



ITS Enter the Second Stage

- Smart Mobility for All -

Seiji MORIYAMA

***ITS Policy and Program Office,
Road Bureau,
Ministry of Land, Infrastructure and Transport,
Government of Japan***

Contents

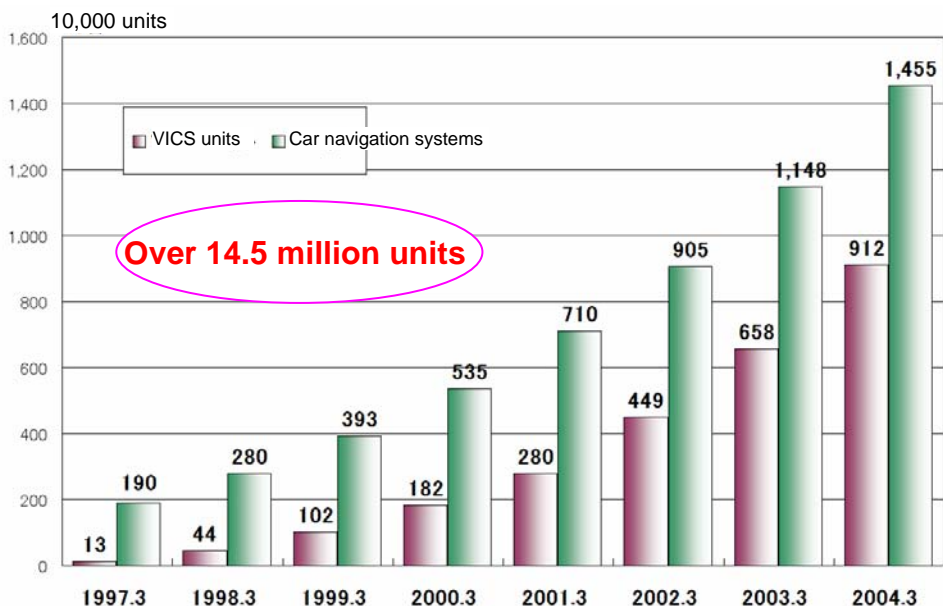
- 1. ITS Begins to Change Society**
- 2. Promoting Further Acceleration as National Strategy**
- 3. Full-scale Adoption of ITS by 2007**
- 4. Conceptualization of ITS Based Services**

1. ITS Begins to Change Society

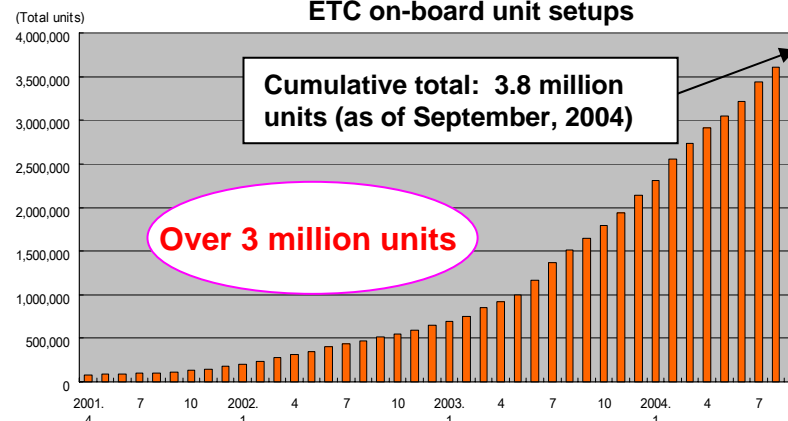
(1) Promotion of Individual Measures for ITS

- ITS is rapidly spreading throughout society.
- IT has become widespread in society and is now a part of everyday life.

