

Effective and Efficient Solution to Road Traffic Issues

Road Traffic Department

We are working on research to use roads effectively and efficiently by utilizing new ICT technologies that are advancing rapidly. We would like to introduce our latest efforts utilizing ETC 2.0.

Social Background and Challenges

More severe socioeconomic circumstances

- Socioeconomic circumstances are becoming more severe, including an aging society with fewer children, increased disaster risks, and fiercer international competition. In order to keep on growing economically, it is essential to reduce unnecessary factors and increase the productivity of society

Productivity of a society and road traffic

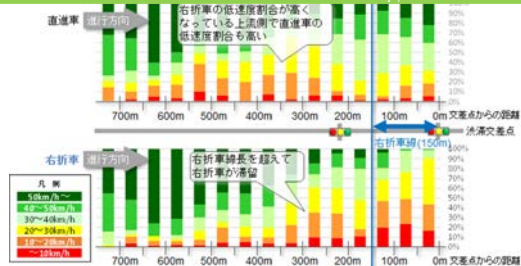
- Improving productivity of an infrastructure: The flow of people and goods is the core elements of every production activity, and road traffic plays a key role in it.
- Improving productivity by investment and new technologies: Measures for the realization of traffic safety using big data.

Policies on road traffic

- Wise use of roads, or an intangible aspect, is important, in addition to the improvement of road networks, as the tangible aspect.

Research Details

More sophisticated and efficient investigation of the actual condition of congestion



Grasping the detailed conditions of the shortage of the length of right-turn lanes and the hindrance to cars going straight from the viewpoints of both space and timeline

Technique to grasp the traffic conditions of the roads in residential areas



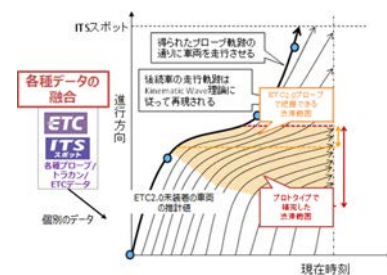
Grasping the overall traffic conditions, including through traffic and driving speed on the roads in residential areas, as well as the locations where accidents and abrupt slowdowns occurred

Analysis of the traffic for tourist cars in the Mount Tsukuba area



Collecting and analyzing data related to visitors such as the route used and time spent in order to grasp the actual conditions of tourist traffic

Technique to grasp the traffic conditions of orbital expressways



Grasping the real-time traffic conditions by integrating the ETC 2.0 probe data, vehicle detector data and simulation technologies

Take efficient measures against traffic congestion precisely where they are needed and produce an effect earlier!
Identify the points of high accident risk beforehand and prevent accidents on a scientific basis!

Related articles:

- More Sophisticated and Efficient Investigation of the Actual Condition of Congestion
- Analysis of the Traffic for Tourist Cars in the Mount Tsukuba Area
- Technique to Grasp the Traffic Conditions of the Roads in Residential Areas
- Technique to Grasp the Traffic Conditions of Orbital Expressways