An assessment of the availability and potential of active travel infrastructure in selected parts of Lagos

at

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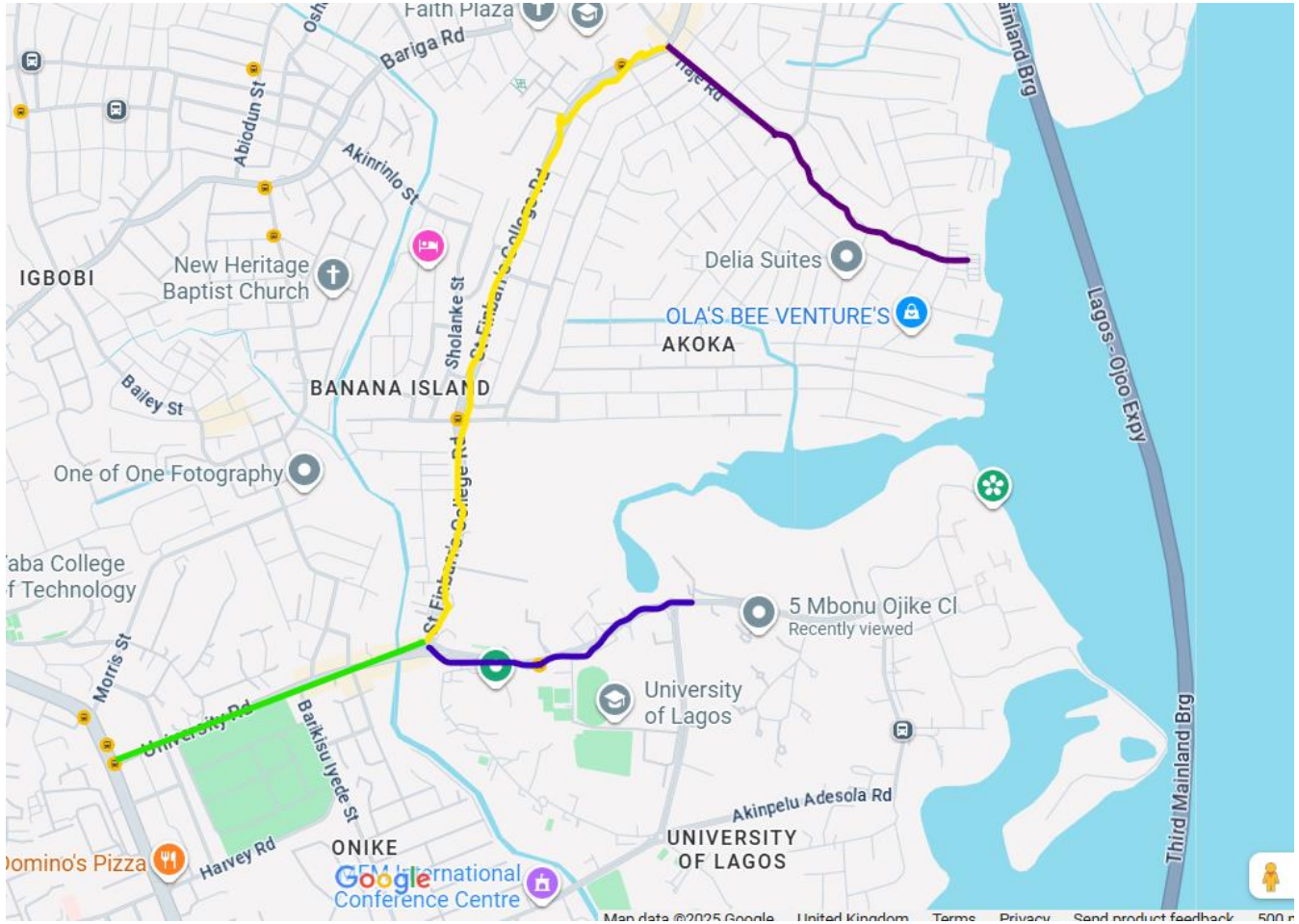
Background

- Lagos is the hub of **business and economic development** in Nigeria, housing around 65% of the country's industrial establishments, **more than 65% of all commercial activities**
- **Residential and educational** land use patterns characterised the study area
  - University of Lagos
  - Federal college of education (Technical), Akoka
  - Three secondary schools within a radius of 0.2km
  - Four primary schools within a radius of 0.2km

