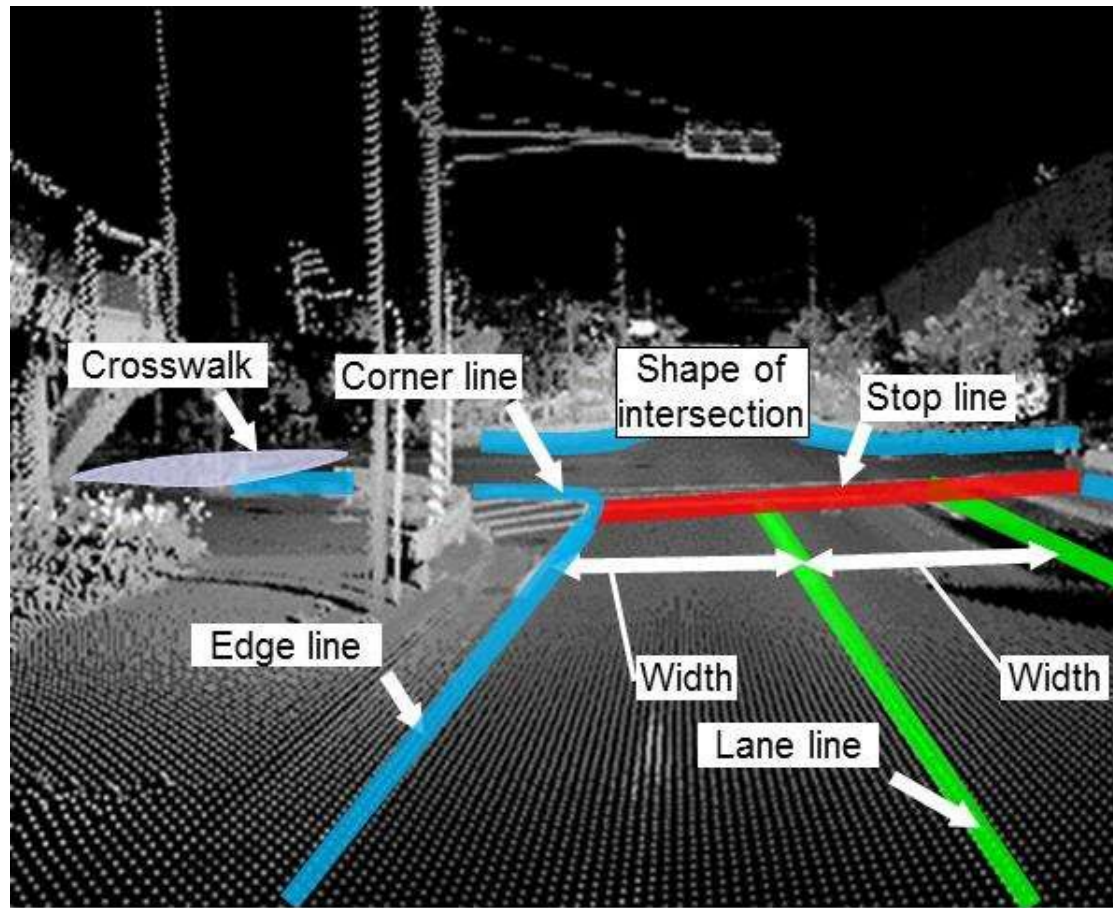# Road administrators' perspectives

Katsuya ABE, Ph.D
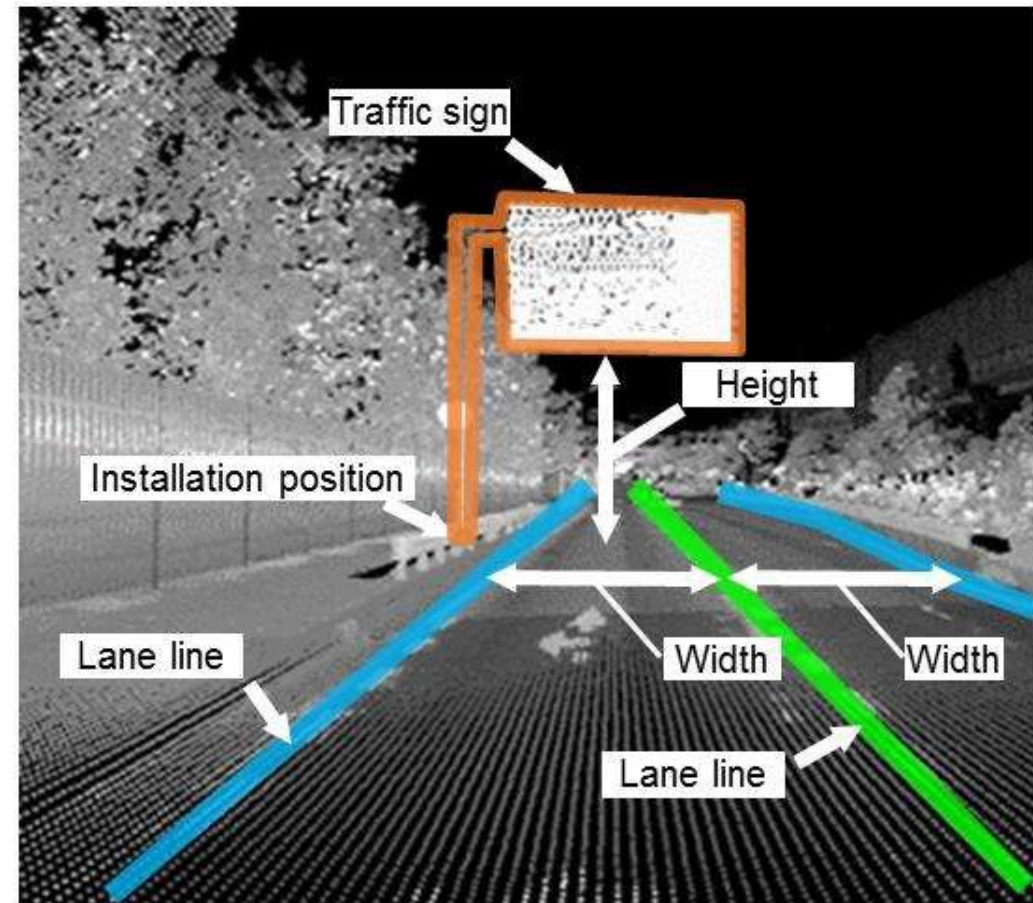
Director, ITS promotion office

MLIT, GOJ
