

4. 付録 (APPENDIX)

4.1 ITS の近況 (Exchange of Information on Recent ITS Activities) : Japan

U.S.A.



ITS Enter the Second Stage

- Smart Mobility for All -

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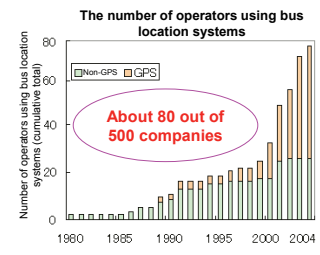
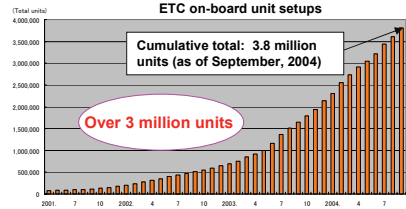
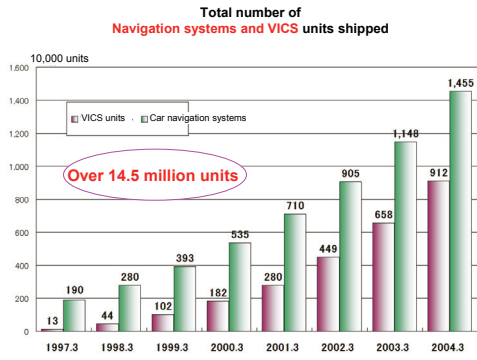
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1. ITS Begins to Change Society



(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.

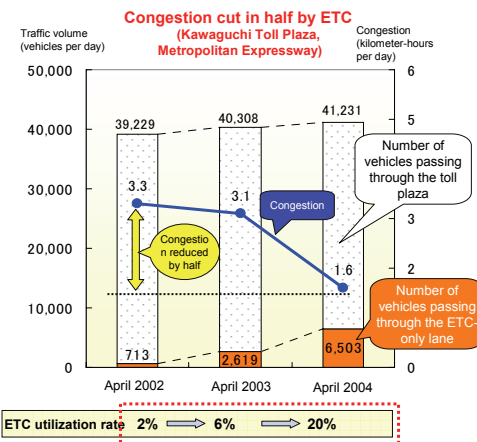


1. ITS Begins to Change Society



(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.



Bus location system (Iyo Railway)

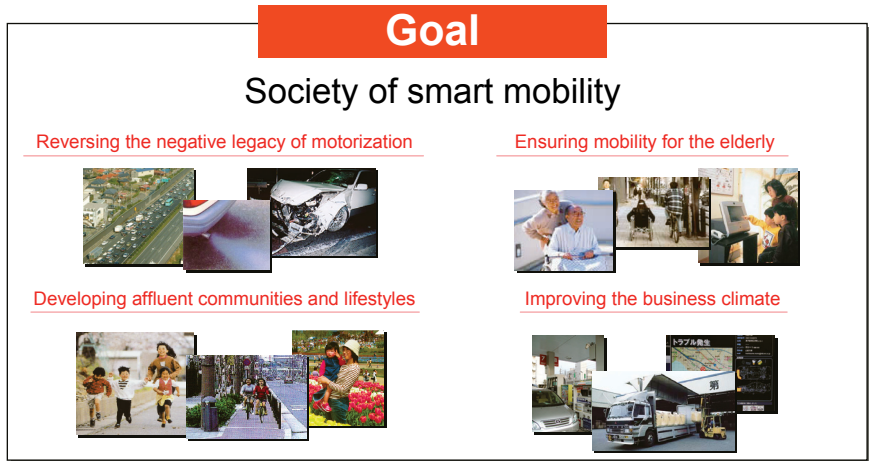
- Ridership increased by 13.4% compared to the same period a year earlier.
- Although communications costs are incurred, large cost savings are realized through more efficient scheduling.
- Users welcome the service because they no longer feel impatient while waiting for the bus.

Increase in ridership compared to the same period a year earlier

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

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.



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3. Full-scale Adoption of ITS by 2007

(1) Deployment scenario

	Vehicular information transmission		Fee payment			Information supply	Data and warnings	Pedestrian support, etc.
	Probes (bus location)	Facility entry/exit management	Parking fees	Multi-purpose payment (gas station fees)	ETC	Regional guides	Driving support information	
		Smooth passage through all types of gates				Regional guides according to location and needs	Timely driving support information	
FY 2004	Implementation of services	Acceptance and widespread use of services			Implementation of services	Acceptance and widespread use of services	Acceptance and widespread use of services	Full-scale commencement of services
		Joint research				Joint research	Joint research	
FY 2005		Preparing standards and specifications*				Preparing standards and specifications*	Preparing standards and specifications*	
FY 2006		Installing roadside units and manufacturing on-board units				Installing roadside units and manufacturing on-board units	Installing roadside units and manufacturing on-board units	
FY 2007		Implementation of services	Implementation of services	Implementation of services		Implementation of services	Implementation of services	
FY 2008 and later		Implementation of services	Implementation of services	Implementation of services		Implementation of services	Implementation of services	

