

Research theme title	International Comparative Study on Environmental Improvement for Acceptability and Safety of Small Electric Mobility Vehicles
Background and objectives	<p>In the 2208C project (previous research), we studied the issues that might arise on sidewalks and roadways, focusing mainly on electric kickboards from the viewpoints of user awareness and behavior, the legal system, and local governments. The research was conducted to identify issues that might arise on sidewalks and roadways.</p> <p>In this study, we will deepen the examination of previous studies and research environmental improvement for the social acceptability and safety of micro electric mobility for one or two passengers. Accordingly, we will clarify the issues of road structure in Japan through an international comparison questionnaire and interviews with overseas practitioners. We will also study the conditions for the coexistence and separation of pedestrians, bicycles, and automobiles based on behavior analysis and propose safe sidewalks and roadway spaces.</p>
Expected results	<p>We will study the social acceptability of micro electric mobility for one or two passengers for use on sidewalks and roadways, as well as the development of a safe environment by conducting questionnaire surveys and interviews based on the results of surveys conducted in other countries. Specifically, by developing statistical models to evaluate user and social acceptability, effective solutions can be proposed for problems that may occur on sidewalks and roadways in Japan. In addition, by evaluating the difference between multiple users for one mobility vehicle and reproducing overtaking from the rear based on a virtual reality survey, issues that can occur under real mixed situations are clarified. By considering the actual traffic issues and safety measures based on overseas observations, we propose specific conditions for safe sidewalks and roadway spaces that are acceptable to various users, especially desirable forms of bicycle traffic space. In this respect, this study has practicality.</p>