**Cover Letter**

Rosa Félix (PhD)

CERIS - Civil Engineering Research and Innovation for Sustainability

Instituto Superior Técnico, University of Lisbon

Av. Rovisco Pais 1, 1049-001 Lisboa, Portugal

Tel: (+351) 218 418 371;

Email: rosamfelix@tecnico.ulisboa.pt

Lisbon, November 29th of 2023

Dear Editor-in-Chief of the Computers, Environment and Urban Systems,

Dr. Tony Grubesic , PhD

I am pleased to submit the current research article entitled “**Modeling the impacts of replacing car trips with combined public transport and cycling: Reproducible methods, results and actionable evidence from biclaR**”, on behalf of my co-authors, for consideration for the special issue titled “Environmentally and Socially Sustainable Mobility” in Computers, Environment and Urban Systems.

Our study explores the potential of substituting car trips with a combination of public transit and cycling in the Lisbon metropolitan area, in order to meet the national cycling targets, using open data and open-source tools. By employing the *HEAT for Cycling* and *HEAT as a Service* tools, we assess socio-environmental impacts and monetize the benefits. Results indicate a 10% potential shift to cycling, reducing CO2eq emissions and yielding socio-environmental benefits of €125 million to €325 million over 10 years.

This research directly addresses the call for papers on "Environmentally and Socially Sustainable Mobility" by providing actionable evidence for policymakers to prioritize interventions that reduce reliance on private motor vehicles. Our work contributes to the sustainable mobility discourse by estimating the impacts of combined public transport and cycling when replacing car trips, presenting reproducible methods, and offering valuable insights for policy development.

Considering the identifiable nature of the project name, "biclaR," we recognize the possibility that reviewers might deduce the authors' identities. To uphold the integrity of the double-blind review, we are open to any suggestions or guidance you may provide to facilitate a smooth and unbiased review process. Our primary goal is to uphold the standards of rigorous and impartial peer review.

All the authors participated in the conception and design of the work and all the authors believe that the manuscript represents valid work; carefully read and fully approve of it. We also confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. We have no conflicts of interest to disclose.

Thank you for considering our manuscript. We believe our findings align well with the objectives of the special issue and offer practical guidance for promoting sustainable transportation practices.

Kind regards,

Rosa Félix

(corresponding author)