# *The Future of Transport*
# *- When Technology Meets Policy -*

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# *Technology Innovation in Transport*

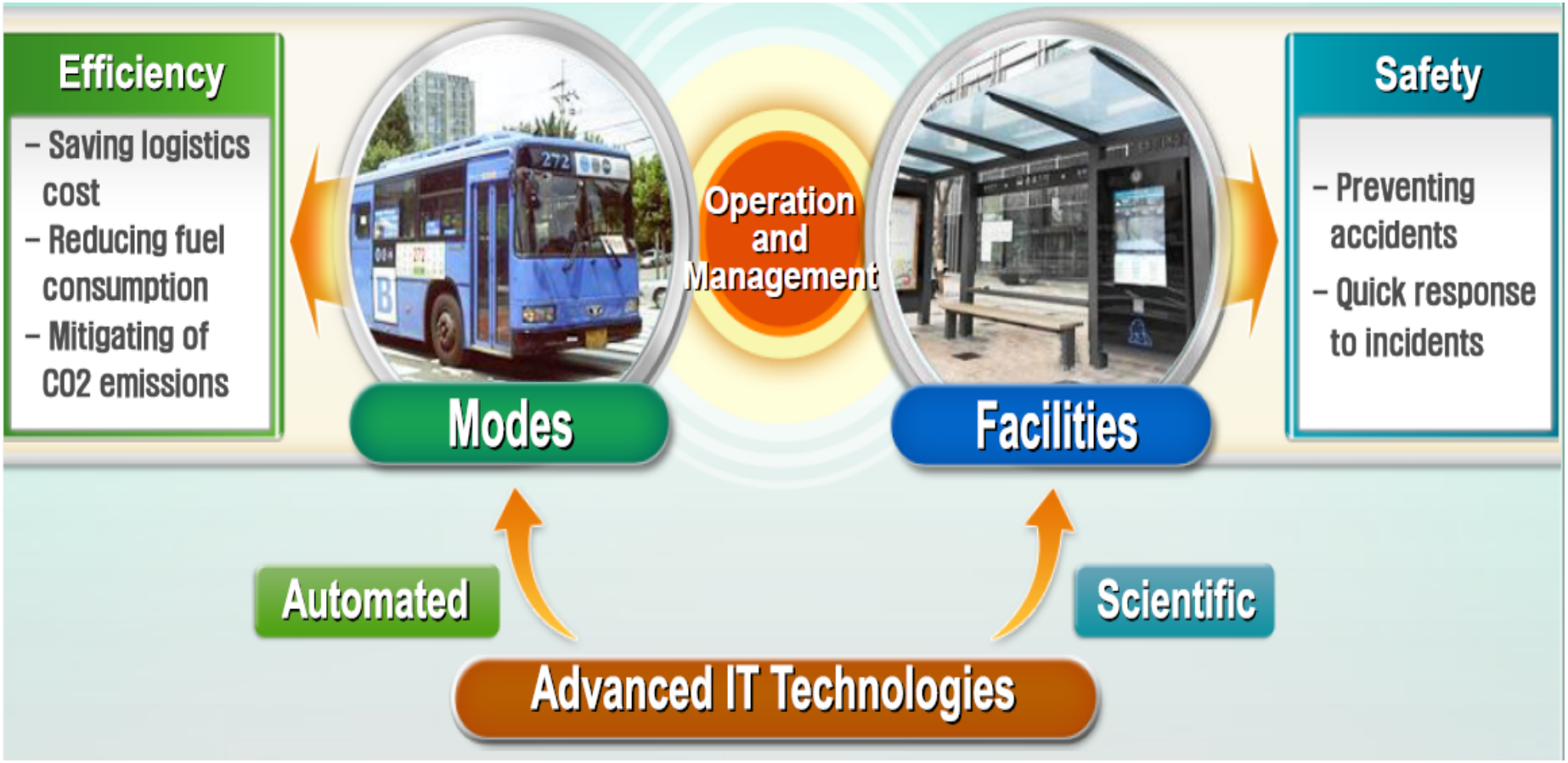
☞ **Sustainable Transport**

- To be Safe, Accessible, Affordable, & Environment Friendly

- Paradigm Shifts for Reducing
  - ✓ Congestion, Road Accidents, Emissions & Air Pollutions, Health Problems
  - ✓ by
    - Avoiding the Needs to Travel by Driving
    - Shifting to Sustainable Transport Modes
    - Improving Efficiency of All Transport Modes

