

# Strategic Finance and Investment by JEXWAY

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# Contents

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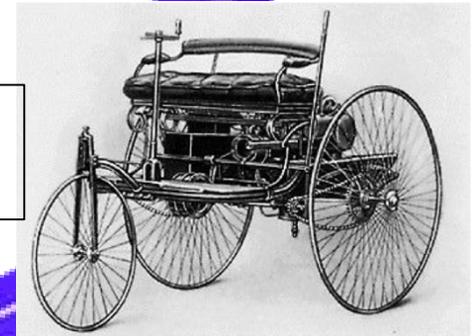
- 1. Role of Road Traffic in 21st Century**
- 2. For the 3<sup>rd</sup> Industrial revolution in Road Sector**
- 3. Value-Sustainable-Highways**
- 4. Environment-Friendly Road**
- 5. Strategic Finance and Investment by JEXWAY**

# 1. Role of Road Traffic in 21<sup>st</sup> Century

## The 1<sup>st</sup> Industrial Revolution



## The 2nd Industrial Revolution



A great contribution  
to **economic growth**

## The 3<sup>rd</sup> Industrial Revolution

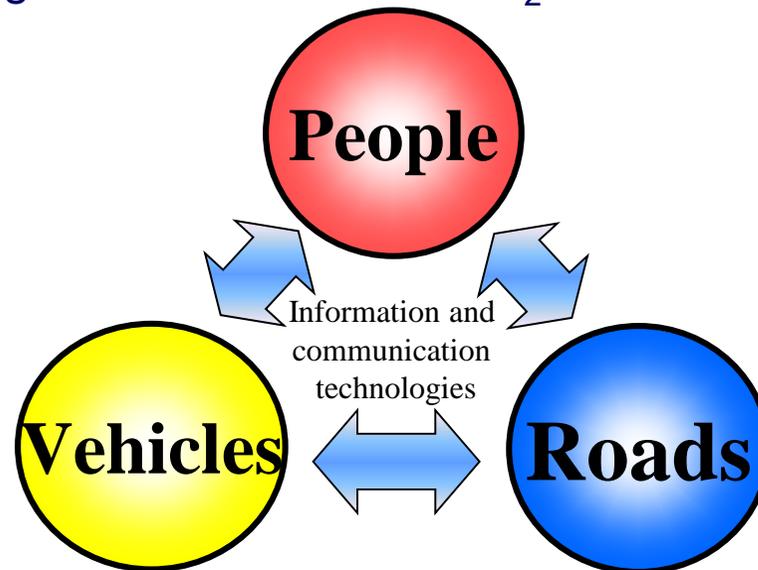
# From GDP to GNH

**Maximize the happiness** of the people by securing safety and comfort with information technology.

## 2. For the 3rd Industrial revolution in Road

ITS is designed to integrate people, roads and vehicles in order to resolve road traffic problems such as traffic congestion, traffic accidents, environmental degradation and assets management..

- Traffic congestion time loss: 5 billion hours per year
- Traffic accidents : 660,000 accidents resulting in 4,400 fatalities(FY2012)
- Environmental degradation: 20% of all CO<sub>2</sub> emissions from transport sector



(Source:MLIT)

### 3. Value-Sustainable-Highways: Maintenance

#### ITS/ICT Technology on Expressway Maintenance

- make full use of an ICT technique and check-up road assets effectively.
- maintain the assets in a healthy state several decades later.



**Pavement inspection using  
High-Speed Road Measurement  
Vehicle**



**Tunnel inspection using  
High-Speed Concrete-crack  
Measurement Vehicle**

# 3. Value-Sustainable-Highways: Against Earthquake

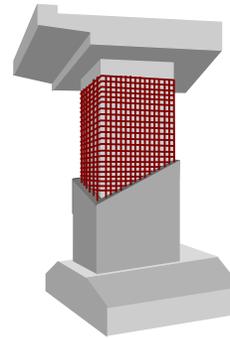
The anti-earthquake bridge design regulation revised based on large-scale damages due to the Hyogo-ken Nanbu Earthquake(1995,M7.3).

Thanks to the revised regulation, no large scale damages observed in the Great East Japan Earthquake on 11 March 2011,



【Damages by the Hyogo-ken Nanbu Earthquake in 1995】

## 【Earthquake-resistant reinforcement works】



# 4. Environment-Friendly Road

## ITS Spot Service(continued)

### Dynamic Route Guidance

- Provide wide-area traffic congestion data to enable car navigation systems to select routes smartly