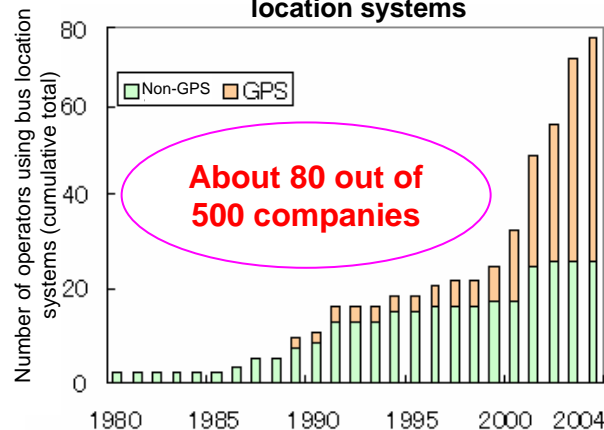
Total number of
Navigation systems and VICS units shipped



ETC on-board unit setups



The number of operators using bus location systems

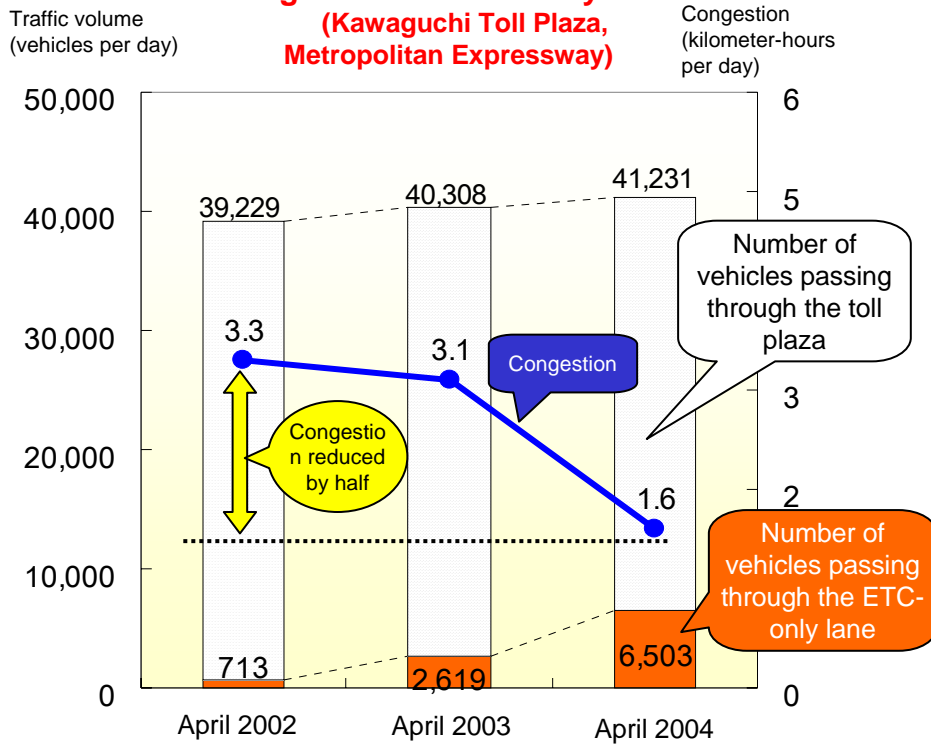


1. ITS Begins to Change Society

(2) Changes Brought to Communities and Society by ITS

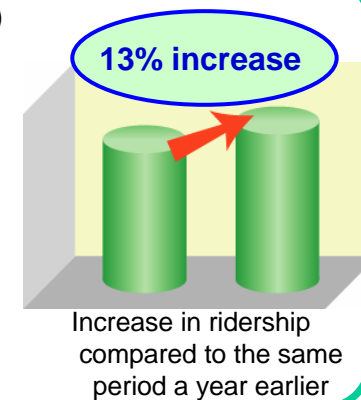
- With ETC, congestion is reduced by half despite an increase in traffic volume.
- With bus location systems, ridership is increased by 13%.
- The total ITS market has already grown to ¥12 trillion.

Congestion cut in half by ETC (Kawaguchi Toll Plaza, Metropolitan Expressway)



Bus location system (Iyo Railway)

- Ridership increased by 13.4% compared to the same period a year earlier.
- Although communications costs are incurred, large cost savings are realized through more efficient scheduling.
- Users welcome the service because they no longer feel impatient while waiting for the bus.



ITS market: About ¥12 trillion

Information: About ¥6 trillion

Car navigation systems, etc.
VICS and ETC
Message signs

Infrastructure: About ¥5 trillion

Roadside sensors and cameras
Networks

Services: About ¥1 trillion

Map software
Content

ETC utilization rate 2% → 6% → 20%

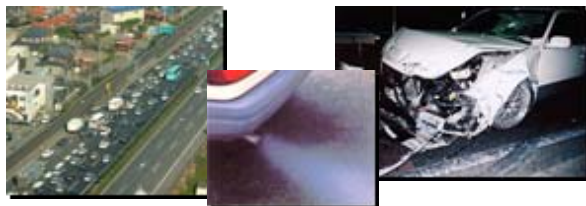
2. Promoting Further Acceleration as National Strategy

- Four goals of Smartway: reversing the negative legacy of motorization; ensuring mobility for the elderly; developing affluent communities and lifestyles; and improving the business climate.

