

Sustainable Urban Transport Policies in Korea

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Outline

- Background and introduction
- EST in general
- Livable and Sustainable Cities
- Special Legislation for EST in Korea
- A Policy Case for EST: Promotion of Public Transport in Korea

Background and Introduction

- Recently, greenhouse gas emission and the possibility of global warming have become the main environmental concern in the transport sector.
- Transport sector is the dominant source of urban air pollution and noise disturbance in most cities in the world.
 - 20 – 30% of total energy consumption
 - More than 90% of air pollutant emission in urban areas
- Controlling transport activity and thus energy consumption in the transport sector has been regarded as very difficult

EST in General

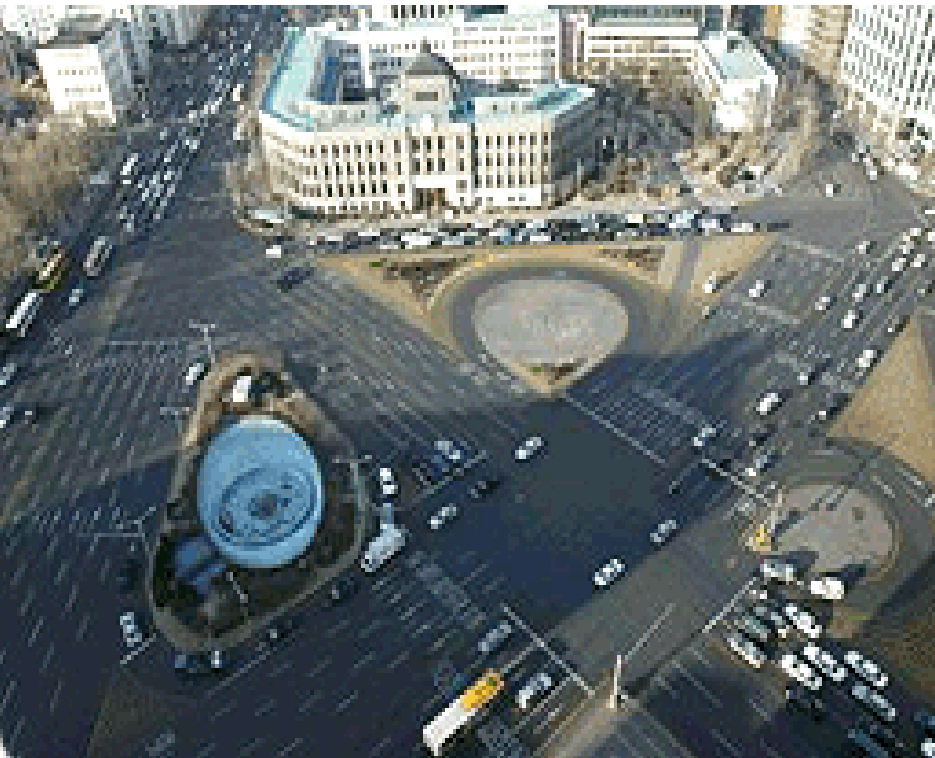
- Transportation demand is a Derived Demand
- Reduction is extremely difficult
- Rapid Motorization Everywhere
- Definition of EST: EST is: Transportation that does not endanger public health or ecosystem and meets needs for access consistent with (a) use of renewable resources at below their rate of regeneration, and (b) use of non-renewable resources at below their rate of development of renewable substitute (OECD)

Livable Cities: Seoul City Cases

May. 1. 2004 Opened

→ Restrain Traffic Flow

→ Pedestrian Square



Before



After

Street for People: Cheonggyecheon

Before



After



Livable and Sustainable



< Goyang City and Lake Park >

Photos by Sungwon LEE

Comparison of Cities



Leipzig, Germany



Dallas, United states



Sejong City, Korea




Bike Highway in Sejong City,


EST Law in Korea

- EST Law in Korea was enacted in 2010
- “Environmentally Sustainable Transport and Logistics Law”
- Motivated by UNFCCC and Kyoto protocol
- Empowers MLTM to exercise diverse regulatory measures