Background

- Herber Marculay Junction to the University of Lagos first gate
- University of Lagos to Ilaje road junction
- University of Lagos environment
- Bariga road to the Jetty in Ilaje



Introduction

- Due to the population size, land use patterns, incomes of the people, and the traffic situation in Lagos, **active travel remains a necessity, not a choice, for low- and medium-income individuals**
- In Nigeria, walking and cycling are often linked to **poverty, as most people who walk, wheel, or cycle are low-income**, except those who use them for recreation

Aim and objective

- The research aims to examine the **availability, potential, and level of usage** of active infrastructure in the study area
- The specific objectives are to investigate the **prospects and challenges** of active travel within the study area
  - **Mapping the route and segmenting the corridor** according to the infrastructural availability and functionality
  - Examine the **current usage levels** of potential cycle routes and pedestrian walkways
  - Evaluate **people's perception** of NMTs' infrastructure in the study area

Why is there a need for active travel infrastructure development

- Lagos is characterized by chronic **traffic congestion, inadequate traffic management, and rapidly worsening air quality**
- The common mode of transportation is **motorized (passive)**, with little **non-motorized (active) travel**



Methodology

Road/route measurements were carried out in three locations

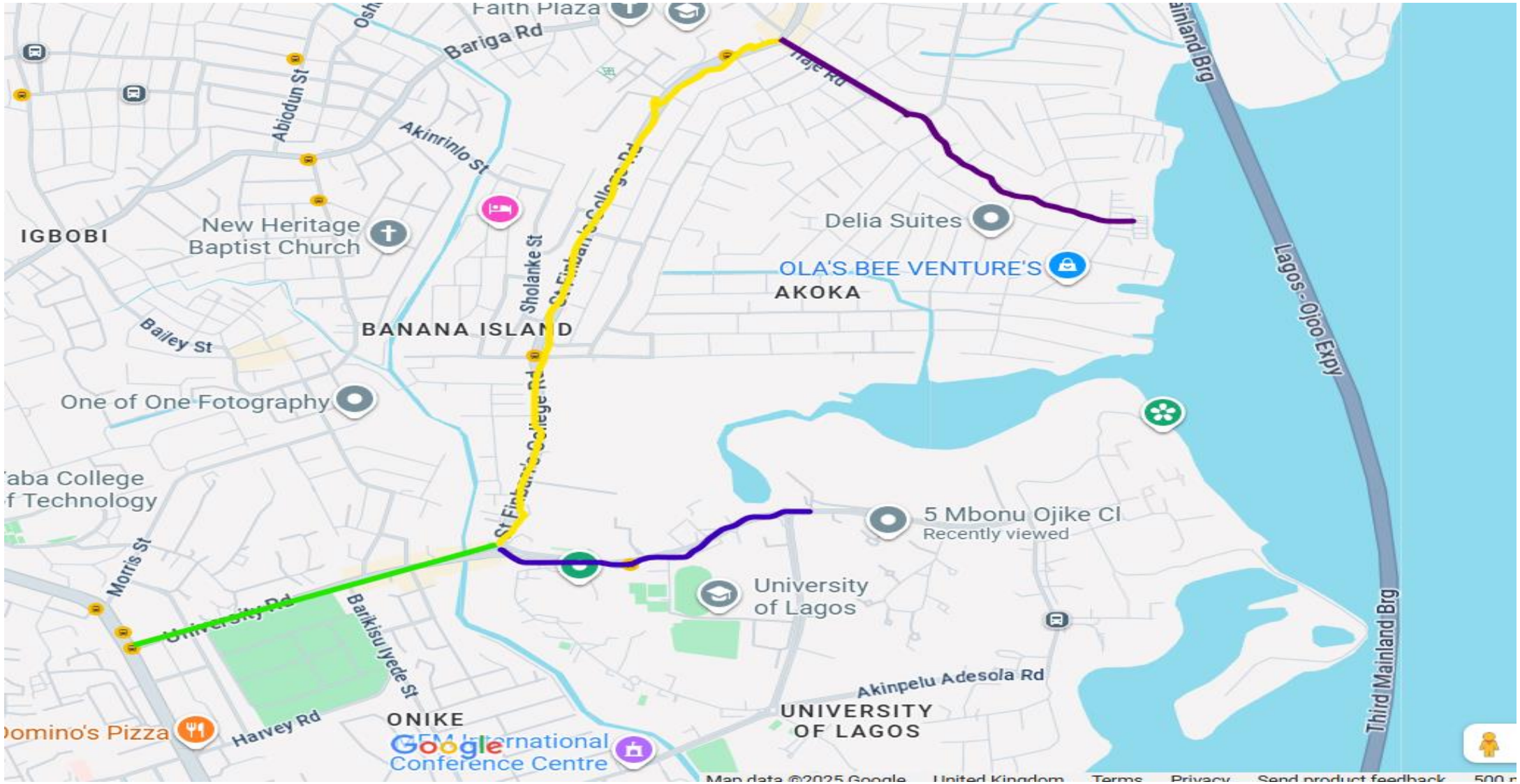
Route User Interface Survey (RUIS) was conducted in three locations