Goal

Society of smart mobility

Reversing the negative legacy of motorization



Ensuring mobility for the elderly



Developing affluent communities and lifestyles

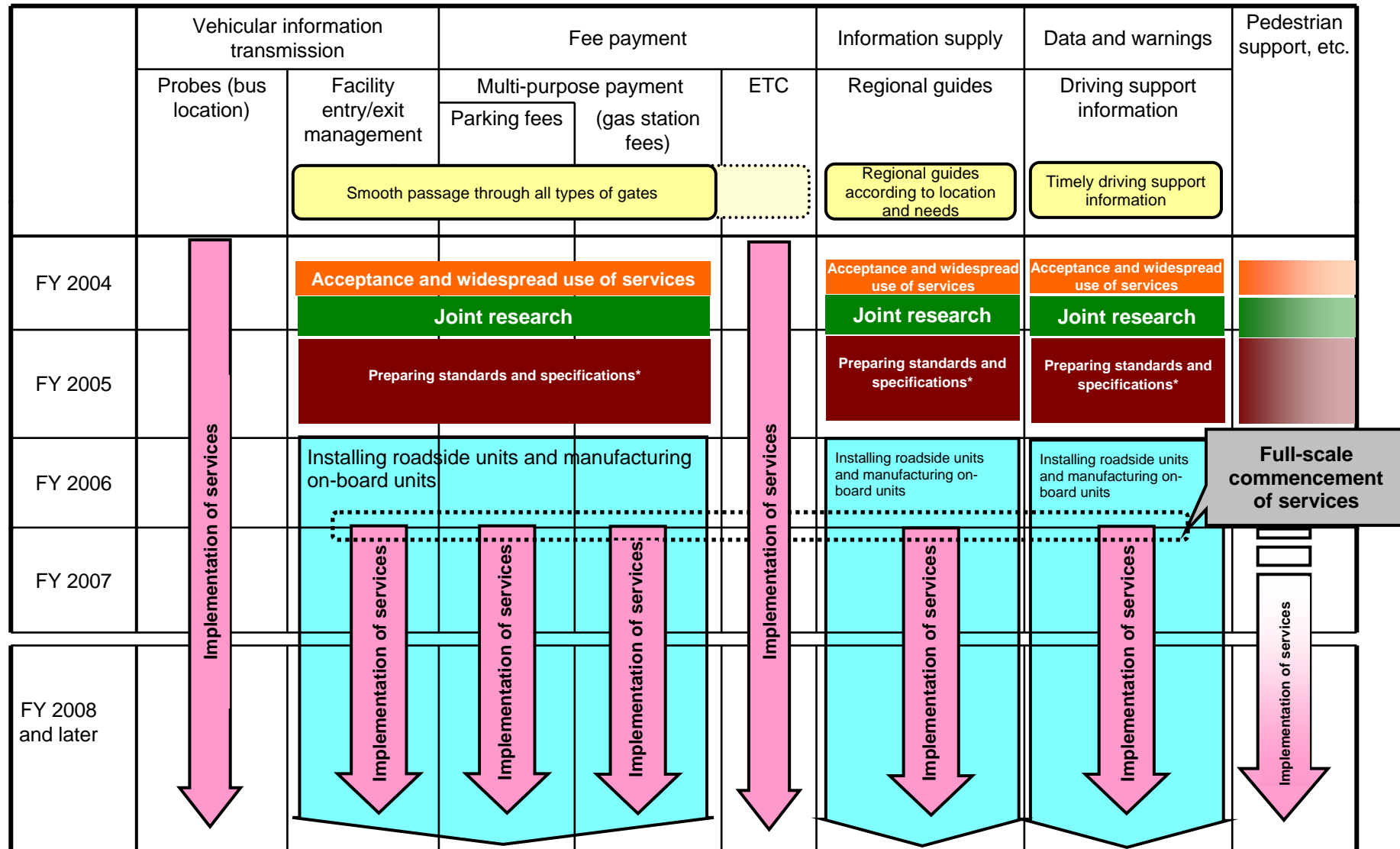


Improving the business climate



3. Full-scale Adoption of ITS by 2007

(1) Deployment scenario



*Including the development of interconnectivity programs

4. Conceptualization of ITS Based Services

[Smooth passage through all types of gates]

- Smooth passage by cashless fee payment other than ETC, including parking fees
- Voice announcement services when entering and leaving a facility.