Important Provisions in the EST Law

- EST planning by MLTM and Provinces
 - Long term planning by MLTM
 - Regional planning by Provinces
- Regional planning requires long term land use and transportation planning consistent with EST

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- EST zoning and EST indicator based management
 - Arterial transportation zone
 - Urban transportation zone
 - Regional transportation zone
 - EST related indicators
 - Environmental indicators
 - Economic indicators
 - Social indicators

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- Integrated urban planning
 - Urban planning must consider EST
 - Green transport promotion
 - Walking and bicycles
 - Walking related infrastructure and survey
 - Bicycle related infrastructure and safety plan

Transport Policies for EST

- Diverse measures required for EST in transport sector
- Technological innovation and economic incentives
- Limitations in policy options and secondary impacts
- No Panacea
- A comprehensive approach is required

Integrated Public Transport Fare and Other Improvements

■ Distance based fare

- Subway single trips
 - : fare according to distance-traveled
(basic fare : 1,000 Korean won (1 US Dollar) up to 12 km;
extra fare of 100 Korean won for every additional 6 km)
- Bus single trips : single fare of 1,000 won

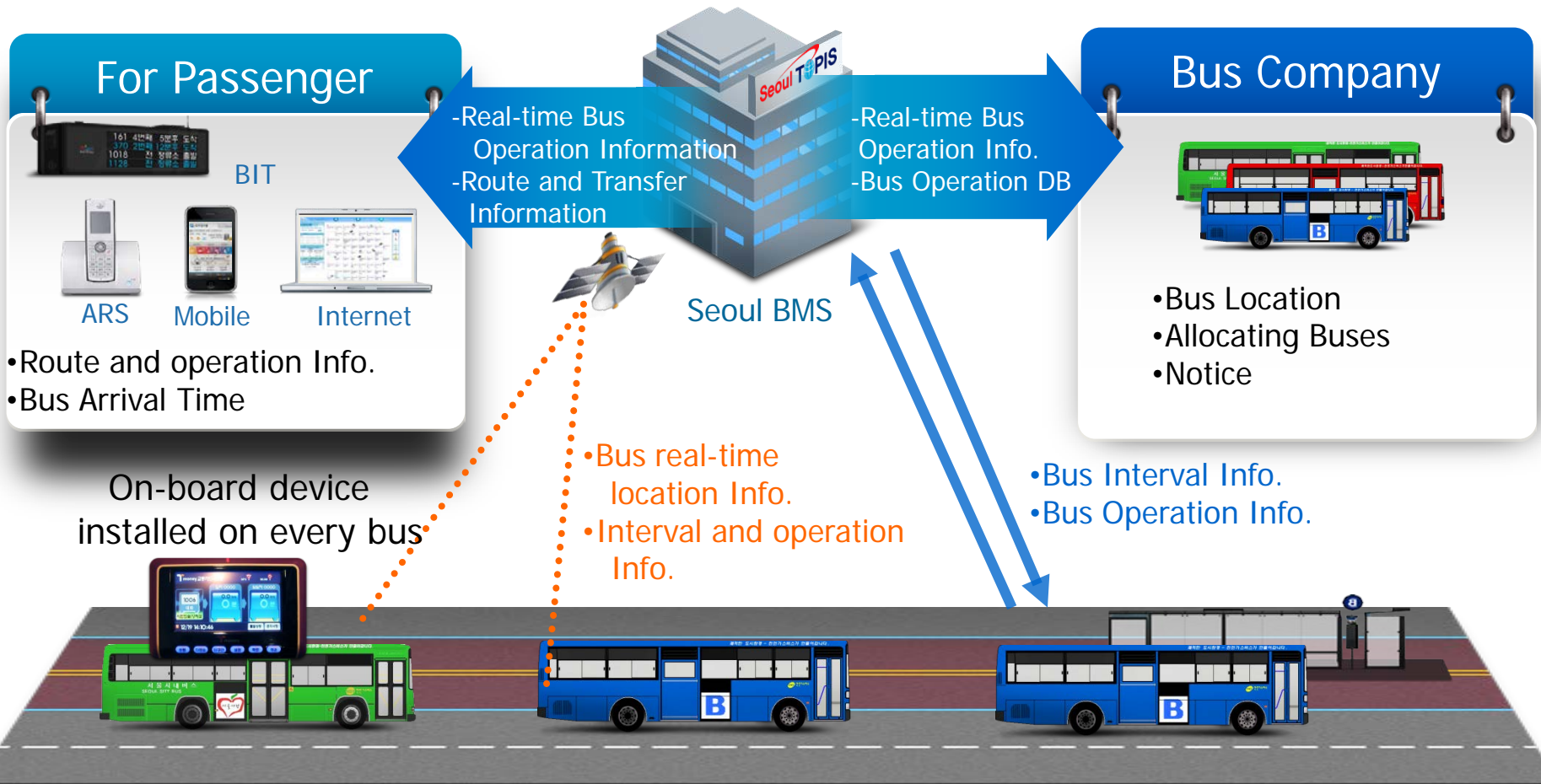


■ Free of charge for transfers

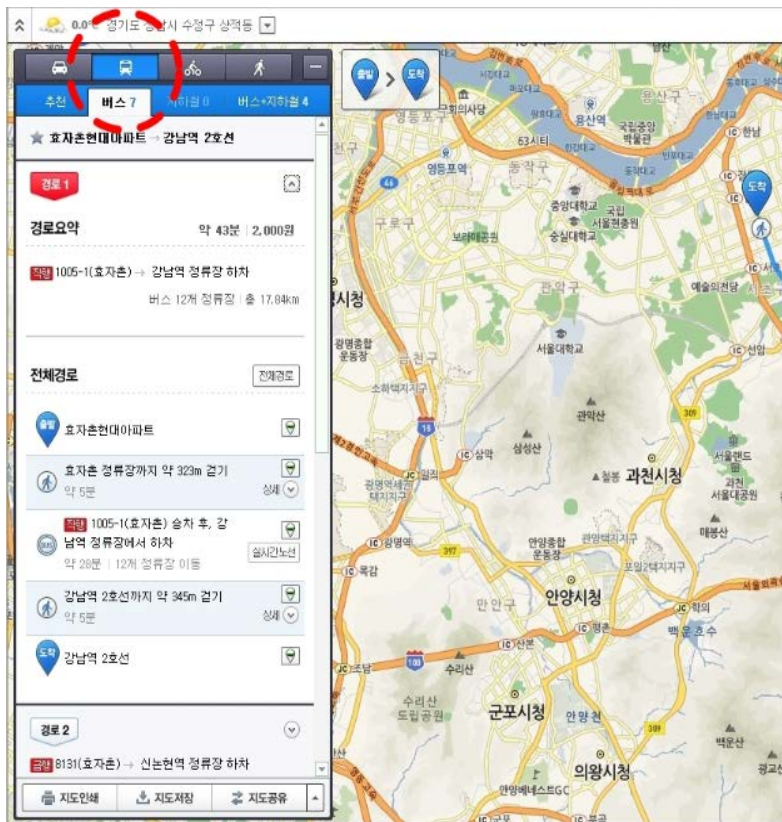
- For transferring trips
 - : accumulated distance-based fare system
→(basic fare up to 10km;
extra fare for every additional 5 km)



