

Summary of SIP-adus Project (FY2016)

Name of the project	Agendas toward the realization of an automated driving system and study concerning a direction of their solutions: Research and examination with public participation concerning congestion/traffic jam predictions aiming for world standard accessibility
Responsible Organization	The Institute of Behavioral Sciences, Highway Planning Inc., Hitachi, Ltd. Consortium
Name	Yuichi Mohri, Director-General, Corporate Planning Department, The Institute of Behavioral Sciences
Object of the Project	
<p>While ART (Advanced Rapid Transit) is being considered as the next generation transportation system, it is also expected to develop methods and policies for dispersing routes and time to avoid traffic congestions and rush hours by the public participation in order to allow users of public transportation (especially those with mobility limitations) to obtain the information required for their comfortable and safe travels and to select their behaviors before a large event, such as the Olympic and Paralympic Games.</p> <p>Based on the results of the survey conducted in 2015, and the verification results of demonstration experiment to be held this year, and also by actively using the information of new media such as SNS, we aim mainly at people who will visit the Olympic and Paralympic games by using public transportation including ART and citizen who live and/or work in Tokyo to propose such a new scheme that can provide congestion predictions and traffic information reasonable for the 2020 Olympic and Paralympic Games in order to minimize impacts on the individuals related to the games.</p>	
Project Summary	
<p>This research achieved the following:</p> <ol style="list-style-type: none">1. By using the transportation related big data including traffic stagnations and/or route searches to understand visitors' travel conditions and collecting behaviors of traffic information, we propose a model structure by which we can grasp or consider the behavior modifications that the visitors may take after obtaining the congestion information and the differences in the behavioral patterns by the personal attribute.2. By providing information on relatively large events and demonstrating/verifying the behavior modifications made by the visitors, we consider the contents of congestion information appropriate for the various conditions and the way to provide, the technical feasibility of congestion prediction, and the reasonable congestion level.3. After suggesting a comprehensive overall scheme for providing information and predicting information to realize the congestion level established as the target, we propose multi-directional and individual policies for how to provide information based on various attributes and how to predict congestion, the necessary expenses and how to recover them, the roles of the public sector, and so on.	
Future plan	
<ul style="list-style-type: none">- For considering prediction and mitigation of congestions/traffic jams during the 2020 Tokyo Olympic and Paralympic Games, some comprehensive framework is required to predict transportation demand based on the daily transportation demand.- For providing information and predicting congestion, an comprehensive study entity should be established by the organizing committee, the metropolis Tokyo, the country, police, the road management authority, transportation operators, etc., and manage it beyond the boundaries of transportation modes, authorities, operators, etc.	