Entry/exit management in a facility for commercial vehicles



Entry/exit management in an apartment building's parking garage



Entry/exit management and cashless payment in a variety of situations

Fee payment in the drive-through restaurant



Source: NEC



Fee payment in a pay-by-the-hour parking garage

Source: Internet ITS Research Group



Fee payment at a gas station

Source: Internet ITS Research Group

4. Conceptualization of ITS Based Services

[Regional guides according to location and needs]

- Providing area road information and regional or tourist information at roadside stations and expressway service areas or parking areas
- Offering a wider range of opportunities to obtain information in the car

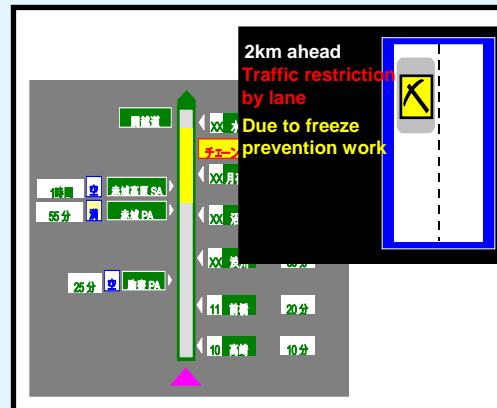
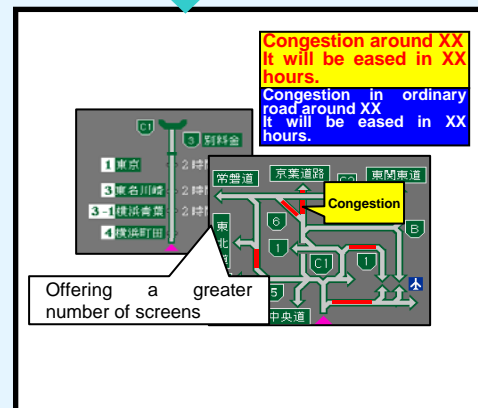
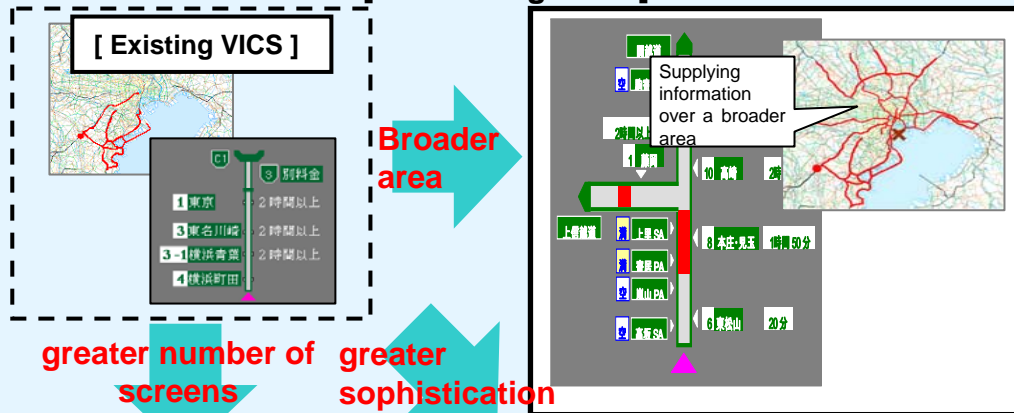


4. Conceptualization of ITS Based Services

[Timely driving support information]

- Improving safety by providing various information instantly while driving
- Enhancing the existing VICS services
- Establishment of infrastructures such as roadside units based on international standards and multi-modal application of on-board units

[Enhancing VICS]



[Notification when approaching a congested section]



[Information on locations with frequent accidents]



[Support for safe driving on curves]



Testing a curve entry warning system
(Sangubashi, Metropolitan Expressway)



END