

Safer Intersections with Digital Twin Technology

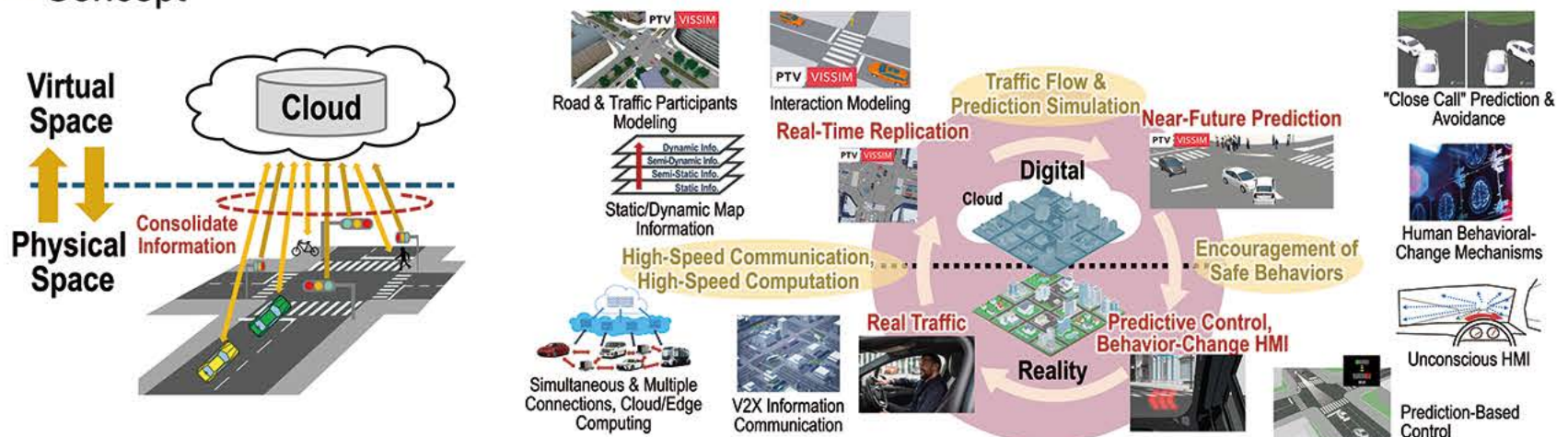
Background

- Digital twins accurately replicate real-world conditions as virtual models, in real time.
- Toyota can use digital twins of intersections to provide new safety services, by predicting traffic risks for protecting road users and vulnerable populations in the traffic environment.
- The goal is a mobility society that enables all people to live safely and with peace of mind.

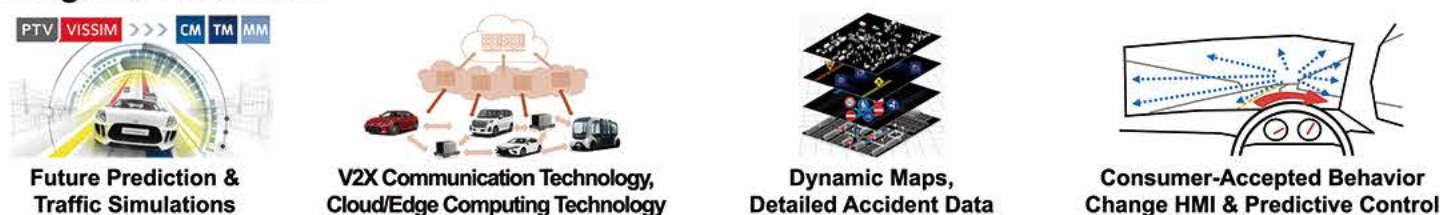


Technologies & Services

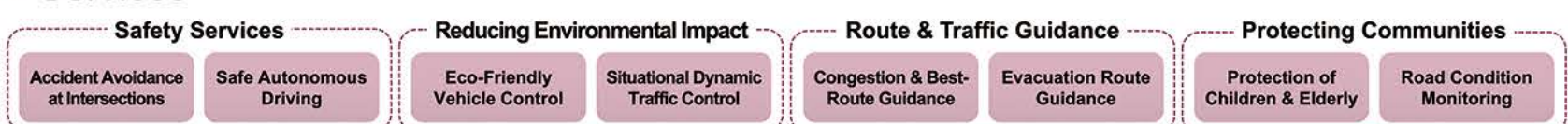
• Concept



• Technological Elements

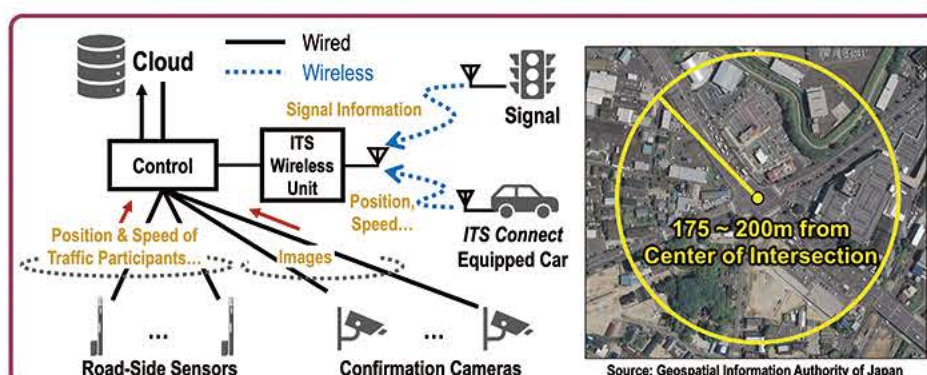


• Services



Future Action

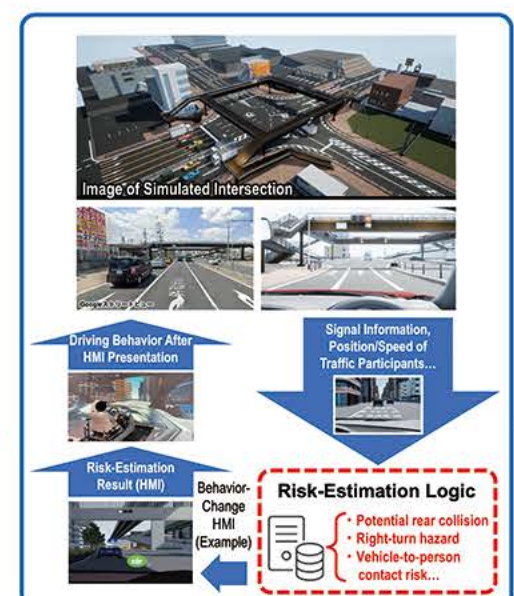
- Build environment for collecting actual traffic conditions and replicating in a digital world.
- Steadily promote development of future prediction technology.
- Formulate business models and validate feasibility.



Conceptual Image of Current Development System

Input speed, position, and other information on traffic participants into a driving simulator.

Reflect information in driving simulator traffic flow, and in support provided to driver.



Driving Simulator Environment for Validation