

NISSAN MOTOR COMPANY



Approaching Autonomous

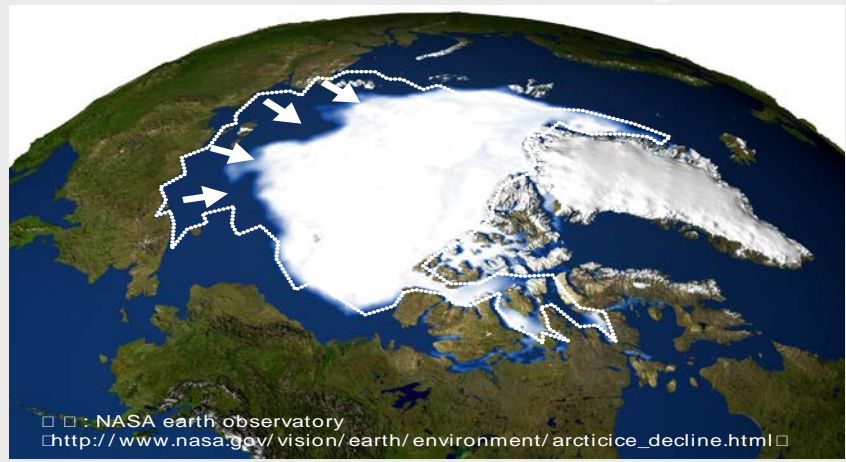
John Schnoes
Vehicle Information
Technology

