Rowan University

Rowan Digital Works

STEM Student Research Symposium Posters

Apr 23rd, 9:00 AM

Transit Access and Mobility Challenges Among Rowan University **Students**

Raven Vijayakumar Rowan University

Nathalie Calvachi Rowan University

Cedric Gadie Rowan University

Oian He Rowan University

Follow this and additional works at: https://rdw.rowan.edu/student_symposium



Part of the Geography Commons

Let us know how access to this document benefits you - share your thoughts on our feedback form.

Vijayakumar, Raven; Calvachi, Nathalie; Gadie, Cedric; and He, Qian, "Transit Access and Mobility Challenges Among Rowan University Students" (2024). STEM Student Research Symposium Posters. 9.

https://rdw.rowan.edu/student_symposium/2024/Apr23/9

This Poster is brought to you for free and open access by the Conferences, Events, and Symposia at Rowan Digital Works. It has been accepted for inclusion in STEM Student Research Symposium Posters by an authorized administrator of Rowan Digital Works.



School of Earth & Environment

Transit Access and Mobility Challenges Among Rowan University Students

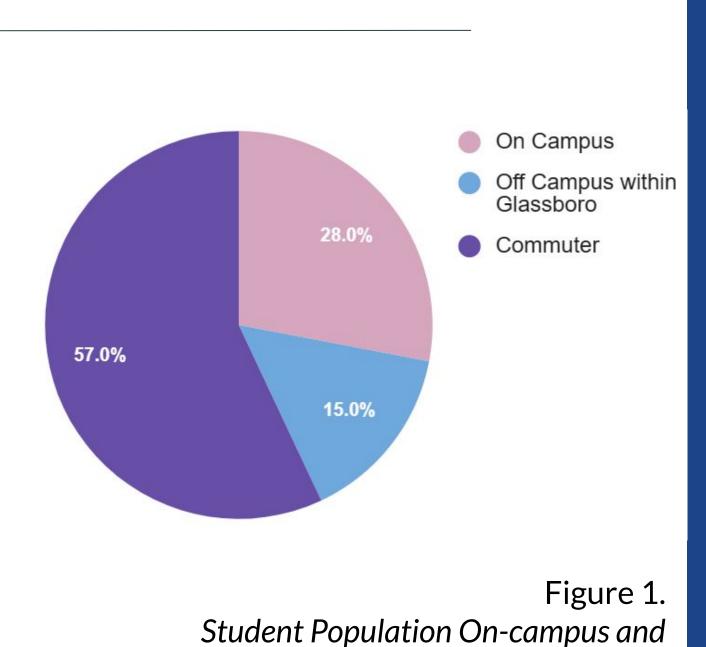
Undergraduate Research Assistants: Raven Vijayakumar & Nathalie Calvachi, Undergraduate Research Intern: Cedric Gadie, Principal Investigator: Qian He, PhD (Assistant Professor) Community Action for Resilience and Equity (CARE) Lab, Department of Geography, Planning, & Sustainability

Introduction

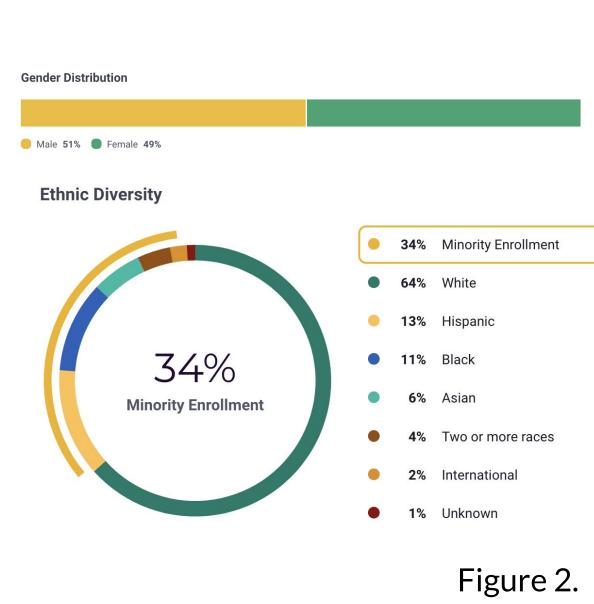
College students can face unique mobility challenges and are an essential group of riders who rely on public transportation. For commuting students, public transportation or the campus shuttle can be one of the most relied-on ways to get to school. For on-campus students, access to public transportation can play an important role in their well-being and academic performance. This project conducts a comprehensive survey study to understand the access to transit service, mobility challenges, and impacts on student well-being and academic performance at Rowan University.