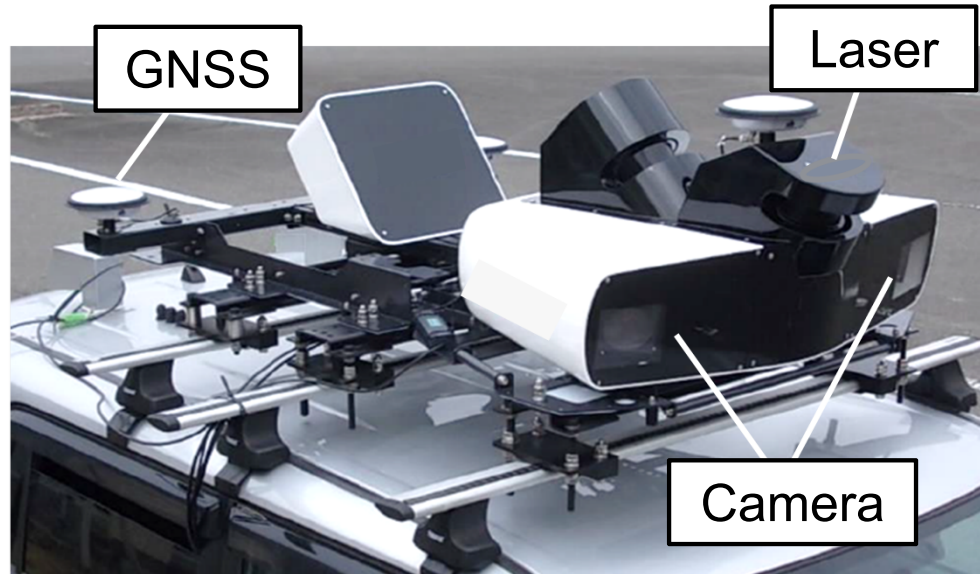
**Road administrator uses these data primarily for checking whether special large vehicles can pass without damaging road facilities.**



