

Ideal Choice for Freshman Dormitory Based on Distance to Key Campus Buildings, Bathroom Style, and Commons Availability

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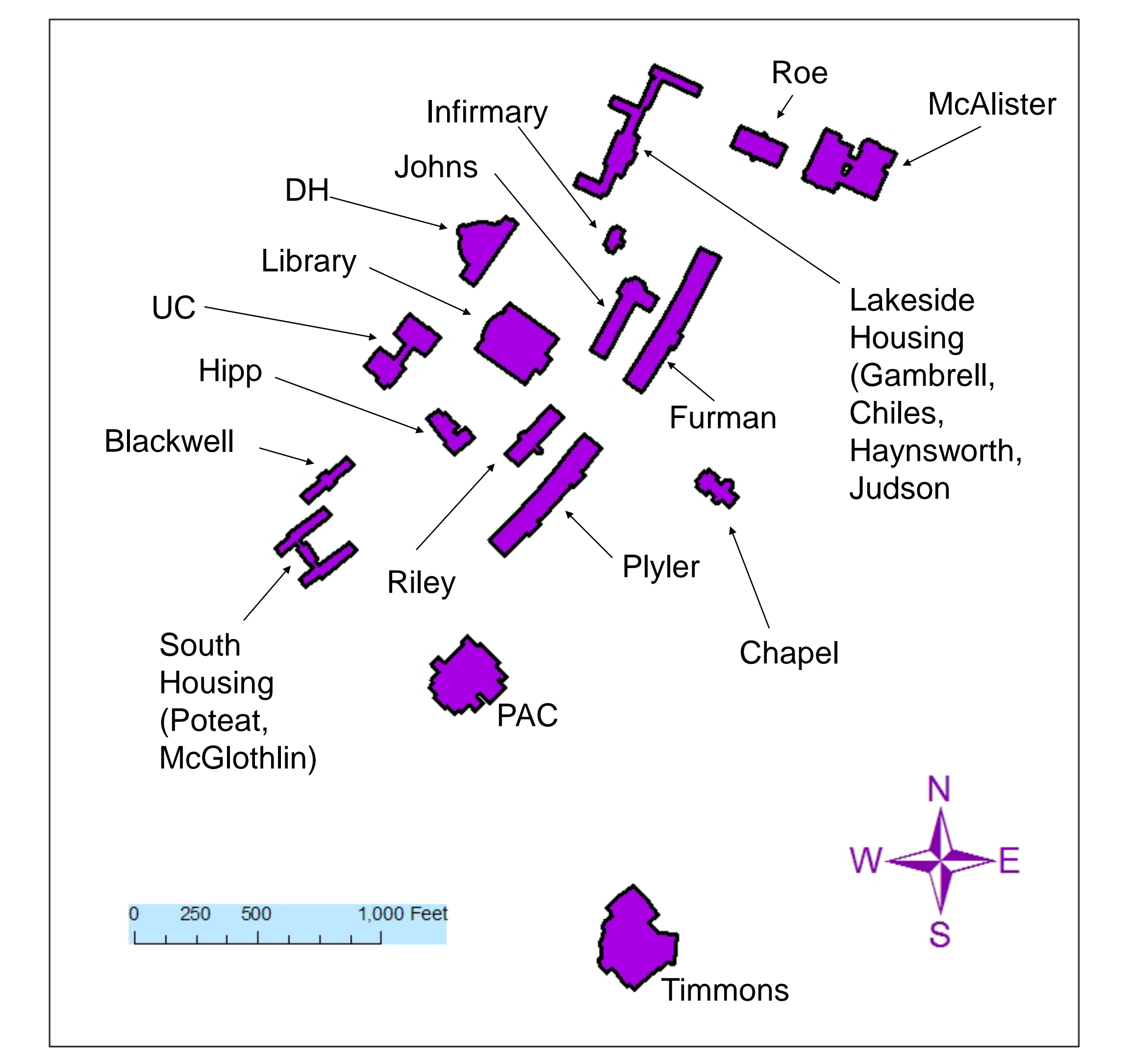
Abstract

