

**International Research Activities :
Issues, Priorities, and Lessons Learned
– A Korean Case**

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Jaehak OH

Vice-President

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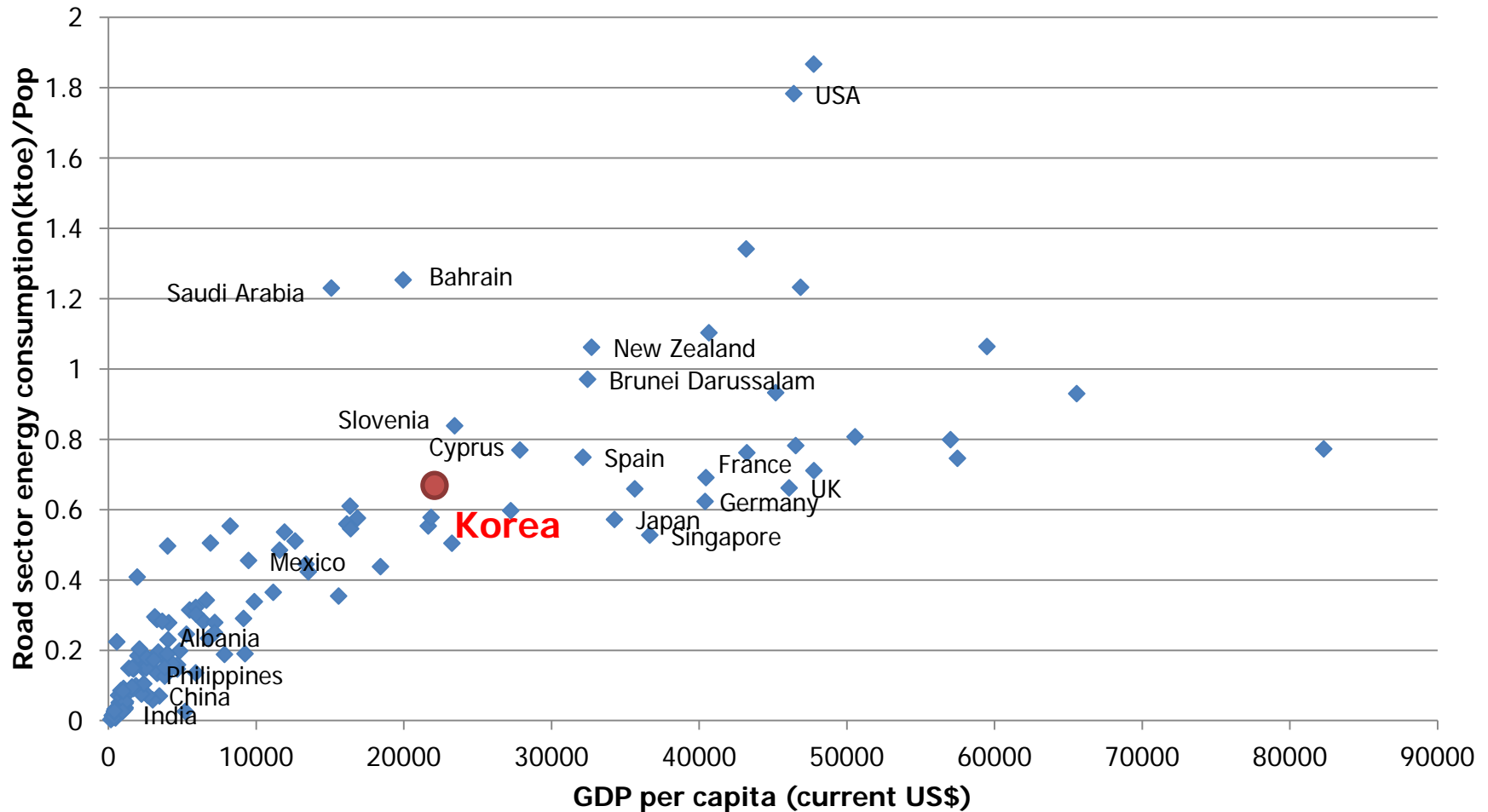
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I . Features of Korea's Transport Development

- **Sustainable Development**
- **Virtuous Cycle for Transport Investment**
- **Road-Oriented Public Transport**

Sustainable Development Model



Source: World Bank (2012)