Four Issues for Sustainability

Energy



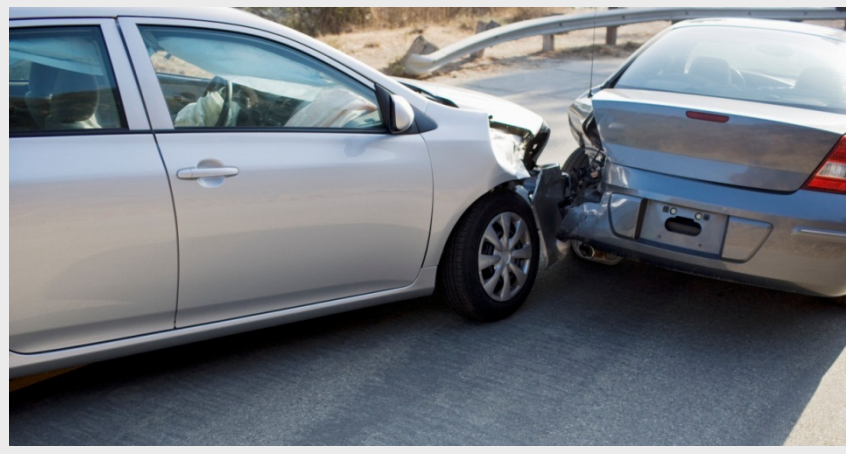
Global warming



Congestion



Traffic Accident



Business Solutions Approach

Energy

Global warming

Electrification



Congestion

Accident

Vehicle Intelligence

Customer Benefits of Autonomous Vehicles