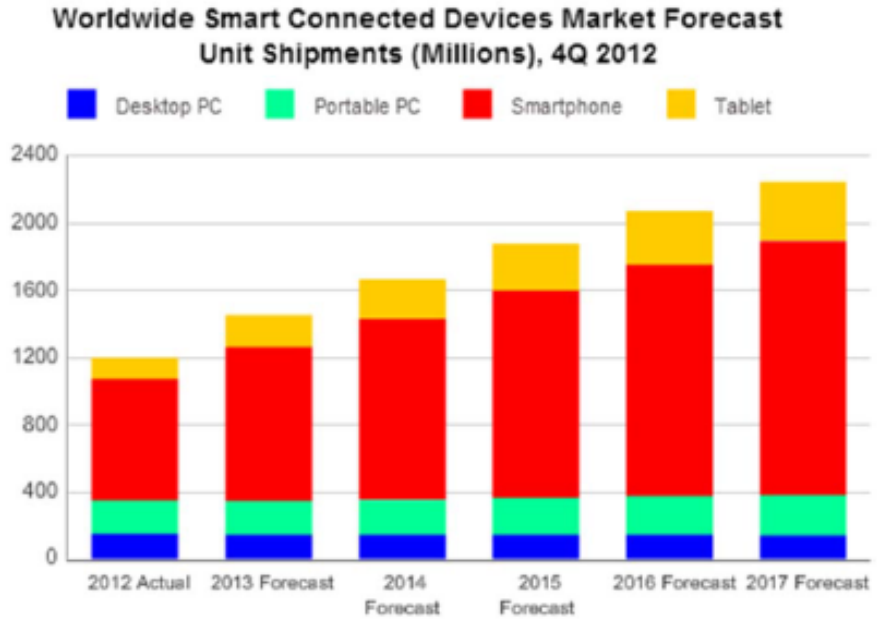
# Technology Innovation in Transport

## Intelligent Transport Systems (ITS)



# ICT changes Transport

- **Mobile Society with ICT**
  - **Continuous growth of nomadic devices**
    - **2,200M units shipment expected in 2017 (IDC, 4Q 2012)**