Background

Rowan University (Glassboro Campus) had 19,788 students enrolled in Fall 2023. Within the student body, there are 14,947 undergraduate students and 3,310 graduate students. The population of international students is 1,100 during Fall 2023. Of the currently enrolled students, 5,500 are on campus, nearly 3000 students living within Glassboro, while the rest are commuter students.



Among the student population, White is the largest ethnic group, comprising 60.41% of the student body. Students of Hispanic and Latino ethnicity make up 12.05% of the student population. There are 10.14% of the student population are African American, while Asian students comprise 8.15% of the student body.



Off-Campus distribution

Rowan T

University

Gender and Ethnicity Distribution at Rowan University (source: U.S. News)

Preliminary Findings

Figure 3. Amenities and Services around Rowan University (Glassboro)^{2,3}

Rowan's Glassboro campus has existing NJ transit and campus shuttle bus infrastructure. These busses run throughout and around campus. They do provide an opportunity for students to access services on campus and off campus. However, reliability, accessibility and safety concerns may be some limitations that may discourage their usage. There are many amenities and services within a 2 mile radius of the campus. However, these can prove to be difficult to access without a private vehicle.

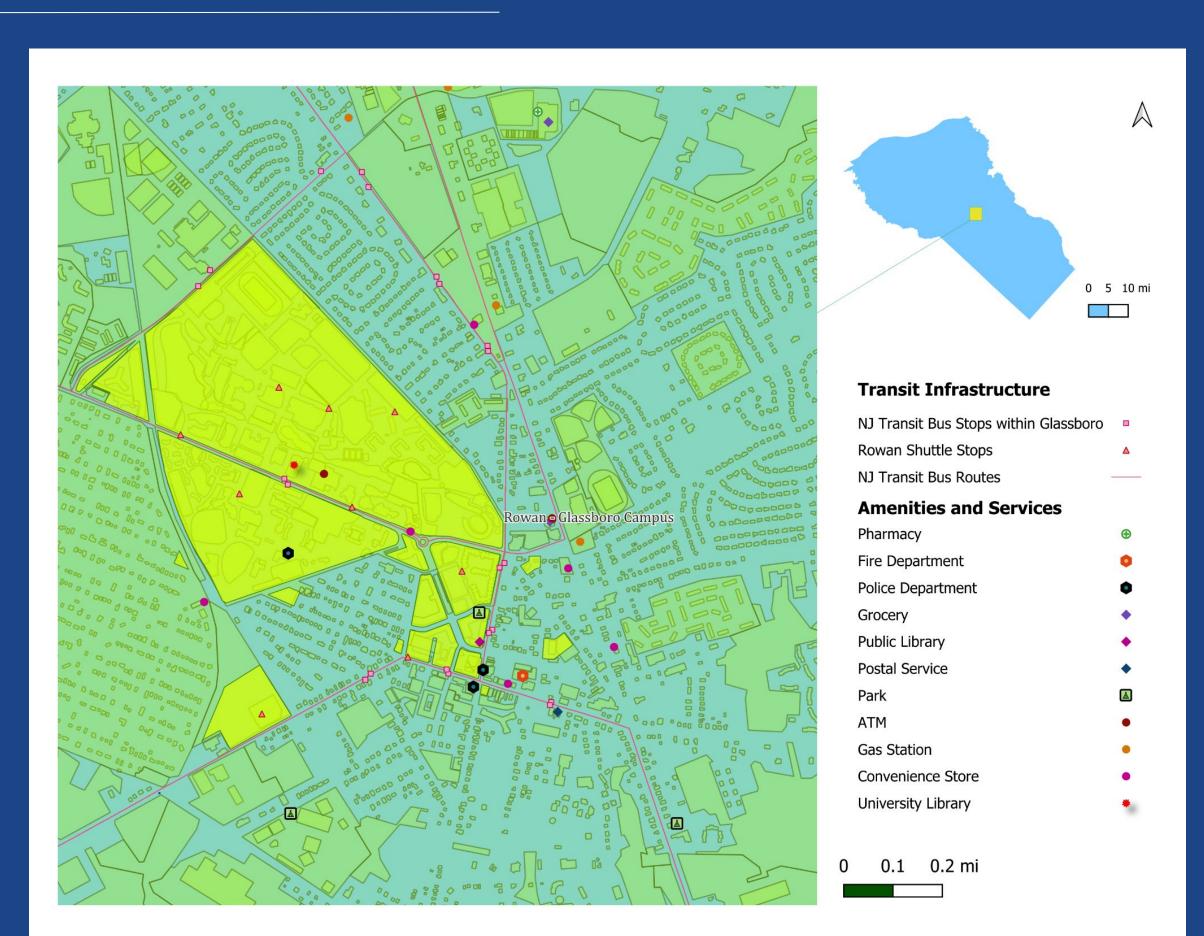


Figure 4.

Distance and Access³

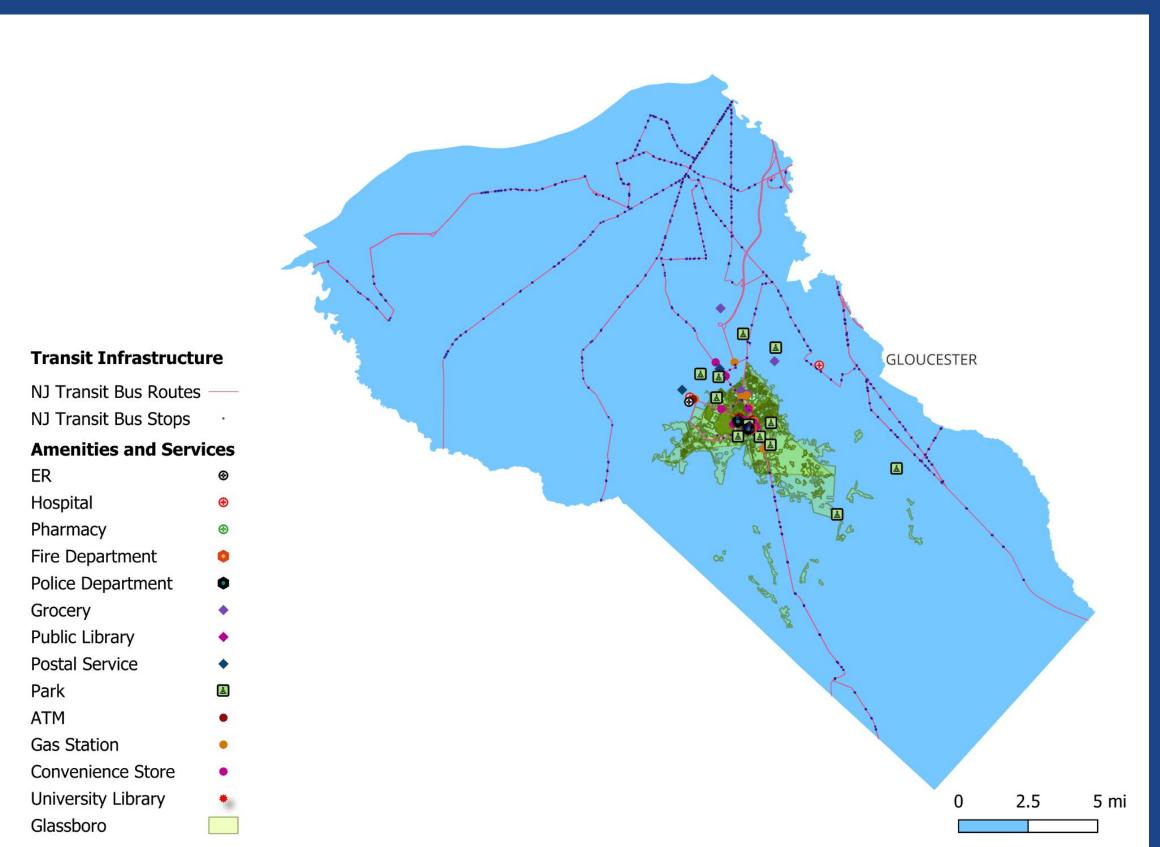


Figure 4. shows Gloucester county with Glassboro highlighted. Amenities near Glassboro (outside the previously mentioned 2 mile radius) NJ transit bus routes and stops are displayed. Despite amenities being relatively close together, the lack of connectivity due to poor infrastructure may act as a barrier for Glassboro residents access basic necessities, like needing to go to the hospital. There is existing public transit infrastructure but its reliability in facilitating access to these places are yet to be studied.