Peace of Mind



Driving Pleasure

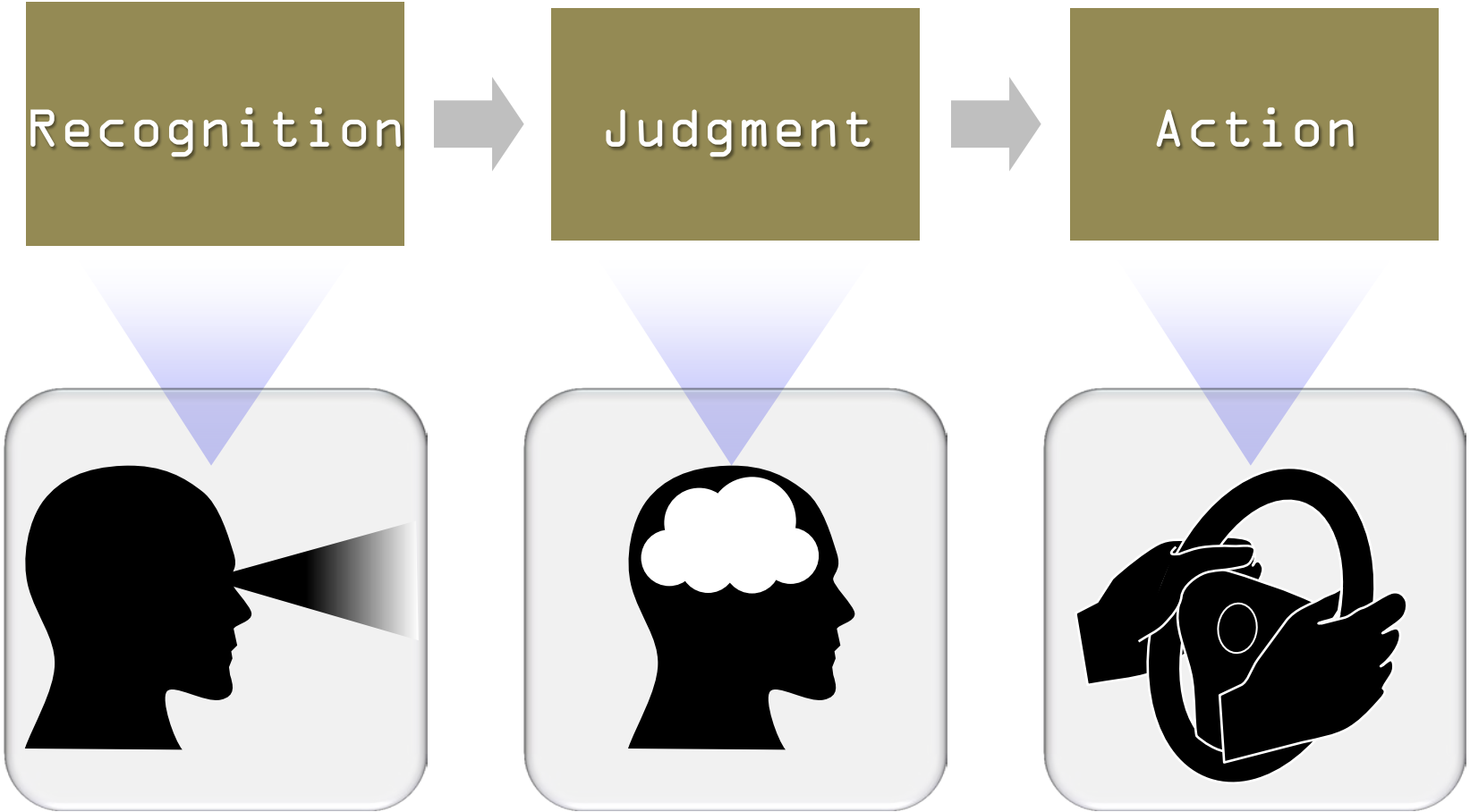


Mobility Convenience

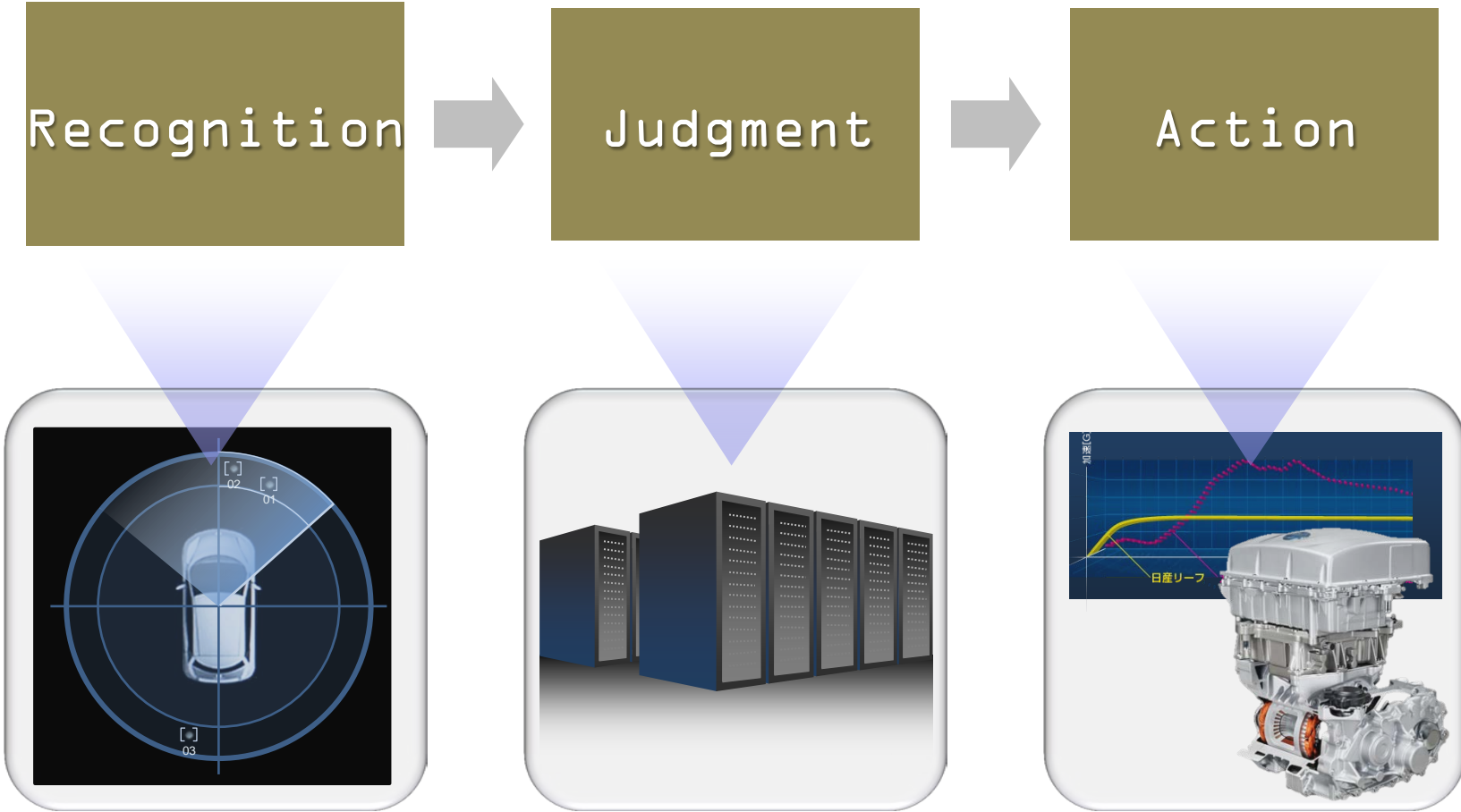


Comfort

Process of Driving



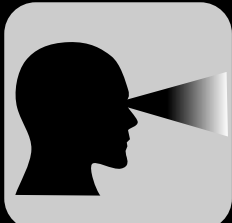
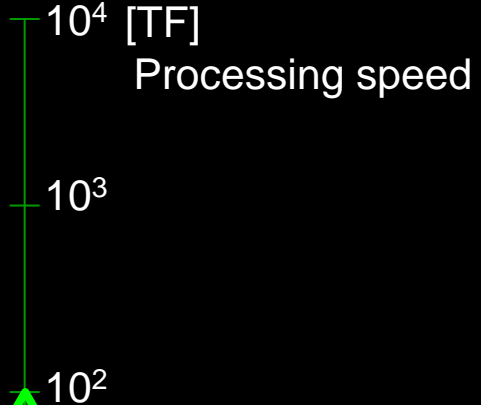
Potential of a Machine