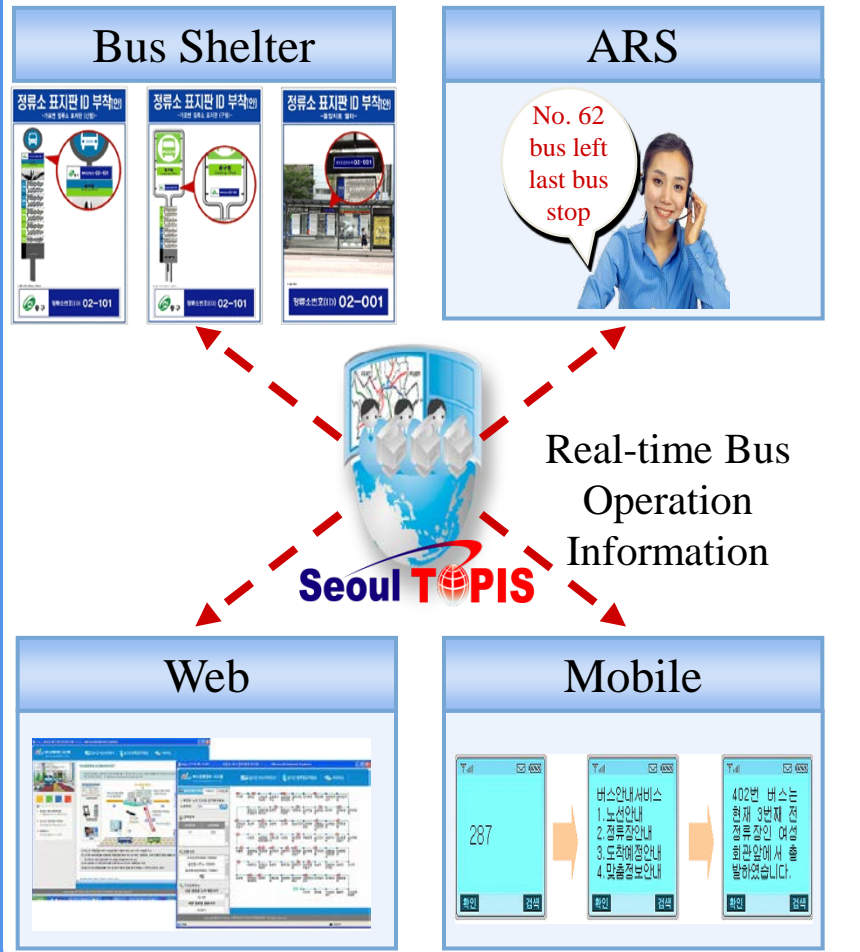
■ Bus Management System : Efficient management of bus services



Bus Information System



Bus Information Service

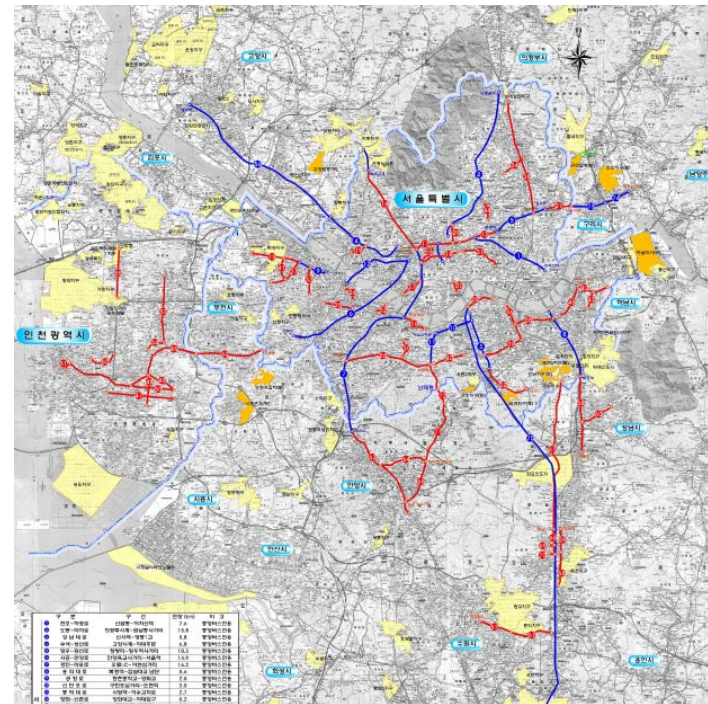


Exclusive Bus lane

- Provides faster and reliable travel within the service area
- Attracts patronage from private vehicles



Median exclusive bus lane



Bus lane Network In Seoul

Bus Station Improvement

Stops Improvement

Before



Shelter & Fence installation

After



Thank You.
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