Virtuous Cycle for Transport Investment

Stable Financing: Transport Infra. Special Account
(Ear-marked Fuel Tax)



Timely Investment (Incheon International Airport, HSR)



Increasing Automobile Ownership



Achieving Top 5 Automobile Industry

Road-Oriented Public Transport

- **Supporting both Passenger and Freight without Sufficient Railway Network**
- **Bus-Oriented Public Transport Service**
 - Expressway HOV Lane (Length 134km)
 - Bus Rapid Transit (17 corridors, 190.8km)
 - Utilization of ICT (Smart Card Payment System, Free Transfers)



II. Research Organizational Structure

- **Transport Related Research Institutes**
- **KOTI (The Korea Transport Institute)**
- **KICTEP (Korea Institute of Constsuction&Transportation
Technology Evaluation and Planning)**

Transport Related Research Institutes

Institute		Functions
Research Conducting	KOTI	Road, Rail, Aviation, Urban Transport and Logistics (Policy, Planning and Technology)
	KRIHS	Land and Housing (Policy and Planning)
	KMI	Maritime and Seaport
	KICT	Construction and Water Resource (Technology)
	KRRI	Rail (Technology)
Research Administration	KICTEP	R&D Programming and Management

KOTI (The Korea Transport Institute)

■ Function and Role

- National Think-Tank
- Support national transport policies and innovative technologies
- Research on road, rail, aviation, logistics, etc.
- International Collaboration: OECD, World Bank, ADB etc.
- Knowledge Sharing & Capacity Building
 - : Bridging gap between developed and developing countries

■ **Budget: 35 million US\$ / Year (40% Gov. Grant)**

■ **260 Researchers (70 PhDs), 200 Research Projects / year**

- **KICTEP: Korea Institute of Constsuction&Transportation
Technology Evaluation and Planning**
- **Fuction: National R&D Administration**
 - Planning and distribution
 - Evaluation
 - After-management
- **Budget: 416 million US\$ for Year 2012**
(Construction 47%, Transportation 53%)



III. Policy and Research Issues

- Goal of Transport Policy and Research**
- Priority Issues for Transport Policy and Research**

Goal of Transport Policy and Research

- **Strengthen national economic growth and global competitiveness through improved efficiency of transportation system**
- **Innovate transportation policies and technologies**
- **Upgrade people's quality of life toward better safety, mobility, environment and security**

Issue 1: Reforming Public Transport

- **Success in 2004 Seoul Public Transport Reform**
(World-wide benchmark case)
- **Integration of National Public Transport System**
(Hub-spoke network combined with HSR)
- **Real-Time Journey Information and Payment System**
- **Developed into “One Nation, One Transport City”**

Issue 2: Remodeling Transport Infrastructures

- **Vehicle-Oriented → Human and User-Oriented Facilities**
- **Improving Level of Transport Safety**
- **Increasing Usage of Non-Motorized Transport Modes and Public Transport**

Issue 3: Expanding Urban Rapid Transit and HSR

- **For Seoul Met. Area, X-Shaped Urban Rapid Transit**
- **For Inter-City Transport, Expanding HSR Network**
(To cover 85% of the national territory)
- **HSR Station Area Developed as Regional Transportation & Economic Hub**
("KTX Economic Zone")

Issue 4: Promoting Intelligent Transport System

- **Leading ICT Country**
- **Utilization of ICT for Competitiveness of Transport System**
- **Focusing on Green Transport, Public Transport Operation and Safety**

Issue 5: Innovating Transport Financing Mechanism

- **Decrease in Financing Capability**
(Due to national budget deficit and people's welfare demand)
- **Encouraging PPP (Public-Private Partnership)**
(Public agreement on minimum revenue guarantee vs. risk-taking)
- **Realization of Transport Pricing Policy**
(Establishing public consensus)



IV. Lessons Learned

- Lessons Learned from the Korean Case**
- Lessons behind Incheon Airport and HSR**

Lessons Learned from the Korean Case

- **Role of National Think-Tank for Innovating Transport Policy and Technology**
- **Securing Stable Financing Resources**
- **Timely Investment for Transport Infrastructure**

Lessons behind Incheon Airport and HSR

- **Timely Investment**
- **User-Oriented Design and Service**
- **Proactive R&D for Technology
Localization**



[Incheon International Airport]

Thank You.