Human Capability



Judgment



Frame rate

[fps] 10^3

Recognition

10^2

10^1



10^{-1}

10^{-2}

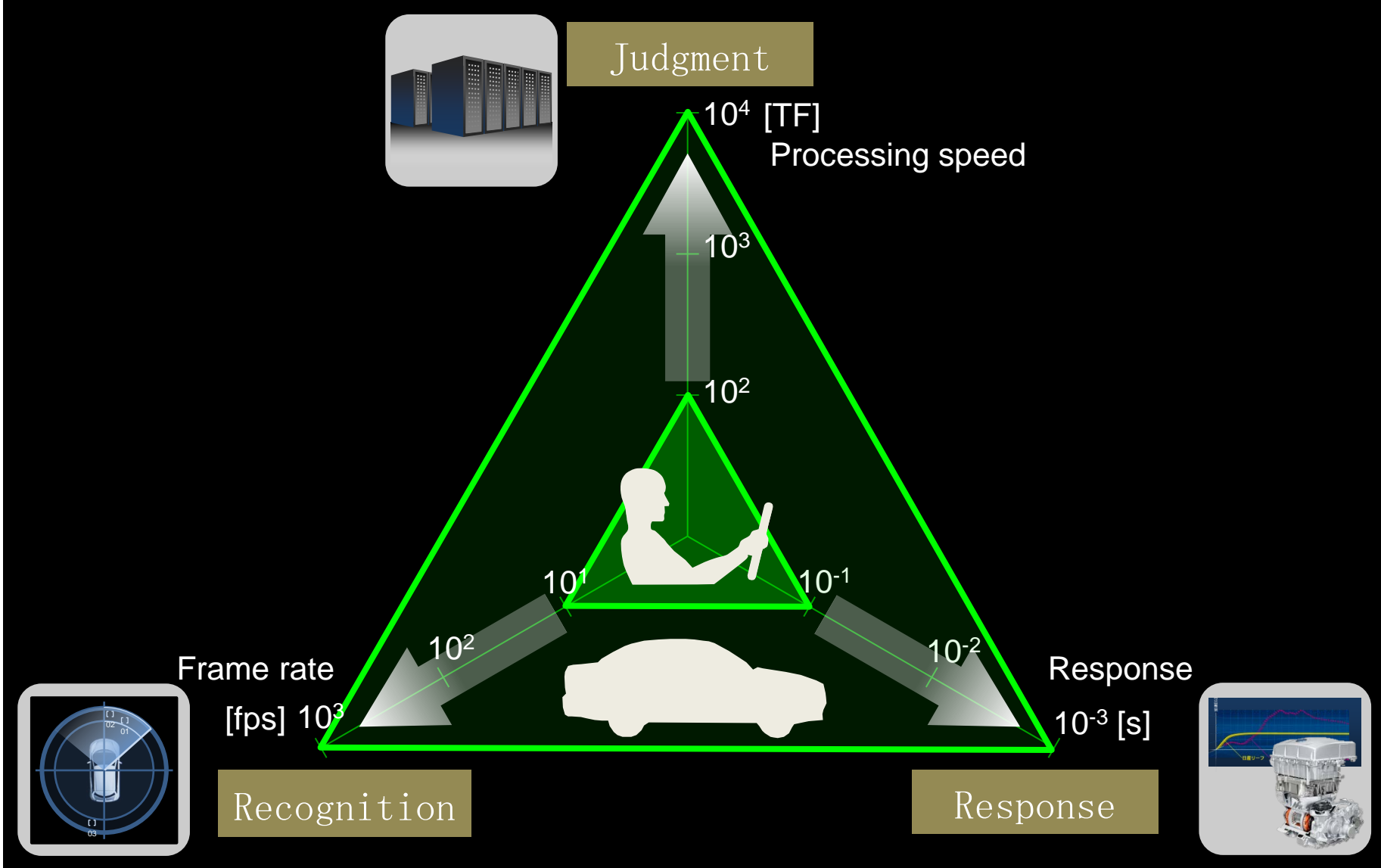
Response

10^{-3} [s]