Manual counts were conducted to investigate the current usage levels of potential cycle routes and pedestrian walkways.

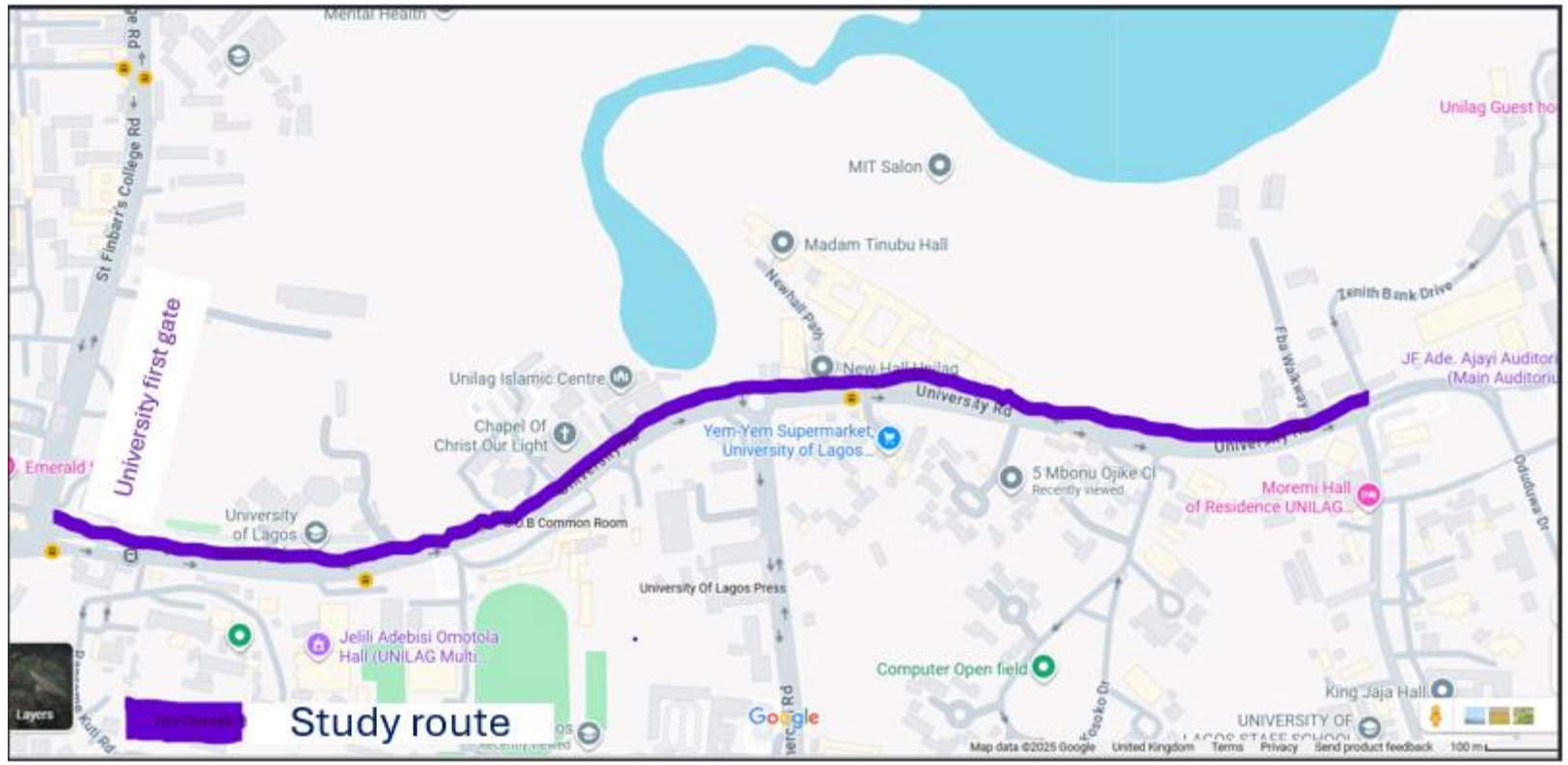
A purposive sampling technique, which is synonymous with a type of non-probability that does not require underlying theories, was employed in this research.