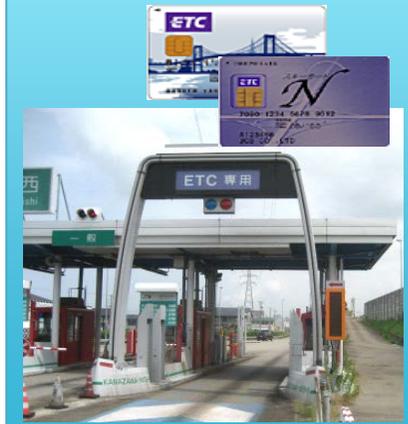
### Safety Driving Support

- Reduce close-call experiences by alerting drivers in advance



### ETC

- Reduce congestion at expressway toll booths



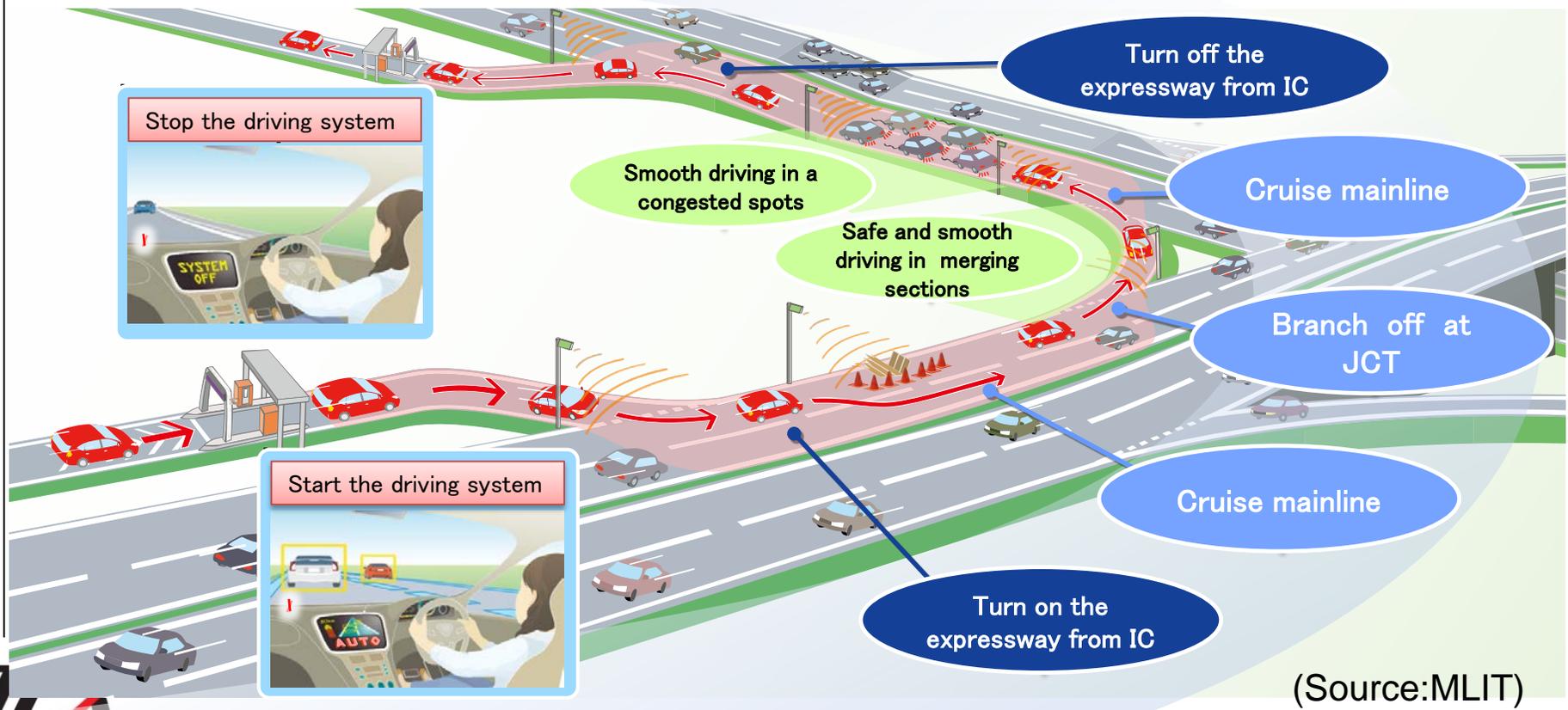
### Other services

- **Cashless payment** : e.g. Drive-through payment
- **Internet access**: Regional tourist and facilities information is available at roadside rest areas.



## 4. Environment-Friendly Road

-Auto Pilot System will make a great contribution to reduction of congestion, traffic accidents and environmental loading (by early 2020s).



(Source:MLIT)

# The Future Times

Thursday, March 19, 2055

Two men injured by a traffic accident on Hirokoji Blvd for the first time in the decade. A virus is detected in the OBU.....

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## **5. Strategic Finance and Investment by JEXWAY**

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- 1. The 3rd Industrial revolution**
- 2. The Value-Sustainable, Resilient, and Environment-Friendly Road**
- 3. Enhance GNH**