

Summary of SIP-adus Project (FY2016)

Name of the project	Study on analytical methodology to estimate the effect of automated driving technology on reduced number of traffic accident fatalities in order to achieve the government target
Responsible Organization	Institute for Traffic Accident Research and Data Analysis
Name	Toru Kiuchi
Object of the Project	<p>The aim of this project is to grasp trends of traffic accidents in 2015, using 255 accident patterns provided by the first year project in 2014, and to estimate effects of elemental technologies used for an automated driving system in Japan.</p> <p>This project has been studied for 3 years.</p>
Project Summary	<p>(1) Traffic accident data analysis and study Using 255 accident patterns, 2015 traffic accident data provided by National Police Agency was analyzed and studied to prepare accident pattern sheets and analyzed sheets.</p> <p>(2) Traffic accident patterns study for 3 years Among 255 accident patterns provided by the first year project, existed patterns below 3 fatalities and new patterns more than 3 fatalities were analyzed. The result recommended that 255 patterns might be studied for a while.</p> <p>(3) Additional study for particular accidents Using accident pattern sheets and analyzed sheets from 2013 to 2015, the following studies were carried out.</p> <p>1) Vehicle to pedestrian accidents: In new patterns more than 3 fatalities, many fatal elderly pedestrians hit by a vehicle during crossing the road from right were observed.</p> <p>2) Motor cycle single accidents: Middle-aged and elderly riders caused slightly increasing numbers of motor cycle single fatal accidents.</p> <p>3) Vehicle to bicycle accidents: Large numbers of fatal cyclists occurred in crossing collisions and rear-end collisions. On the other hand, high fatality rate of cyclists occurred in rear-end collisions.</p>
Future plan	<p>In the next year, continuous study will be needed to prepare accident pattern sheets and analyzed sheets for the fixed point observation of traffic accident fatalities.</p> <p>Regarding additional studies for particular accidents, much cooperation between ITARDA and adus system WG might be recommended.</p>