Incoming freshmen have seven options for required dormitory residence and submit their requests to Furman University Housing. Since Furman is a relatively small campus with walking as the main mode of transportation to destinations, choosing a dormitory in close proximity to frequent destinations is very important. The project uses GIS to determine not only the distances relative to certain freshmen dorms, but also bathroom and commons differences. South housing is close to Hipp Hall, University Center, Riley Hall, the PAC, and Plyler Hall. Lakeside is close to Roe Art building, McAlister music building, Furman Hall, Johns Hall, and the Infirmary. The distances were compiled using GIS, which can be used to determine one's ideal dormitory based on distance. Other factors such as bathroom style and presence of a common room can also be viewed using this output.

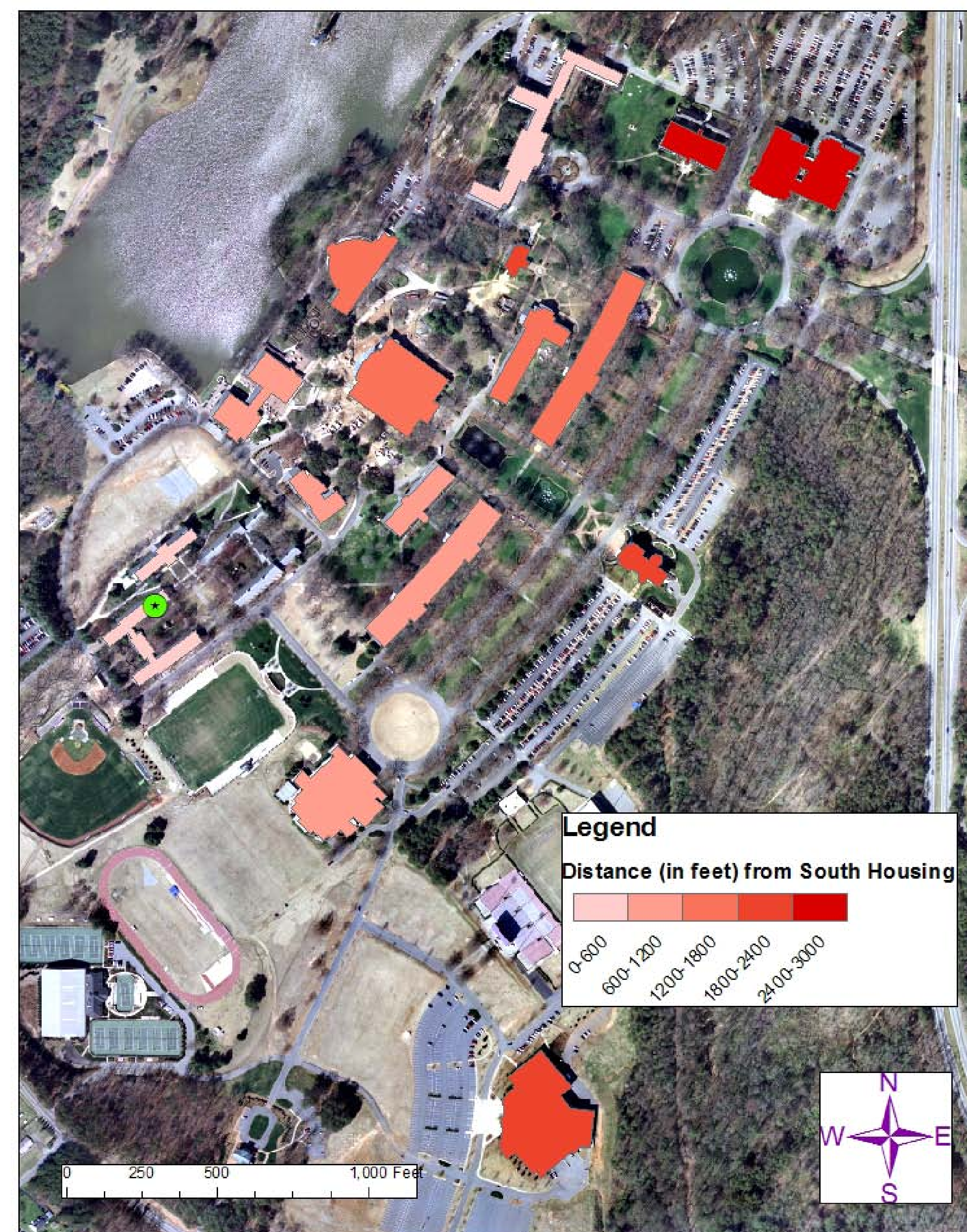
Introduction/Background

Incoming freshmen to Furman University are required to live in any one of seven residence dormitories on campus. These freshmen will live in either South Housing, or Lakeside dormitories. Incoming freshmen will rank their top dorm choices and will be assigned to these choices. Both areas have advantages and disadvantages when compared to one another, but share many of the same basic amenities. The room sizes are also comparable, each supplied with the same beds, desks, dressers, and electronic connections. Each