Response



Capability Enhanced with a Machine



Better Recognition than the Human Eye



**Ability to See
in Slow-Motion**

Better Judgment



**Multiple
Object
Tracking in
Complex
Dynamic
Situations**



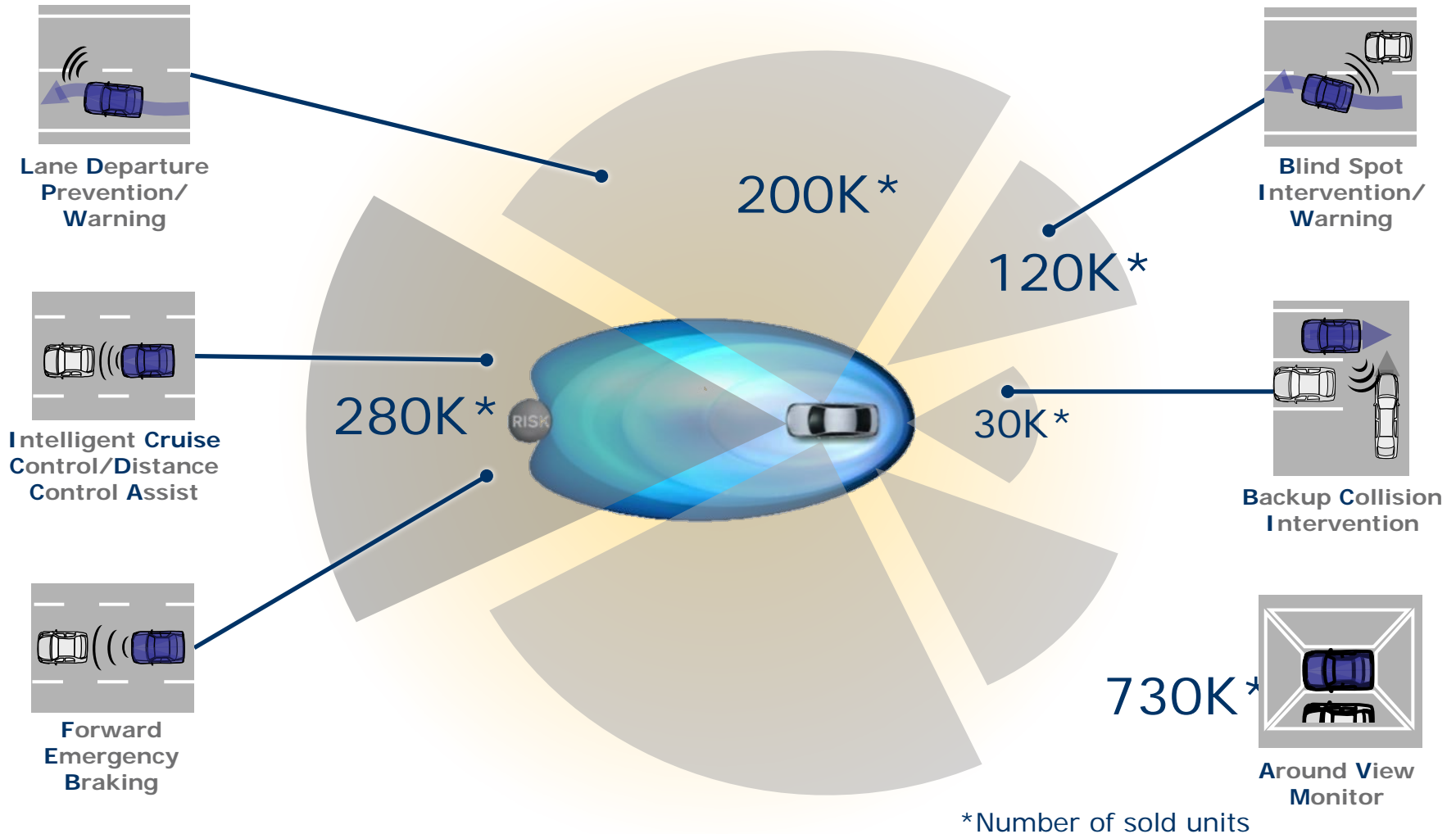
Faster Reactions



**Quick and
Precise
Reaction**

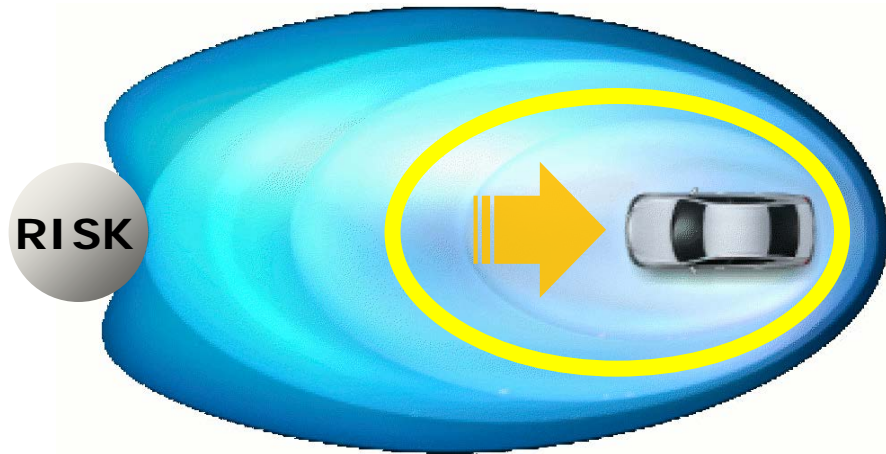
Safety Shield Technology

Massive Application of 360 Degree Safety Shield

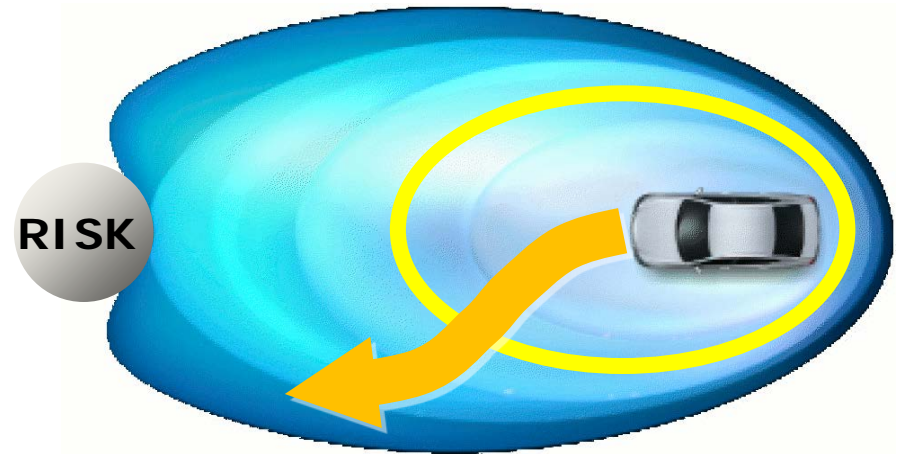