Gloucester County Amenities Map:

SHUTTLE MAP SHUTTLE STOP LOCATIONS 6 Edgewood Park & Chestnut Apt 8 Ellis Street Parking

Figure 5. Rowan University Shuttle Services Map⁴

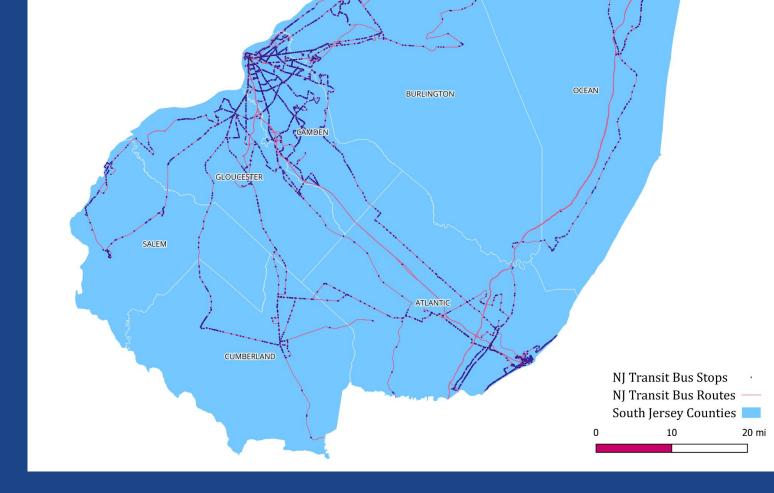
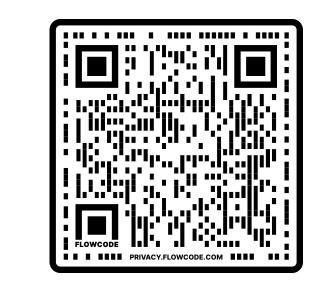


Figure 6. NJ Transit Bus Stops and Routes throughout South Jersey counties³

Project Timeline

- → Finalize Survey Questionnaires in Qualtric and Complete the Institutional Review Boards (IRBs) Approval
- Approximately April
- → Survey Administration and Response recruitment through both in-person and online survey distribution
 - May to September
- → RUSPO collaboration on field observation trips
- September
- → Results Analysis using R, Stata, and GIS.
- September



This is an ongoing project, for more information and further reading^{5,6}, please scan the QR code.

References

¹Source: U.S. News. Retrieved from

https://www.usnews.com/best-colleges/rowan-university-2609#:~:text=It%20has%20a%20total %20undergraduate,is%20National%20Universities%2C%20%23163

²OpenStreetMap contributors. (2023) Planet dump Glassboro Base Map. Retrieved from https://planet.openstreetmap.org

³Imagery courtesy of NJGIN

⁴ Retrieved from https://sites.rowan.edu/shuttle-services/

Fast Facts (rowan.edu)

⁵Bond, A., & Steiner, R. (2006). Sustainable campus transportation through transit partnership and transportation demand management: A case study from the University of Florida. Berkeley Planning Journal, 19(1).

https://doi.org/10.5070/BP319111492

⁶Krueger, T., Murray, G. (2008). Transit Systems in College and University Communities. United States: Transportation Research Board.

Acknowledgements

This study is a collaborative effort involving a partnership with Rowan University Students Planning Organization (RUSPO). We thank the valuable input from Professor Megan Bucknum during the early phase of this project. This project is funded by the faculty startup fund for Assistant Professor Dr. Qian He. For inquiries or more information, please contact Dr. Qian He at he@rowan.edu