location is more beneficial to those of a certain major or who are involved in certain activities. Dormitories are ultimately assigned by University Housing, but incoming Furman students need a more organized system of requesting certain dorms than just written descriptions from the University Housing Website.

Important Buildings and Housing Areas of Furman University



Distances to Various Buildings from South Housing



The distance from South Housing dorms is represented with a graduated red color scale. The farther away a building is from South housing, the darker red it appears.

Distances to Various Buildings from Lakeside Housing



The distance (in feet) from Lakeside dorms is represented with a graduated blue color scale. The farther away a building is from South housing, the darker blue it appears.

Materials and Methods

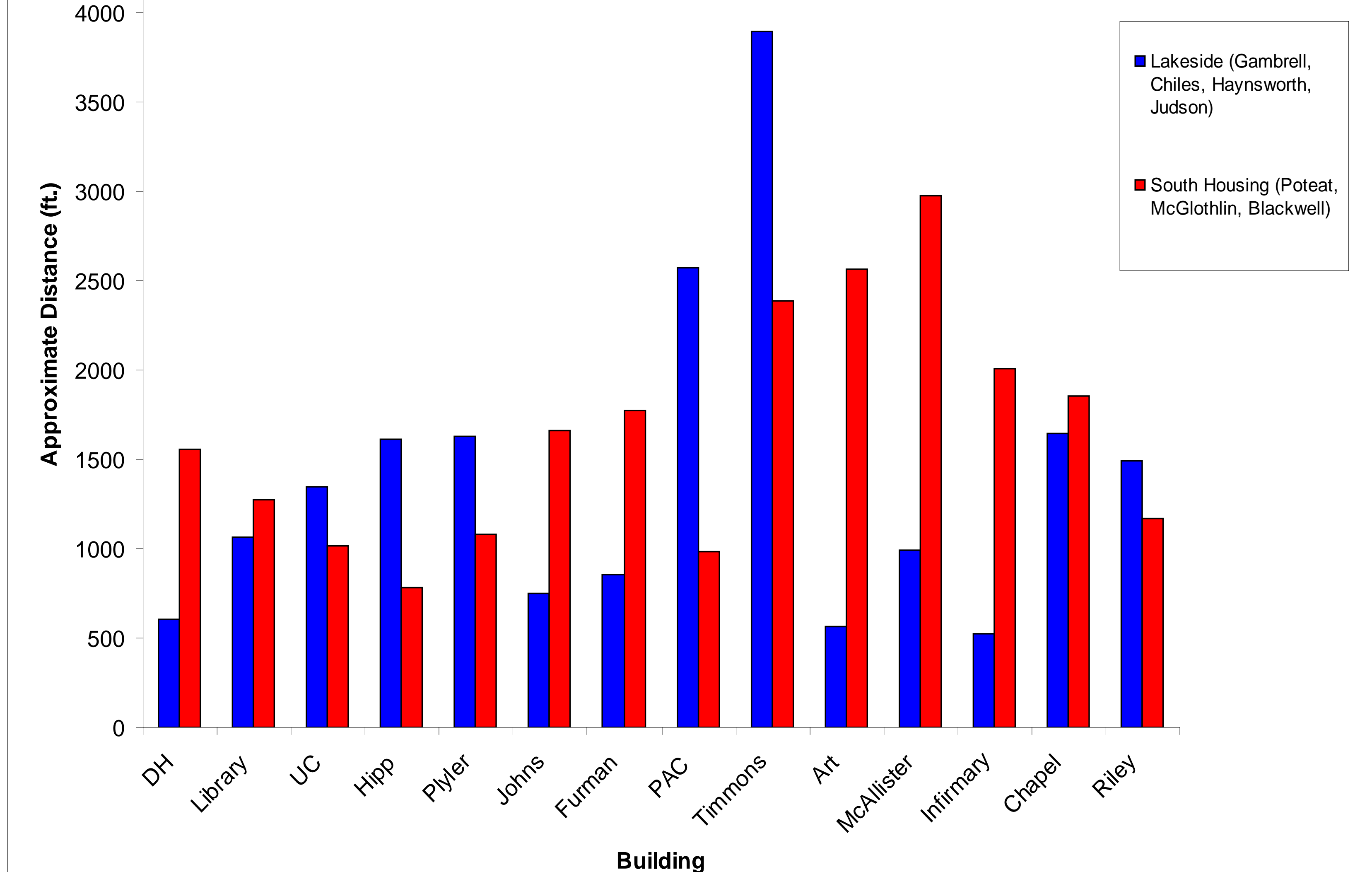
Maps and overhead images of Furman University were used to create a layered map of the campus which included building attributes. Distances were measured along walking paths and averaged with distances measured from the GIS generated map. These measurements were compiled in a spreadsheet and joined to previous data. A graduated color scale was used to represent relative distances from the central point of each residence area to the separate destinations. Additional GIS outputs displaying kitchen/commons options and bathroom differences were also generated.