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# *ICT changes Transport*

## Societal Forces Driving Next Generation ITS

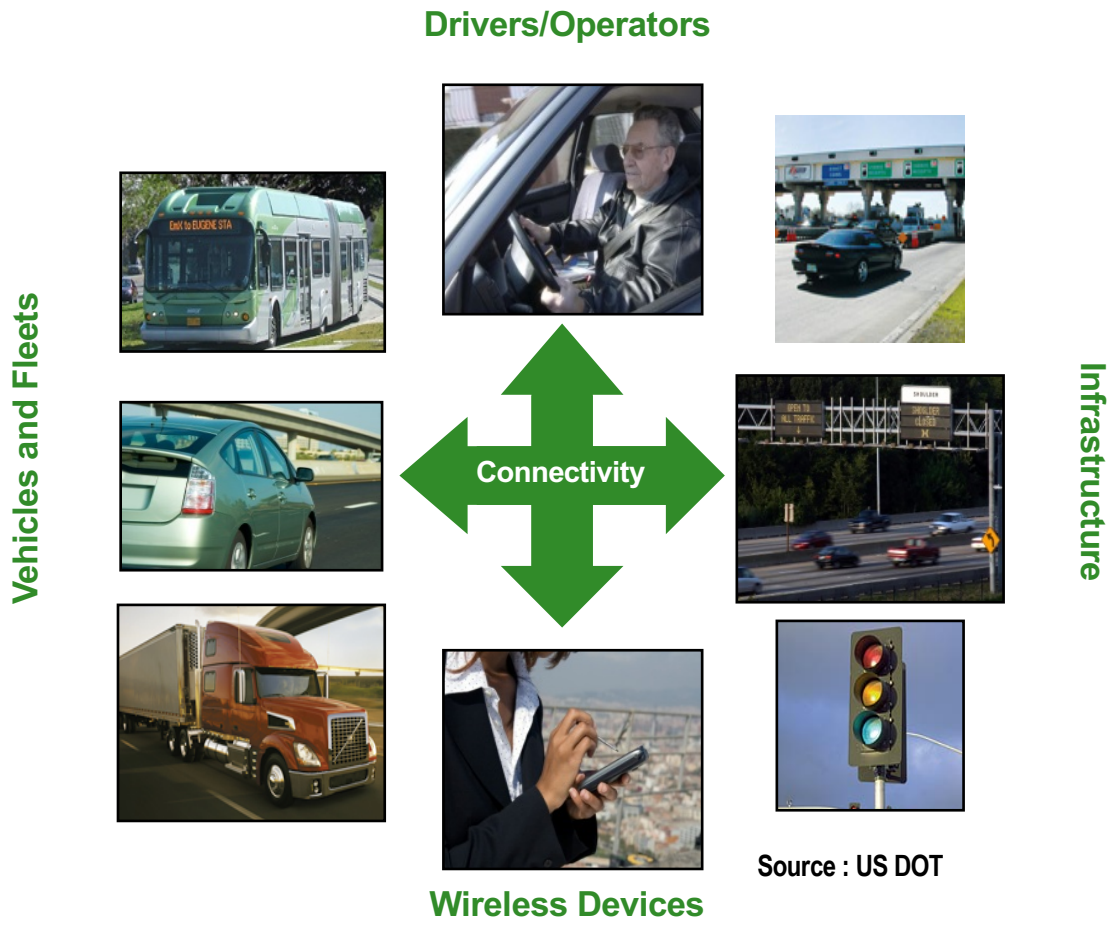
- Higher Investment & Maintenance Costs in Conventional ITS
  - Cases for ITS in Korea
- Global Climate Change & CO2 Emissions
  - Approx. 20% due to Transportation
- Aging Population (> 65 years) up to 20% in 2025
- Shared Economy

☞ Adopting a new Measure of Effectiveness (MoE) as “Green”

☞ Changing Travel Behavior and Trip Patterns to be “Smart”

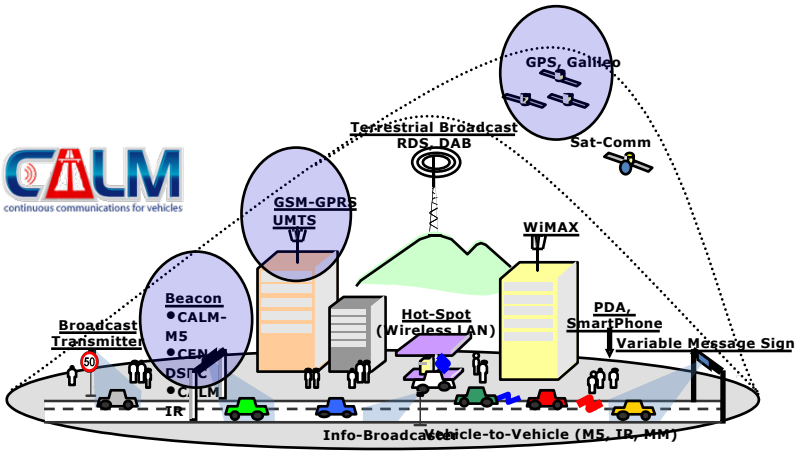
# ICT changes Transport

- **Next Generation ITS**
  - **Connectivity between**
    - **Vehicles**
    - **Infrastructure**
    - **Drivers**
    - **Nomadic Devices**
  - **Communications**
    - **V2V, V2I**
    - **V2N, V2H**
    - **IoT**
  - **Big Data**



# ICT changes Transport

- **Conventional ITS**
  - Improving Mobility & Safety, Reducing Emission
  - But, "Expensive", "Complicated", and "Difficult"
- **Next Generation ITS**
  - Utilizing the existing mobile networks, 3G/4G LTE, etc.
  - To be "Cheaper", "Simpler", and "Easier"