Intersection



Road section

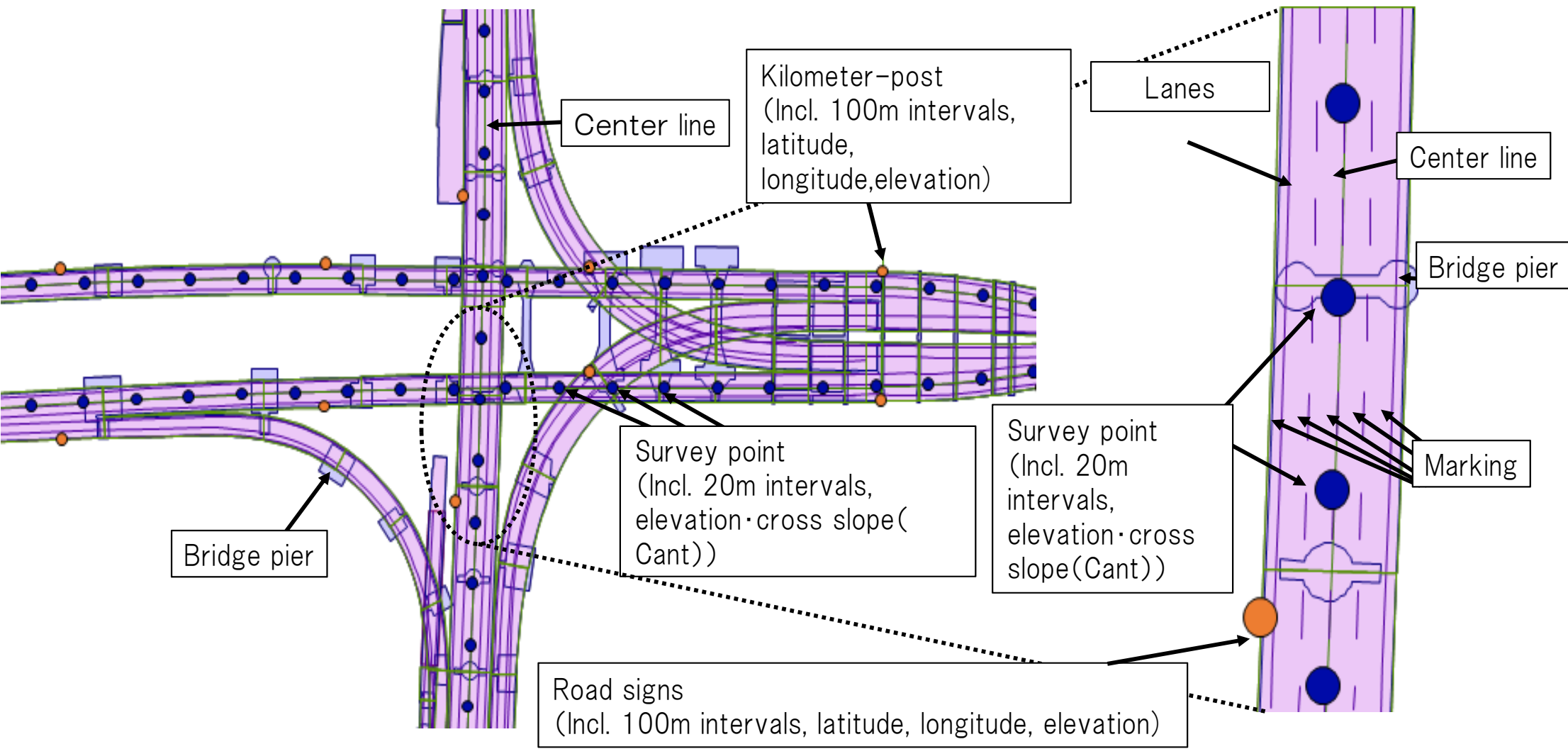| Data Target | Location data including intersections, marking, kilometer-posts, traffic signs, and bus stops. |
|---|---|
| Density of Point cloud data | 50 points/m² and more |
| Precision of topographic maps | 25 cm  or less at the scale of 1/500 |
| Camera | 1 photo every 1 to 2 meters<br>5 million megapixels |