Results/Discussion

Both residence areas are comparable distances from the Chapel, Riley Hall, and Library, but show significant variations for destinations such as the Dining hall (DH), Hipp Hall, Plyler Hall, Johns Hall, Furman Hall, the Physical Activities Center (PAC), Roe Art Building, McAlister Auditorium, and the Infirmary.

South Housing is close to the Varsity athletic facilities, the Physical Activities Center (ROTC, Health and Exercise Science), and is very close to the Townes Complex (science), Riley Hall (math, computer science), and Hipp Hall (business related classes, Education). South Housing also has a close parking lot and is close to the University Center (mailboxes, bookstore). Lakeside Housing is close to the McAlister (music), Roe (art), Furman Hall (languages, humanities), Johns Hall (social sciences) and the Infirmary. The majority of Lakeside dorms have suite-style bathrooms (Haynsworth and Judson), with the others having hall bathrooms (Gambrell and Chiles). All Lakeside dorms also have a common room on each hall.

Approximate Distances from Each Housing Area to Key Campus Buildings



Conclusion

Based on the GIS output, it is determined that individuals who plan on majoring in Health and Exercise Science, Math, Computer Science, any of the business majors, any of the natural sciences, or are involved in varsity athletics should request South Housing dormitories based on proximity to their frequently visited buildings. Incoming freshmen who are intent on majoring in any of the social sciences, humanities, art, music, and of the foreign languages should request Lakeside dormitories.