*Including the development of interconnectivity programs

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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



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

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

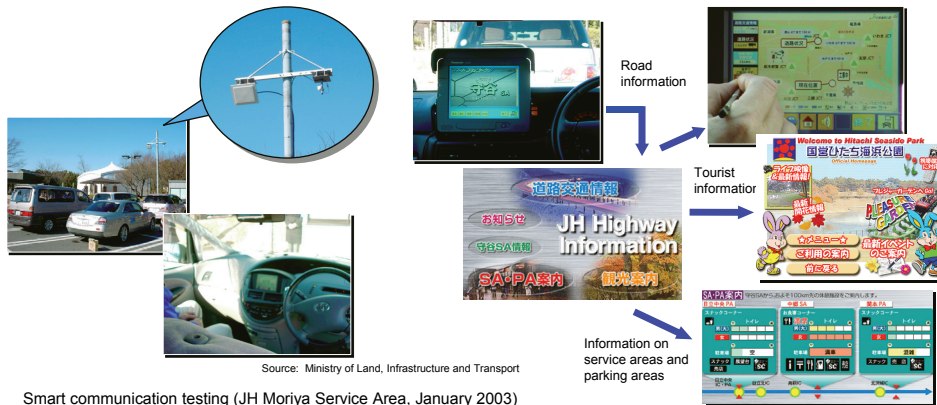
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4. Conceptualization of ITS Based Services



[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



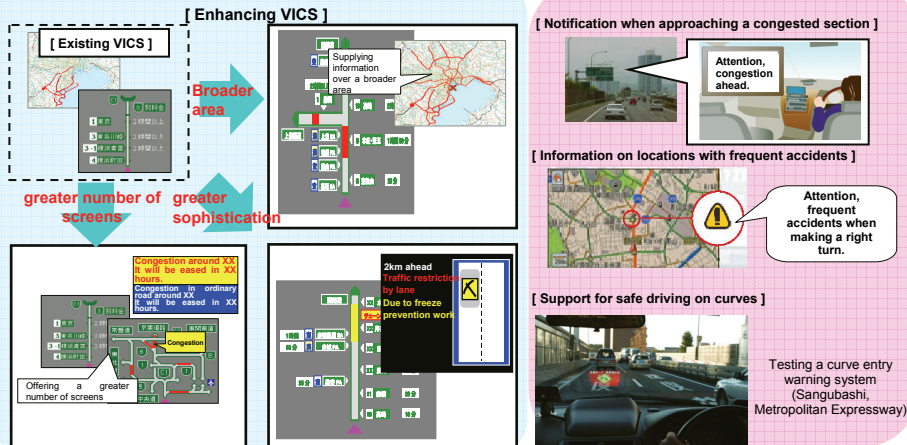
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4. Conceptualization of ITS Based Services



[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



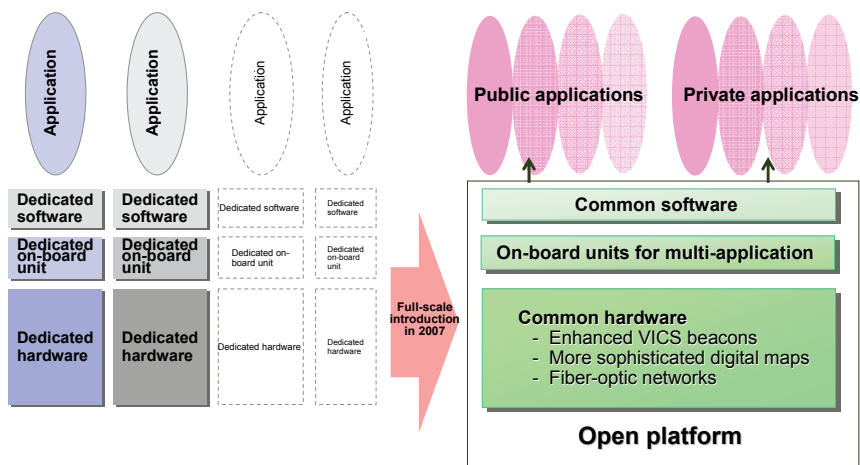
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5. Establishing a common infrastructure



(1) Establishing a common infrastructure

- The elements of infrastructure (open platform) are to be established in order to enable shared use by many operators.



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5. Establishing a common infrastructure



(2) Promotion of ITS on-board units

- Determining standards and specifications through joint public-private efforts
- Ensuring security and mechanisms to provide safety from the user's standpoint
- Looking to international standards in project implementation
- Giving thorough consideration to traffic safety



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