

2108B

Title of Research Subject	Research on the Development of a Safe and Comfortable Road Environment with Electric Mobility
Background and Objective	<p>Various electric mobility systems have been developed, such as electric kickboards and ultra-compact mobility systems for sitting and riding. They are expected to become popular as next-generation mobility systems to realize a safe and comfortable transportation society. However, there are many issues to be considered in Japan, such as the acceptability of new mobility, safety issues on sidewalks and roadways that may arise due to coexistence with existing mobility, legal arrangements, and traffic space.</p> <p>In this study, we will conduct a survey of foreign countries where electric mobility is spreading and clarify the barriers that need to be cleared when the above mobility is introduced in Japan. We will also analyze user psychology, behavior, and conflicts with other users on sidewalks and roadways where various types of electric mobility are mixed, and examine how sidewalks and roadways should be improved in Japan so that multiple entities can use them with peace of mind.</p>
Expected results	<p>To realize a safe and secure transportation society in Japan, it is necessary to identify the road infrastructure that is truly necessary and to reconstruct the space. Various types of electric mobility are expected to play a significant role in this process. However, at present, the position of these mobilities in the road space is not clear, and the effects of mixing them with existing mobilities and the barriers that must be cleared are not apparent.</p> <p>To this end, this study will: 1. Conduct surveys of European administrations and research institutions that have advanced initiatives, and we will deepen discussions with domestic and international researchers and practitioners. Through this research, we will clarify the</p>

problems of the legal system and infrastructure development for the introduction of electric mobility, as well as measures to solve these problems. 2. Conduct on-premises experiments to evaluate the effects on others of mixing electric mobility on the sidewalk and roadway. 3. We will conduct an international comparison questionnaire and a questionnaire for local governments in Japan. 2 and 3 will enable us to understand the current state of social acceptance of electric mobility and to discuss the direction of future safe road space development and the requirements for social implementation of electric mobility systems. 4. Based on the results, we will hold workshops in Japan and abroad to present a concrete direction for electric mobility that can be socially implemented and used safely and comfortably by everyone.