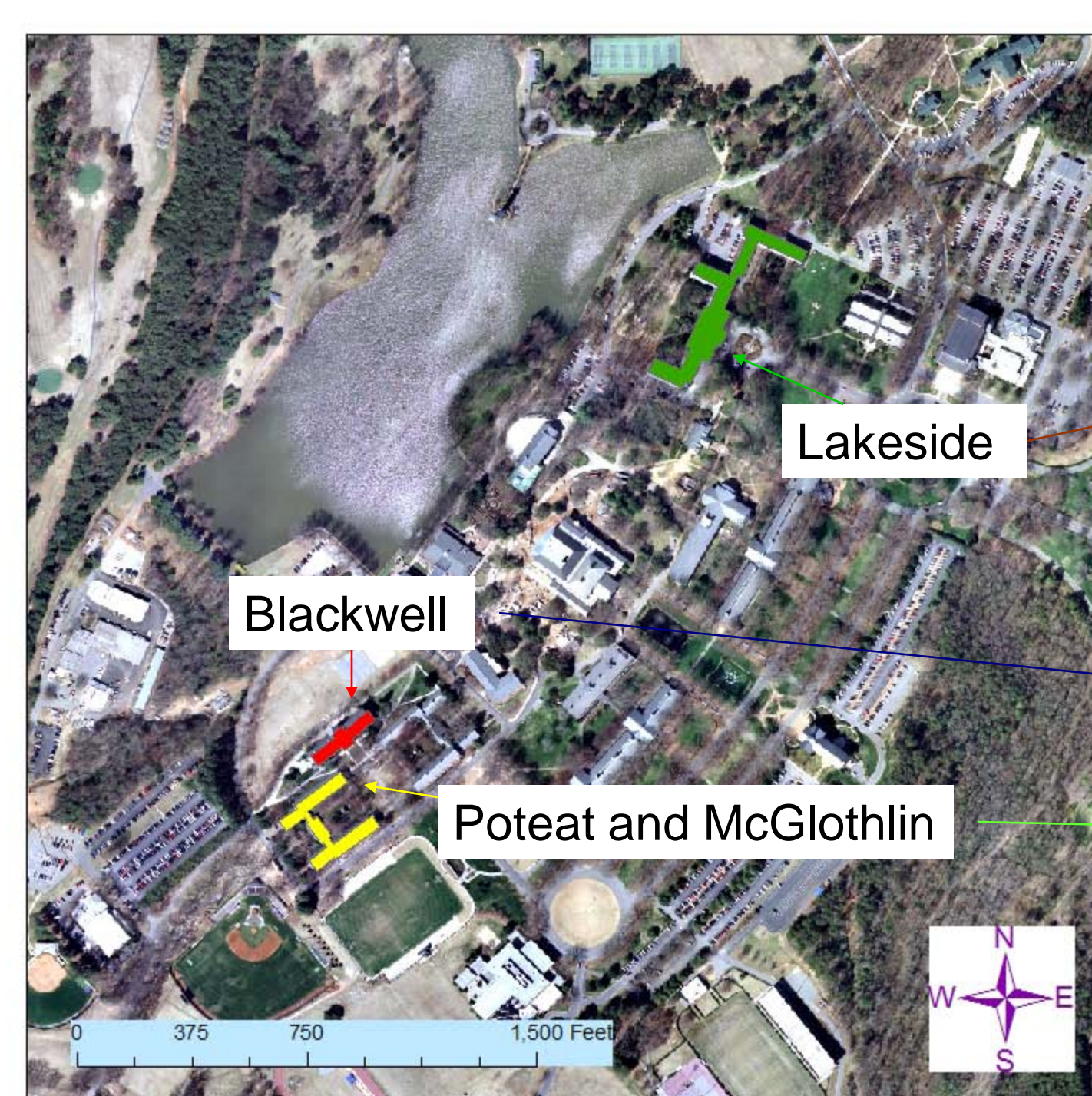
References / Data Sources

- Jason Cassidy, Director of Housing and Residence Life at Furman University.
- Furman University Housing Website. <http://www.furman.edu/housing/rhnew.htm>. Updated 2009.
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- ESRI Data & Maps [CD-ROM], 2005. Redlands, CA: Environmental Systems Research Institute.
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Acknowledgements