The selection of participants was based on the **researchers' judgment and the willingness of road/route users**

Segmentation of the Corridors

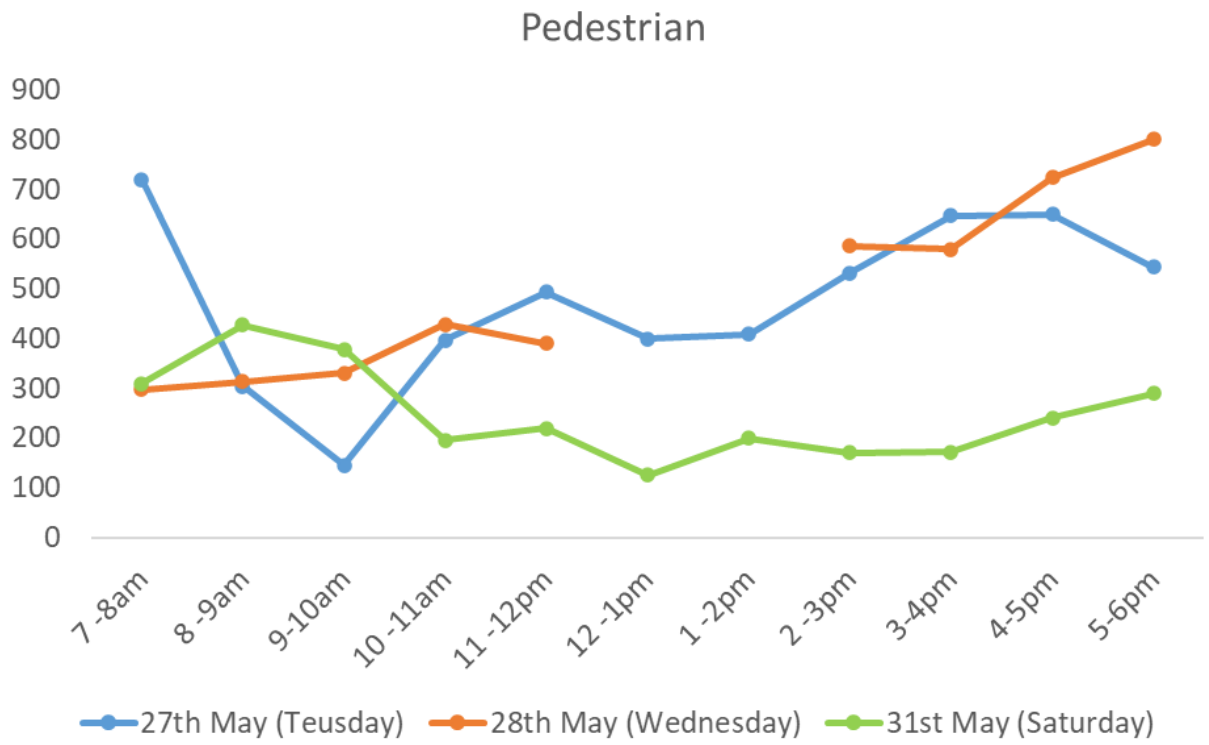


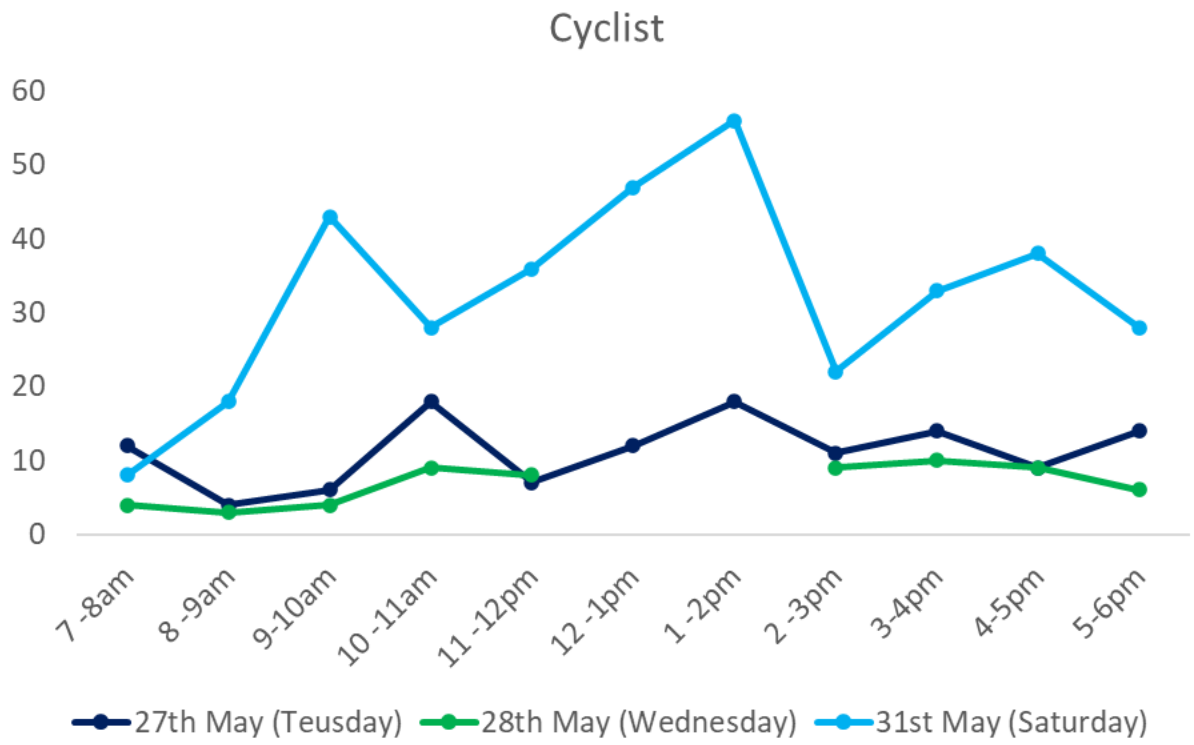