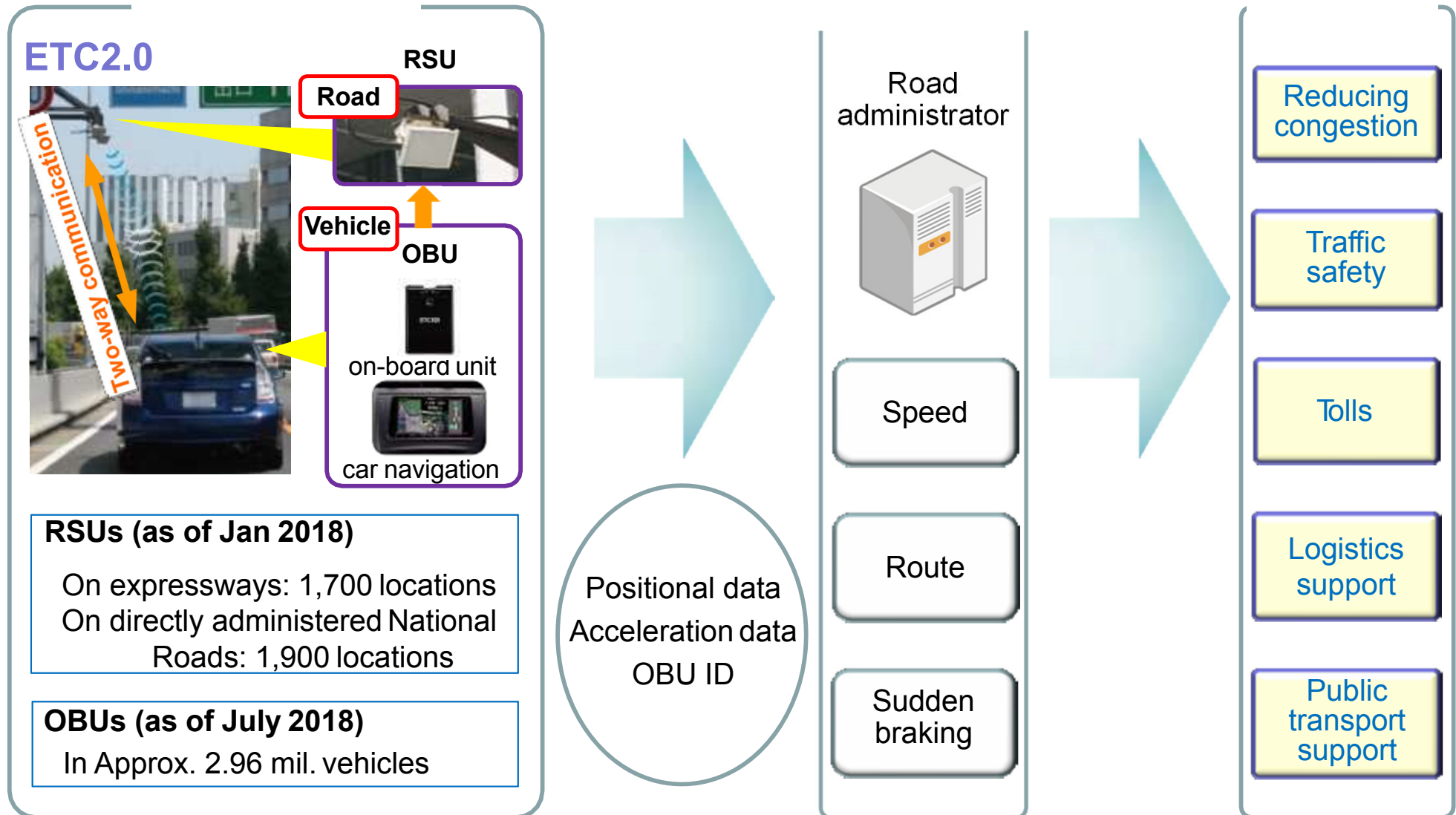**Image diagram at Nishisemba JCT of the Hanshin Expressway**