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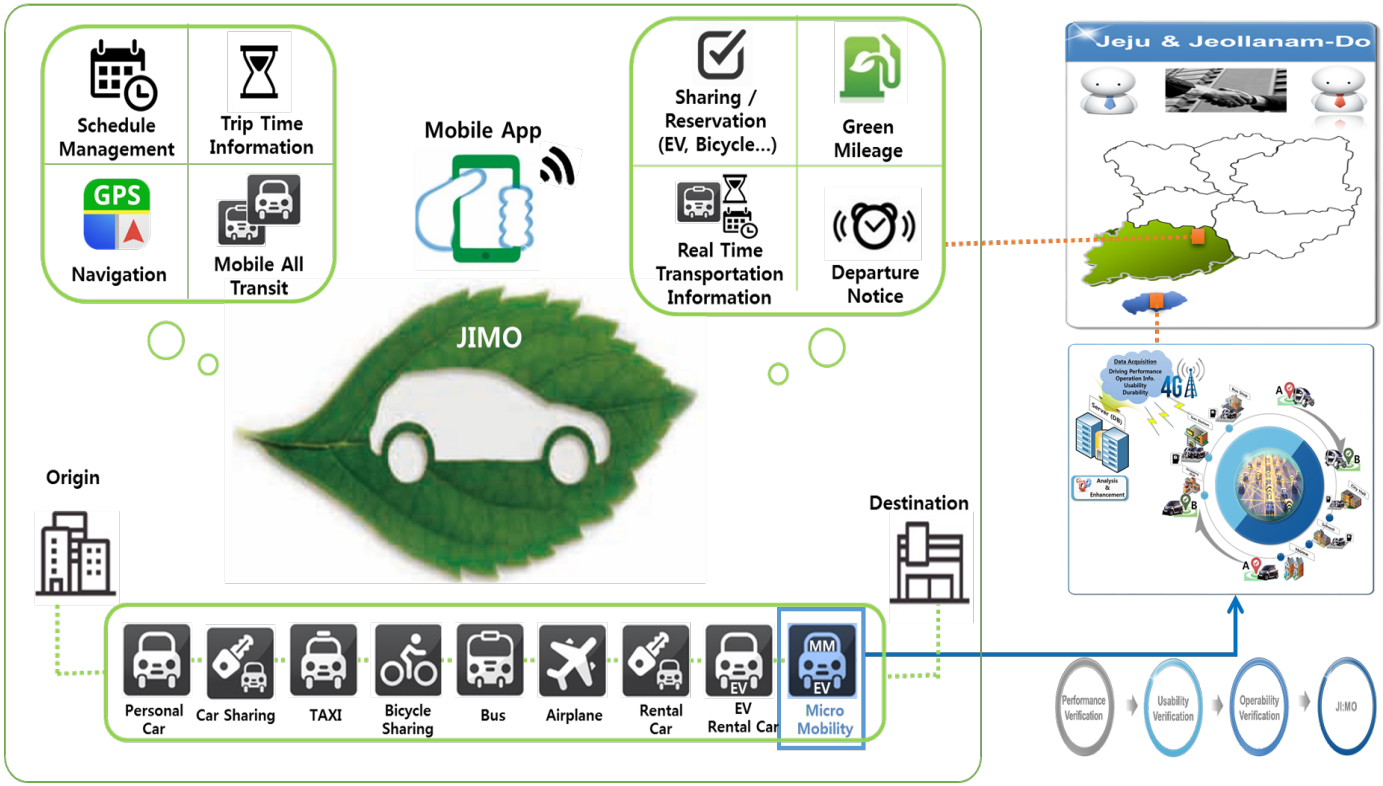
# Future Transport Technology

