SAKAI LAB.

[Utilization and Implementation of ITS in Local Area]

Advanced Mobility Research Center (ITS Center)
Transportation Policy, Intelligent Transportation System (ITS)

Department of Civil Engineering, Graduate School of Engineering

Practical Research for Utilization and Implementation of Intelligent Transportation System in Local Area

We are conducting the practical research activities on real field for implementing the technologies of intelligent transportation systems (ITS) in real world.

● Provision of Information on Multimodal Transportation

Realize the society which supports safe, secure, comfortable, and seamless transportation for various people with no dependence on transport mode

Goal: Achieving the Goal

The Way of

Origin

XM

Destination

Unicycle

Search and reservation using IoT

Regarding the transit not only train and bus but also various local transit such as on-demand transit, community-based transit and so on, the mechanism that each people can find the appropriate transportation mode is needed

● Social Impact of Automated Vehicles

Realization of Society of Automated Vehicles

- Efficiency in Transportation Industry
- Activation of Travel Public Welfare
- New Form of “City”

The fields impacted by realization of society of automated vehicle

Efficiency in Transportation Industry
- Achieve the cost of distribution (land) / travel time reduction of 20% or more and improve the productivity and competitiveness of local area

Activation of Travel Public Welfare
- Safe and accessible transit such as carpooling, and planned and fixed transportation in towns
- Help people find the appropriate transportation mode

New Form of “City”
- Creation of City, Roads
- Livelihood

Evolution of service vehicles (buses and trucks)

Evolution of personal vehicles (privately owned vehicles)

Advancement and expansion of target environments

● Utilization of Omnidirectional Video in Road Maintenance

Figure of Concept

● Analysis of Transportation Big Data

Legend

- > 50km/h
- < 50km/h
- < 40km/h
- < 30km/h
- < 20km/h
- < 10km/h

2018/1/15
18:00
(Normal time)

2018/1/22 18:00
(Snowfall time)

Evolution of automated driving systems (proposals)