A Continuous Evolution

■ The way to Autonomous Driving has already started



Protective

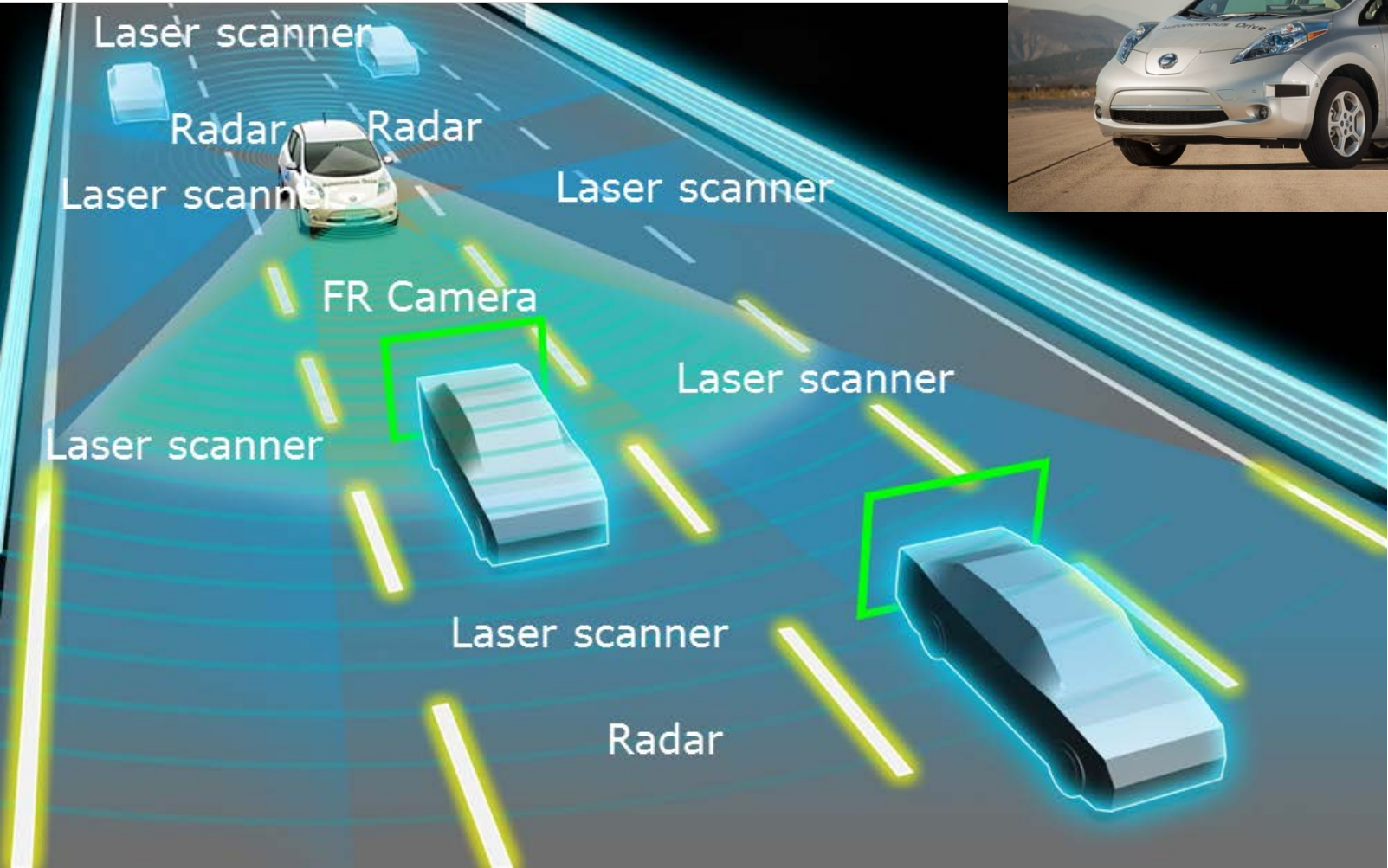


Proactive

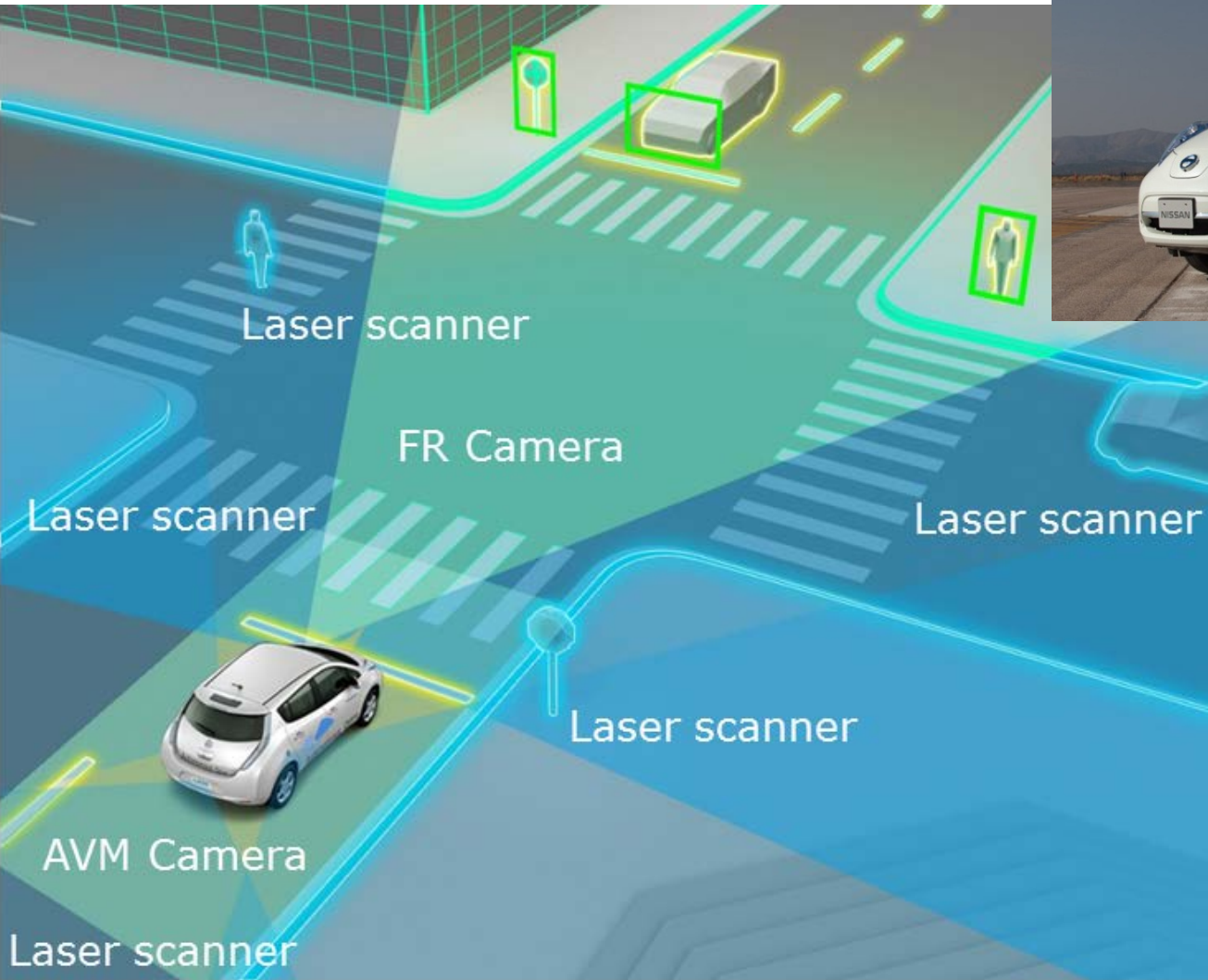




Autonomous Driving on the Freeway



Autonomous Driving in the City



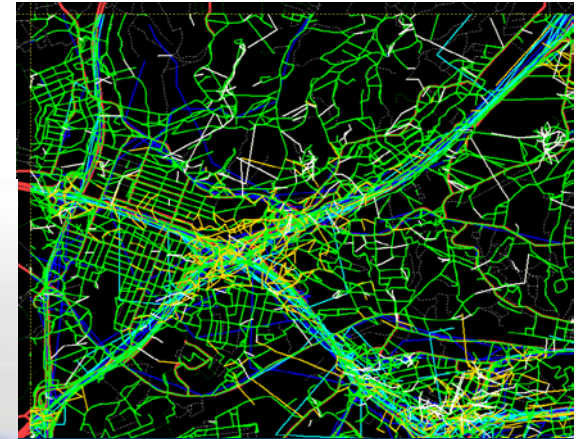
World of Intelligent Vehicles



Autonomous Drive



EPRO Driving



Infra-Cooperation

Enjoy Your Ride



Electrification

Vehicle Intelligence