# Mobile-device Based Pedestrian Warning System
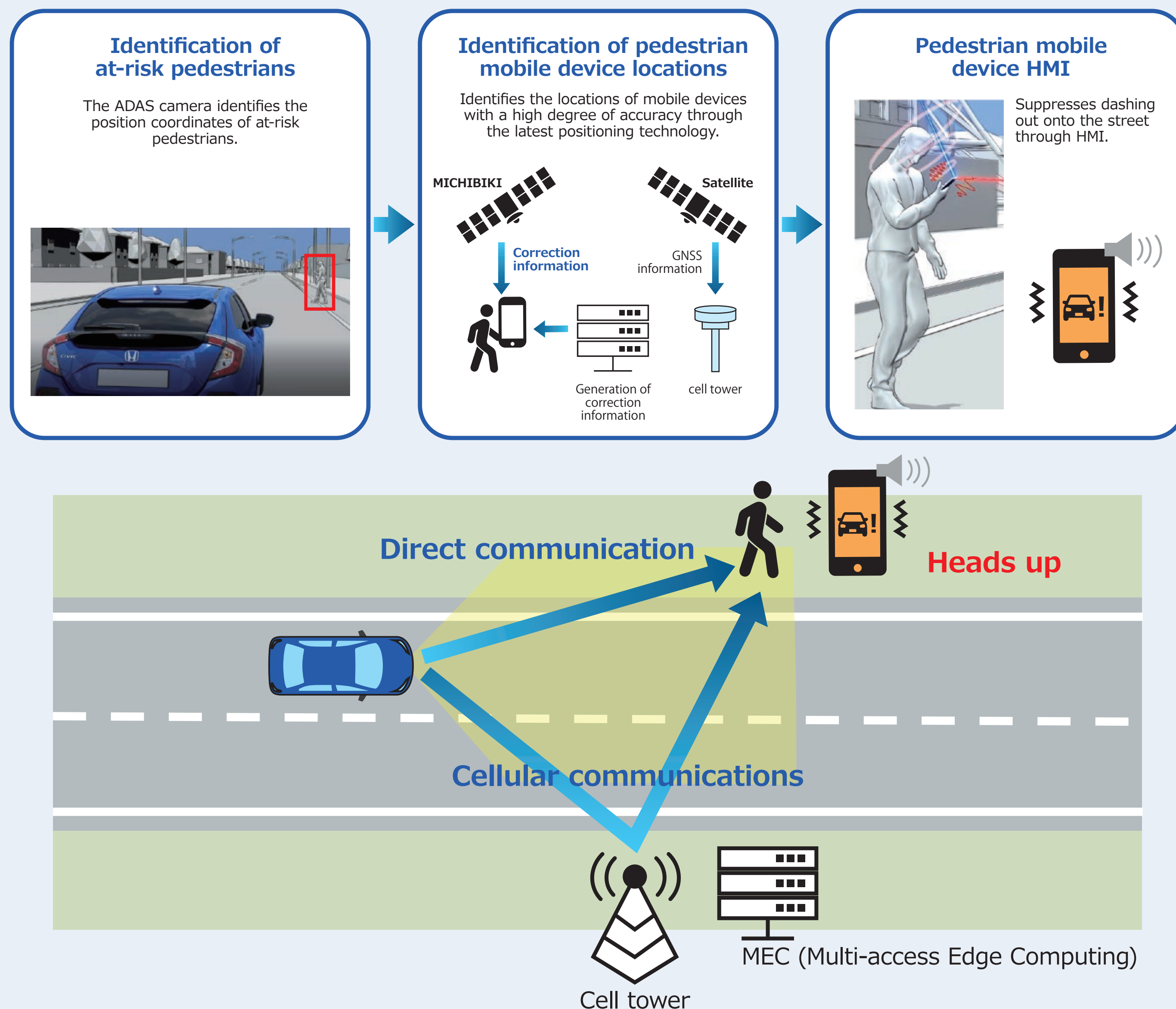
## ● Objective

· Convey dangers to pedestrians through cooperation between cars and pedestrians to suppress pedestrians from dashing out onto the road.

· Send notification on the presence of pedestrians in the periphery who are hidden in areas with poor visibility due to parked vehicles, etc.

## ● Technology Features

· Cooperation between V2P and ADAS: Identifies dangerous pedestrians through ADAS and sends notification to mobile devices through V2P

· Detects areas with poor visibility through on-board cameras, consolidates area information on the server, and shares it with traffic participants in the vicinity to detect pedestrians in the area.

## ● Technology Content

### · Reduces accidents with pedestrians visible from the vehicle.

Honda SENSING 360

**Identification of at-risk pedestrians**

The ADAS camera identifies the position coordinates of at-risk pedestrians.

**Identification of pedestrian mobile device locations**

Identifies the locations of mobile devices with a high degree of accuracy through the latest positioning technology.

MICHIBIKI      Satellite

Correction information       GNSS information

Generation of correction information      cell tower

**Pedestrian mobile device HMI**

Suppresses dashing out onto the street through HMI.

Direct communication

Heads up

Cellular communications

Cell tower      MEC (Multi-access Edge Computing)

### · Reduces pedestrian accidents by sharing information in areas that are not visible from the vehicle.

**Identification of areas with poor visibility**

The on-board camera identifies areas with poor visibility due to parked vehicles, etc.

**Pedestrian location identification**

·Pedestrian detection information from other vehicles
·Location information from pedestrian mobile devices

**Server consolidation of information in areas with poor visibility**

Consolidates information for areas with poor visibility and transmits it to traffic participants in the surrounding area.

**Pedestrian mobile device HMI**

Conveys information on approaching vehicles to pedestrians.

**Vehicle HMI**

Conveys the presence of pedestrians to the driver.

Area with poor visibility

Ego vehicle (no recognition function)

Pedestrian inquiry

Pedestrian location

Heads up

Heads up

Pedestrian detection information from other vehicles

Cell tower      MEC (Multi-access Edge Computing)

**HONDA**