Analysis of the pedestrian and cycle route potential



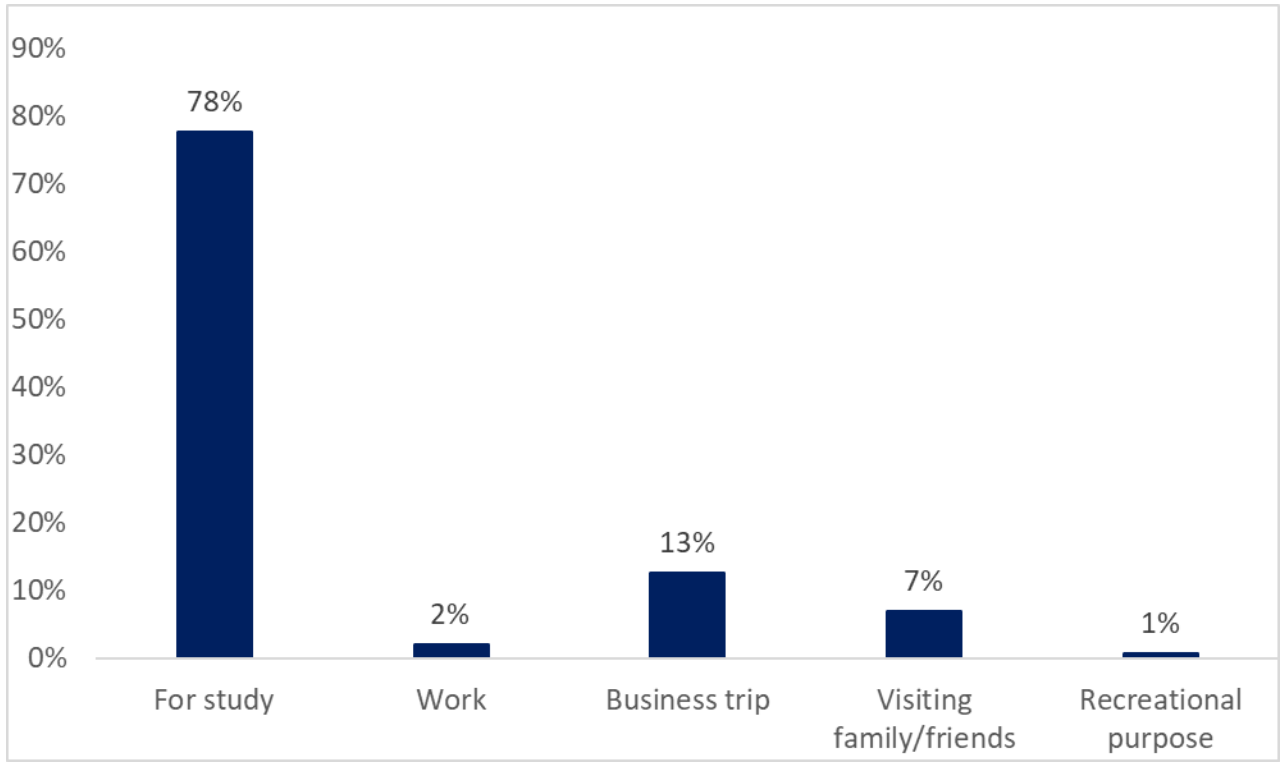
- The length of the route is 1.25 km
- Section with potential is 1.01 Km (87.91%)
- Ride Sharing is 0.09 km (7.14%)
- No potential is 0.03 km (2.4%)