## ◆ Mobility Integration on Sustainable Transport

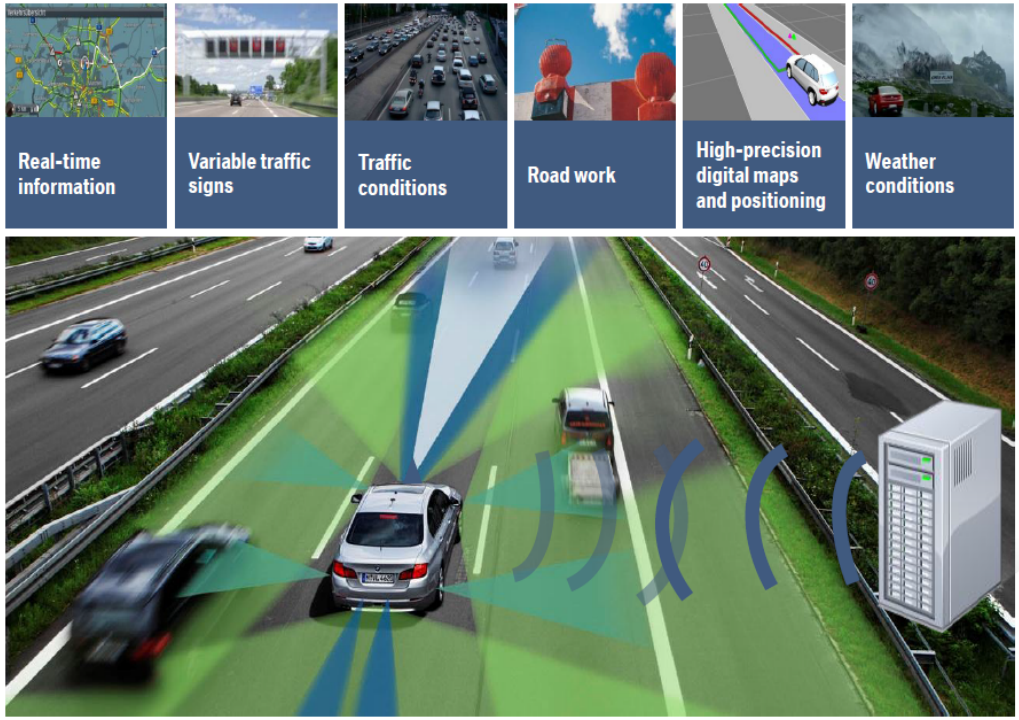
### ✓ *Networked Smart Journey by EV Sharing & Driving*

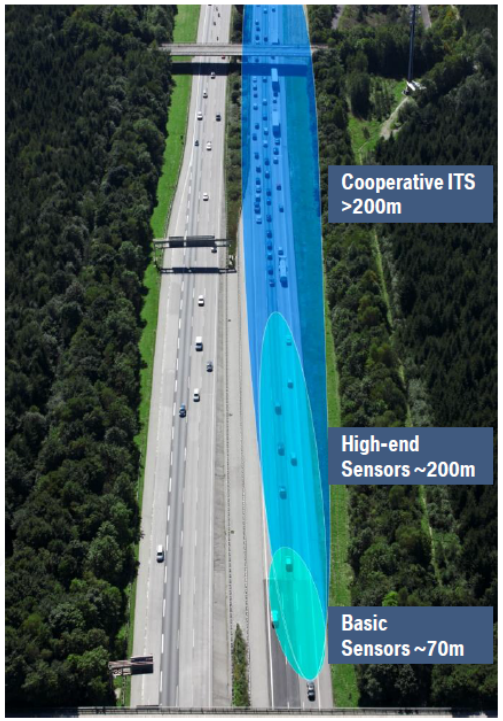


# Future Transport Technology

## ◆ Connected Automated Driving

### ✓ *Automated Vehicles & Highway Systems*




Sources : AUVSI 2014, San Francisco



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# What Next?

- **Technologies to be Developed**
  - ☞ ***Automation, Electrification & Mobility Integration to be Safer, Smarter, and Greener***
- **Policies to be Met**
  - ✓ **Users' Perspective Business Models**
  - ✓ **Deregulation, Legislation & Standardization**
    - ✓ **for Supporting Business Models**
  - ✓ **Public-Private Partnership**

***Thank you very much!***


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