**ETC 2.0 offers useful information to drivers on such supports as congestion  avoidance and safe driving.**

Data collection

Data processing

Data use

**ETC2.0**

RSU

Road

Vehicle

OBU

on-board unit

car navigation

Two-way communication

**RSUs (as of Jan 2018)**

On expressways: 1,700 locations
On directly administered National Roads: 1,900 locations

**OBUs (as of July 2018)**

In Approx. 2.96 mil. vehicles

Positional data
Acceleration data
OBU ID

Road administrator

Speed

Route

Sudden braking

Reducing congestion

Traffic safety

Tolls

Logistics support

Public transport support

5

**Road work information is sent to JARTIC through contractors, road administrators and local police.**



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Road works → Contractors → Road administrators [JARTIC] → JARTIC
Road works → Contractors → Road administrators → Local police [JARTIC] → JARTIC
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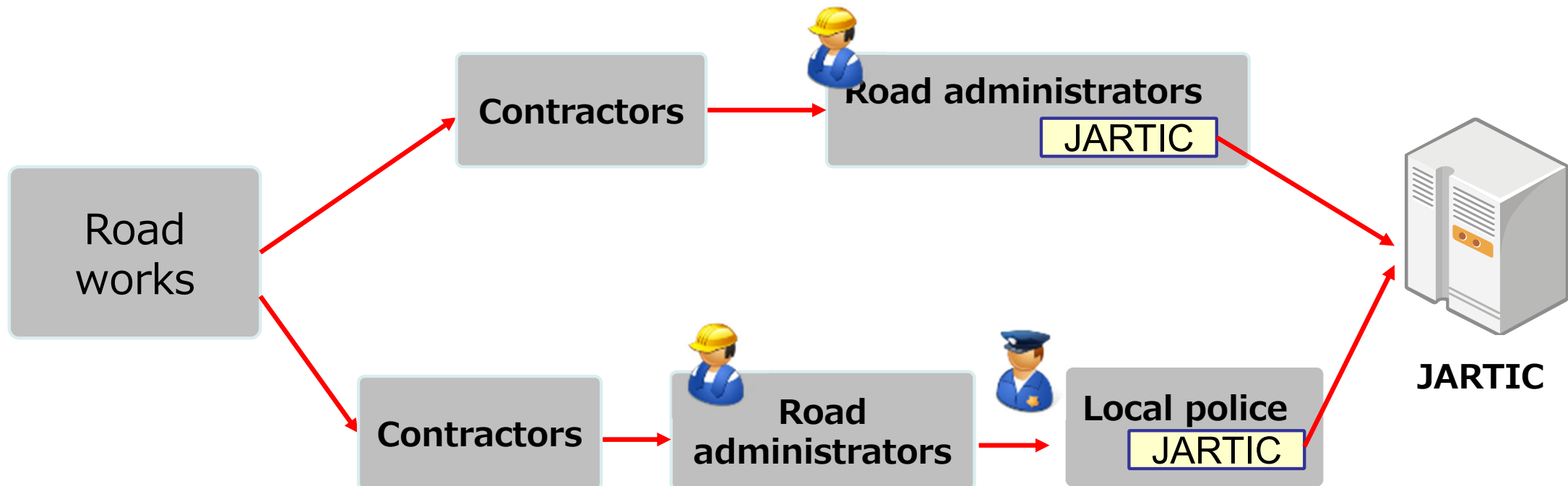
The Japan Road Traffic Information Center (JARTIC)

Automated driving systems require incident information, e.g., traffic restriction, road work, fallen objects, in advance.