Pedestrian and cyclist count



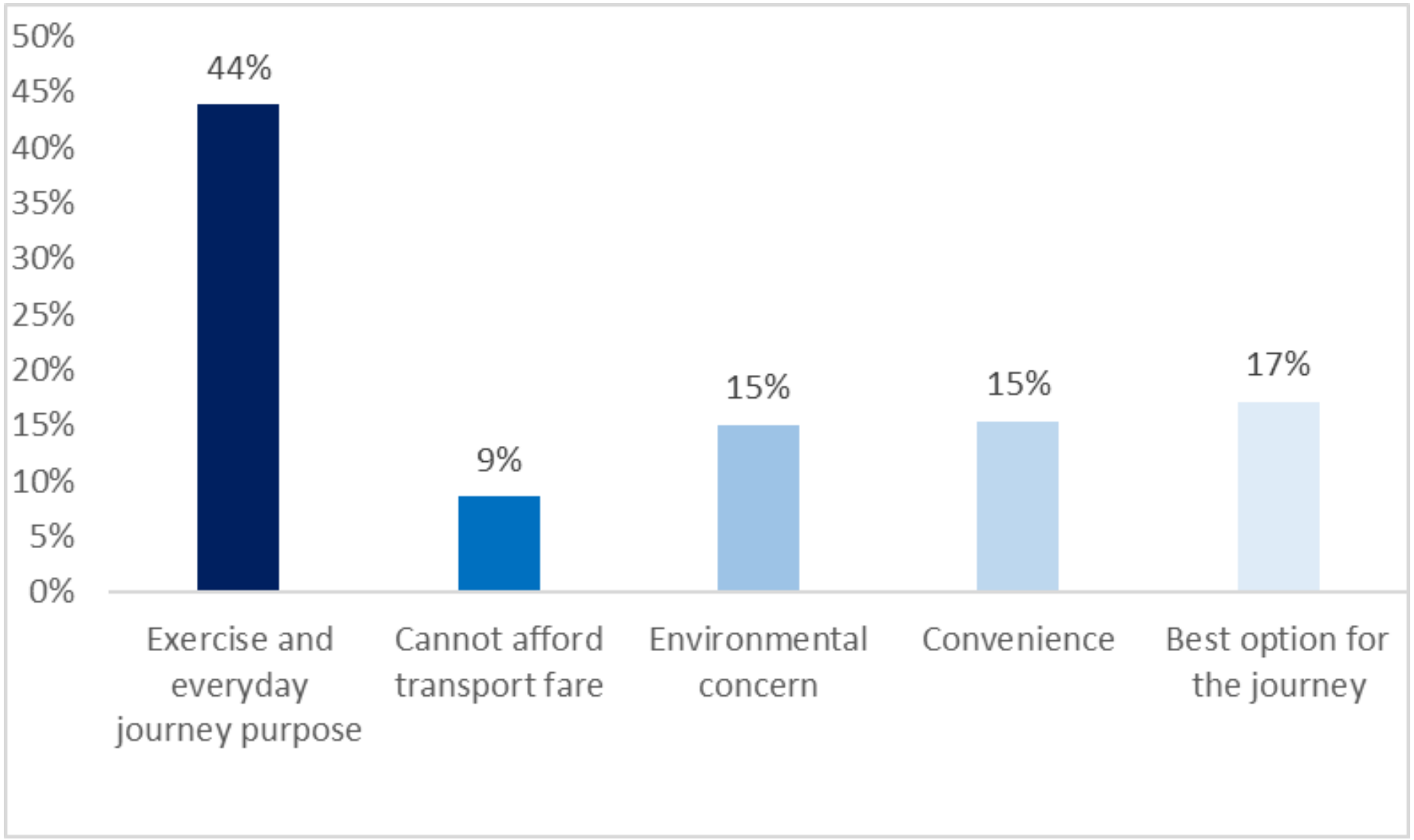


Journey purpose

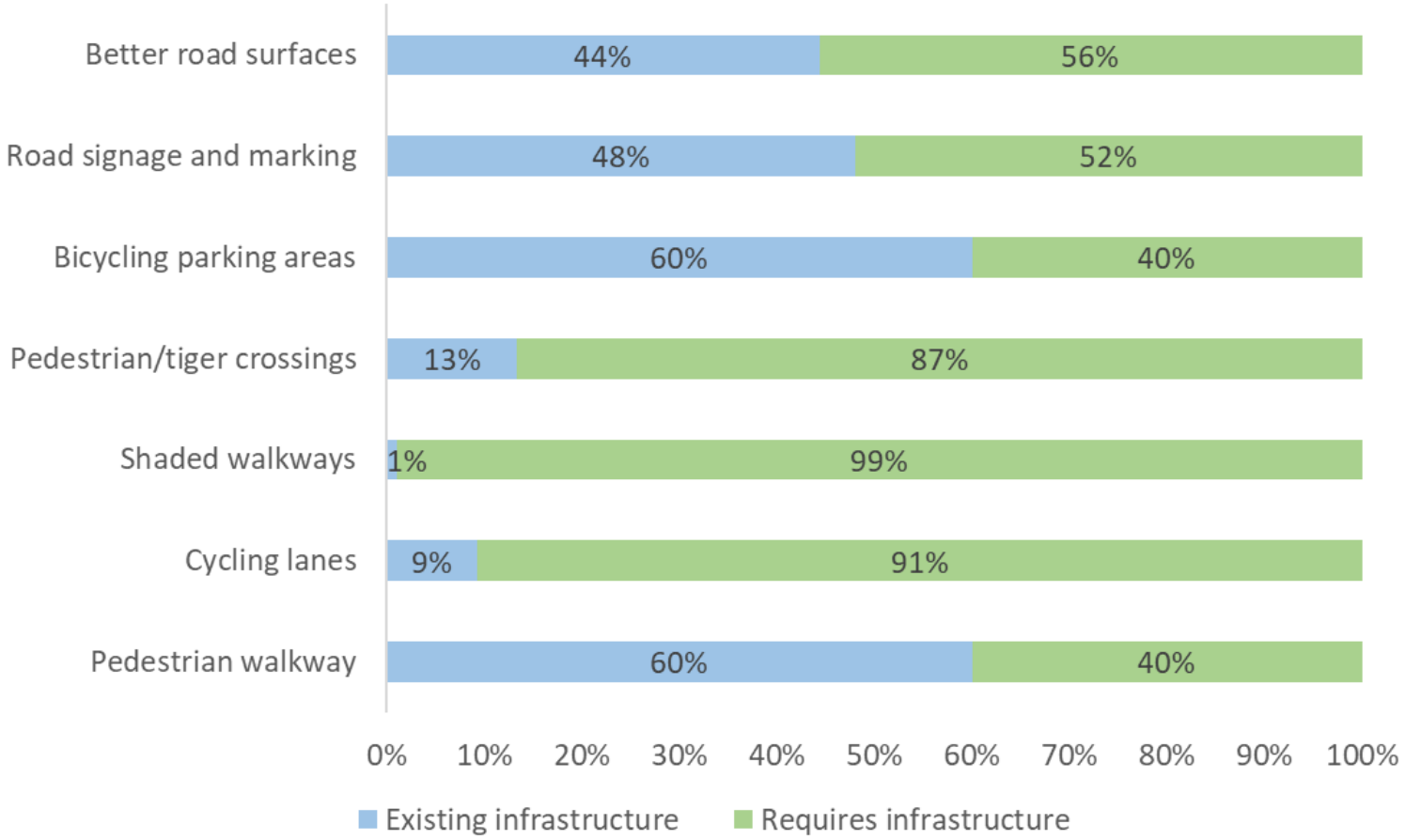




Why respondents intend to walk or cycle

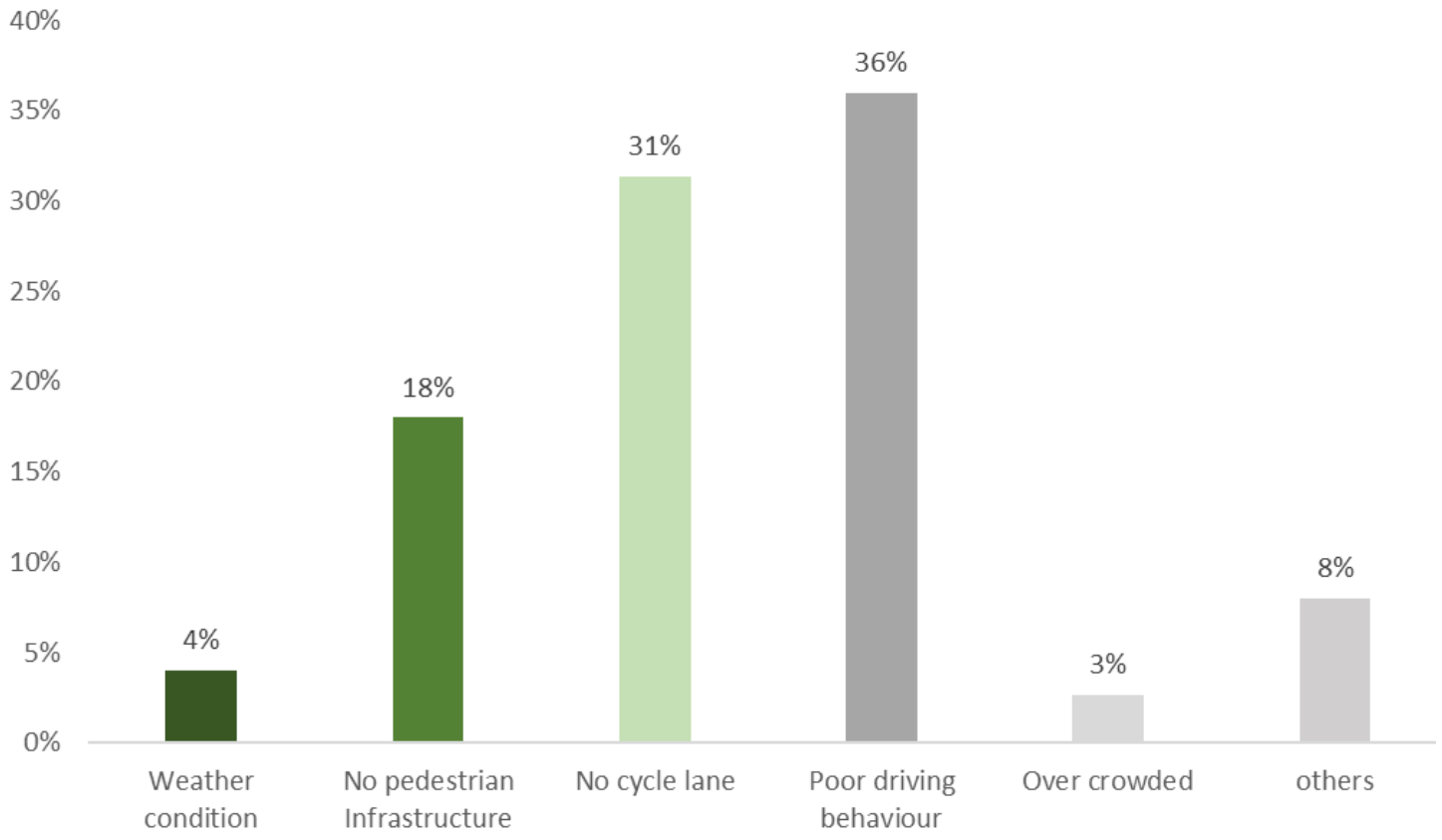


Existing and required active travel infrastructure





Challenges of Walking and Cycling





Conclusion and recommendation

- There is a **need** for each tier of **government (local, state, and federal)** in Nigeria to integrate cycling and walking infrastructure into road designs
- The state government should introduce Non-Motorized Transport (NMT) into closed estates such as university institutions, etc.
- The governments should promote an active travel behavioural change initiative that will encourage people to cycle and walk more.