

Predictive Driving Support

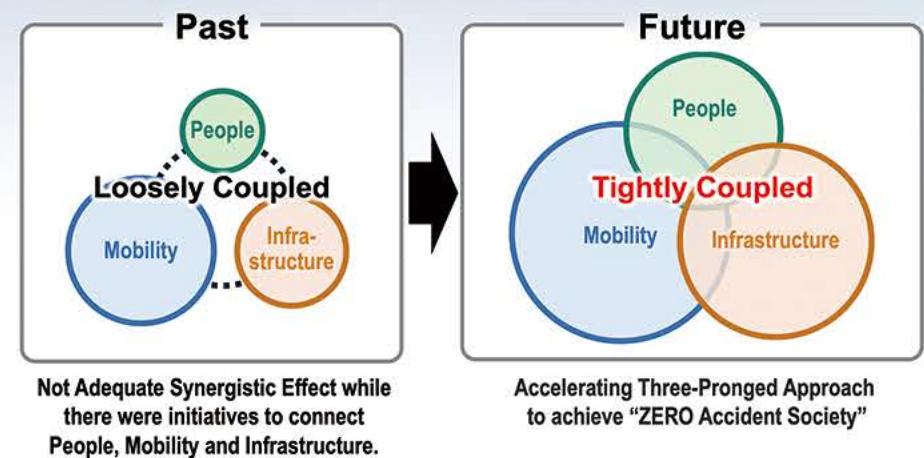
Background

Challenges for Infrastructure-Collaborative Technology

- High cost of building infrastructure
- Low adoption → Less benefit → Future non-adoption
- Preventing accidents with pedestrians and bicycles
- Approach to improving traffic flow

Evolution of Three-Pronged Approach

- The potential for preventing accidents through collaboration between people, mobility and infrastructure is greater than ever before.



Concept & Technology

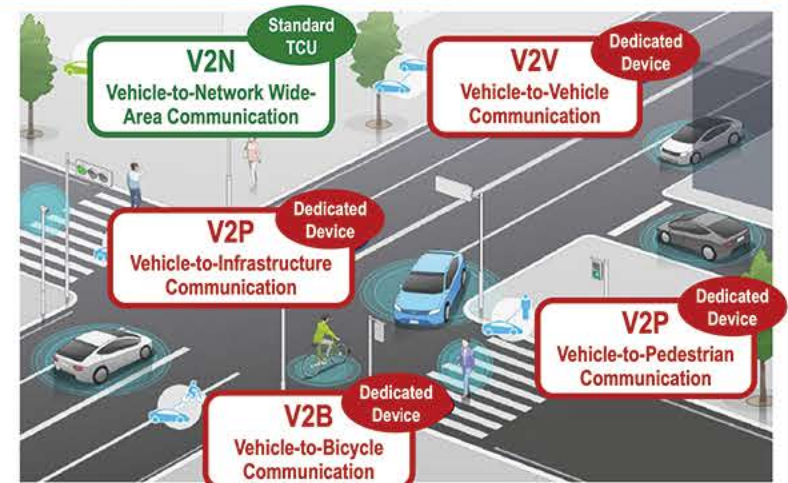
Proposed Approach to Infrastructure Collaboration

V2N (Vehicle-to-Network) Communication

- Communication is possible with a telematics control unit (TCU).
- Data distribution to smart phones is also possible.
- Carries risk of communication delays.

V2X (Vehicle-to-Other) Communication (V2V, V2P, V2B etc.)

- Needs dedicated onboard equipment and road infrastructure.
- Enables real-time communication.



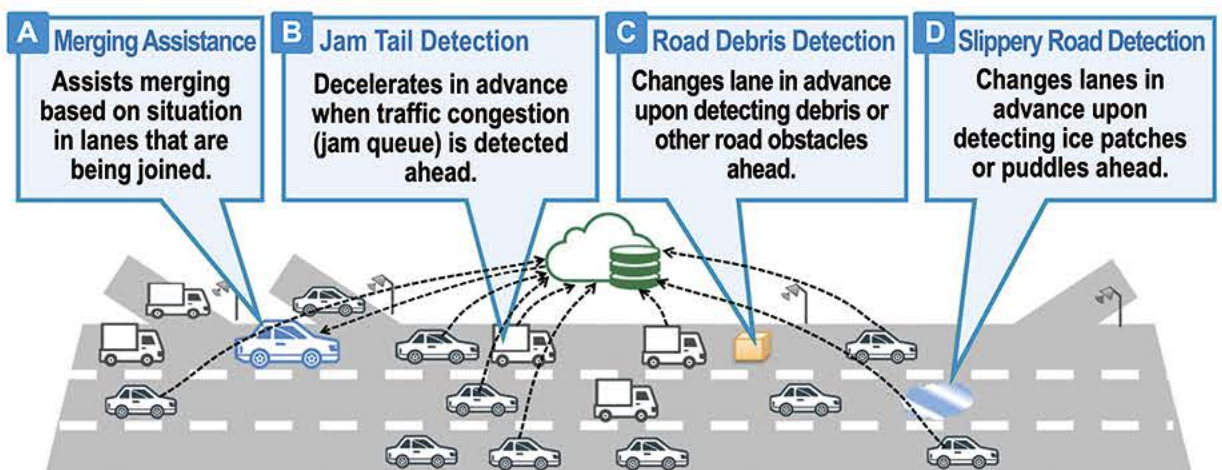
Leverage strengths of standard TCU while maximizing benefits of V2N, smart phone, and V2X communication.

⇒ Start by using each technology where it can help, while continuing to reduce risk of communication delays.

Future Action

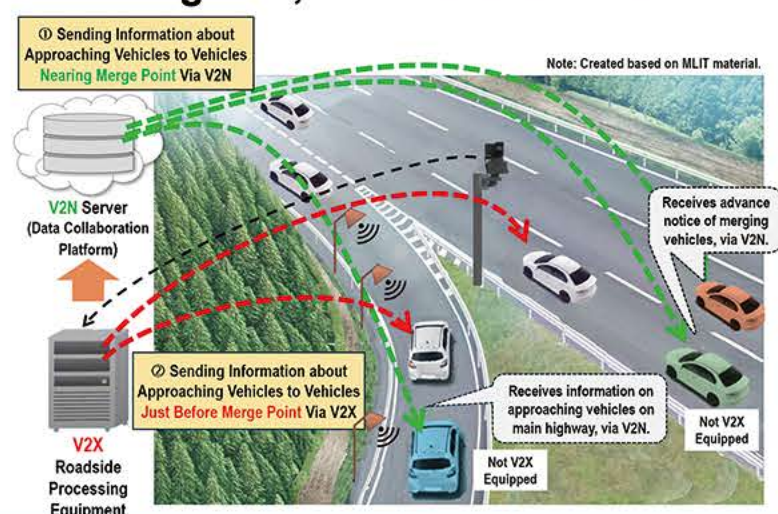
Create Predictive Services for Ever-Safer Highway Driving

- A Merging Assistance**
- B Jam Tail Detection**
- C Road Debris Detection**
- D Slippery Road Detection**



Merging Assistance Example

Using V2N, V2X Communication



Using AI Agent

