone pipe bedding/backfill to stabilize the excavated area(s). This will make it possible for work to continue during rain.

- **Exactly where and when will project work take place?**

The new steam plant will be located at the corner of Sixth Avenue South and 13th Street, across from Bartow Arena. The distribution network has two major segments, identified as the North Loop and South Loop, with two minor sub-segments the Northeast and Southeast Loops. Approximately 60 percent of the piping will be installed within UAB campus properties and approximately 40 percent is planned to be within the City of Birmingham sidewalks and streets.

Go to <http://www.uab.edu/steamproject> to find detailed maps and descriptions of where the work will be underway at a given point in time.

- **How will UAB manage traffic and parking during the project?**

Project management's goal is to minimize the disruptions to the routines/business and academic activities of the members of the UAB and Greater Birmingham communities impacted by the construction.

First, construction activities related to street and right-of-way have been specifically addressed in the project construction documents with rigid contract requirements regarding permitting, construction and repairs. The intent is to get the work done quickly while ensuring that traffic never comes to a complete stop on any given street, and to make sure that people are made aware of partial road closings and or parking deck or lot impacts before they take place.

Project management will communicate roadway and parking status changes with the UAB community through the university's electronic newsletters for faculty and staff (*The eReporter*) and students (*GreenMail*), and through UAB Parking and Transportation's Twitter feed (<http://twitter.com/uabparking>). All electronic updates will link back to this website, which is devoted solely to the UAB District Steam System Project and will be updated on an ongoing basis with information regarding the overall progress of the project with a special emphasis on identifying construction activities at specific locations with estimated work durations and other important details.

Also, a project liaison has been assigned to communicate directly with the City of Birmingham Traffic, Engineering and other agencies to provide advanced detailed information related to construction activities planned for city streets and right-of-ways.

- **Is this project safe?**

Yes. Major emphasis was placed on overall safety during design of the steam system, with specific attention given to the location and routing of steam supply and condensate lines relative to life-safety within the campus, hospital and other medical facilities and surrounding community. The steam supply and condensate lines are designed to operate with a safety factor of 150 percent above the designed operating pressures, which conforms to ASME engineering standards and local codes (ASME was founded as the American Society of Mechanical Engineers). The steam supply and condensate recovery lines will be constructed of high quality welded carbon and stainless steel with rigid inspection and testing during installation, including ultra-sonic testing of each welded joint to ensure zero defects for safety and operational integrity.

- **Is this project environmentally friendly?**

Yes. The UAB District Steam System has been designed to parallel other policies and practices with respect toward environmental friendliness to the campus and community, and the steam generation plant facility has been approved by local and governmental environmental regulatory authorities. The plant is designed to operate as a low emissions facility, with natural gas being the primary fuel enhanced by technologically advanced low Nox burners and controls. The steam distribution and condensate recovery piping systems are designed to minimize thermal losses by encapsulating the piping in high quality insulating materials. Further, each building receiving steam service will be retrofitted with a condensate recovery system for return to the steam generation plant. The steam condensate has very high thermal values for use in boiler make-up water and vastly reduces the domestic water consumption and natural gas energy required to generate steam.