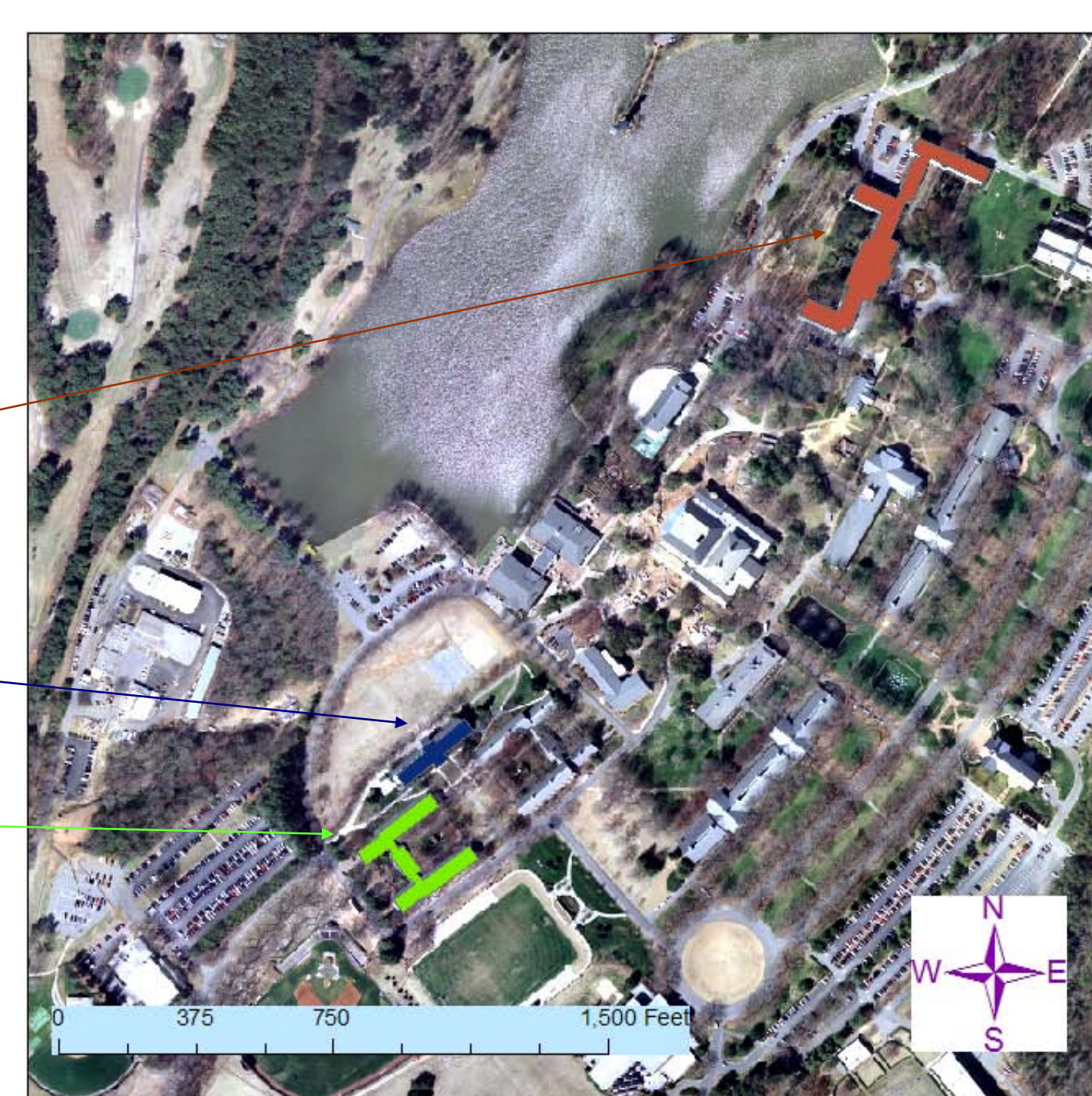
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Kitchen/Commons Options for Various Dorms



Kitchen/Commons options for various freshmen dorms. Dorms in green (Gambrell, Chiles, Haynsworth, and Judson) all have a hall commons with a kitchen. Dorms in yellow (Poteat and McGlothlin) have no hall commons or kitchen, but a central commons for the entire building. Blackwell dorm, represented in red, has no hall commons or kitchen, but a single kitchen for the entire building.

Bathroom Options for Various Dorms



Bathroom options for various freshmen dorms. Dorms in brown have either hall bathrooms (Gambrell and Chiles) or suite style (Haynsworth and Judson). Dorms in light green (Poteat and McGlothlin) have hall bathrooms but also have sinks in each room. Blackwell, represented in dark blue, has a hall bathroom.