**Introduction**

The City of Richmond and the Virginia Department of Transportation proposed to rehabilitate the Gambles Mill Trail connecting the University of Richmond (UR) to the intersection of Huguenot and River Road. Planners envision this trail as a sustainable model for the reduction of nutrient and sediment flow and as a vital path in a city-wide network of bike and pedestrian trails. Meanwhile, UR also proposes to rehabilitate the corridor in their new Master Plan. Nevertheless, until now, no substantive studies exist on thetrail or the corridor linking the trail to the south side of the James River. Richmond is working with a variety of stakeholders (public, private, and community-based) to map the Environmental Context, is working with a variety of stakeholders (public, private, and community-based) to map the past, present, and future of the Gambles Mill Corridor and influence local and regional sustainability of transportation, hydrology, and recreation in a floodplain ecosystem. Students produce maps grouped around four scales: local corridor, UR to the River, a city-scale sustainable transport network, and a temporal scale tracing previous transportation routes in the area such as the 1930s streetcar line and colonial era canal system.

**History**

The historical mapping group provides historical context to the Gambles Mill Corridor. Fieldwork and community collaboration have given insight into the history of the corridor, and we can now begin to paint a picture of how the corridor has looked throughout history. Maps produced display the evolution of land use and patterns of human mobility over time. This includes past transportation routes, residential neighborhoods, and historic photographs (Figs. 1.1, 1.2). The area was originally targeted for settlement largely because of its proximity to the river; an aspect our historical group hopes to emphasize through maps. Mapping historical transportation networks such as the 18th century canal system and early 20th century streetcar system can inform planners of these more sustainable transportation networks even as we work to once again improve connectivity from the University to Richmond and beyond (Fig. 1).

**The Gambles Mills Corridor**

Currently, the Gambles Mill Corridor is the most neglected part of the University of Richmond campus. Largely unknown to the student body, the degraded asphalt service road is barred to vehicle traffic on the southern side while the northern side is used only by those accessing UR's community garden, the occasional biology class conducting field observations, along with a trickle of trekkers and runners (Fig. 2). Those individuals who use the trail witness a marginalized wilderness characterized by nutrient runoff from the neighboring golf course, incised stream banks, and an open deciduous forest overgrown with invasive wild grapevine and poison ivy (Figs. 2.1, 2.2, 2.3). The Gamer master plan proposes to transform this neglected landscape into an “ecological” corridor connected to campus by multiple paths, while also providing a pedestrian and bike friendly gateway to the river and city of Richmond. Another proposal recommends transforming not only the purpose of the corridor, but also the nature of the path by replacing asphalt with a permeable natural surface capable of filtering excessive nutrients and chemicals from storm-water runoff.

**Methods**

The students in this introductory computer cartography and community-based learning course used ArcGIS 10 and Adobe Photoshop CS 5 to create maps based on data from Gambles Mill Corridor. Fieldwork and community-based learning may use data from government institutions, Google Earth, and Esri. To obtain and analyze data, students reached out to engineers, city and county officials, community organizations, archivists in regional and local libraries, and University of Richmond professors. The community-based element of the course, funded by a Community-based Learning Fellowship from the University of Richmond’s Center for Civic Engagement allowed students to do academic research in an applied environment. This learning opportunity allows students to not only develop their critical thinking skills and technical mapping proficiency, but also to understand the interdisciplinary, communication, and personal challenges they will face in the workplace following graduation.

**Conclusion**

At the creation of this poster, the course continues, but preliminary conclusions include an appreciation for the complexity of human-environment planning across multiple institutions, jurisdictions, and stakeholder interests. We hope feedback for this poster will help us improve on our map making efforts and allow us to more clearly represent the issues at hand in the sustainable development of the Gambles Mill Corridor both for the students of the University of Richmond and the larger Richmond community.

**Sources**