

2306B

Title of Research Subject	Research on efficient accident prevention measures using artificial intelligence
Background and Objectives	<p>The 11th Basic Plan for Traffic Safety of the Government states as a priority measure the promotion of traffic guidance and enforcement that contributes to the deterrence of traffic accidents by enhancing the sophistication of traffic accident analysis based on geographical information and other factors. To date, the IATSS has published the “Traffic Enforcement Handbook” since 2014, and has continuously provided information to those involved in traffic enforcement.</p> <p>With this background, we conducted basic research in FY2022 on a model that proposes efficient accident deterrence countermeasure locations using artificial intelligence AI. In FY2023, we will conduct on-site verification of the basic model, improve the model, and identify issues that need to be addressed before practical application.</p>
Expected Results	<p>In the past, traffic enforcement was based on years of experience, and efficient enforcement plans were made in the field; since 2011, traffic enforcement plans have been incorporated into the PDCA (Plan-Do-Check-Act) management cycle, and plans have been formulated based on actual accident conditions and analysis results. However, the system differs from prefecture to prefecture and is largely dependent on the technical skills of the person in charge. If the basic model proposed in this study can be used in further developing practical accident prevention measures, it will be possible to deter traffic accidents more efficiently in combination with field experience.</p> <p>In FY2023, the validity and effectiveness of the basic model proposed in the previous fiscal year will be re-examined based on field tests. This will contribute to basic research that will lead to the development of future general-purpose applications, which can be deployed in various regions.</p>