



Environment-Friendly Traffic Policies in Seoul

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Contents

- Seoul at a Glance
- Traffic Conditions and Policies
- Exclusive Median Bus Lane System
- Weekly No Driving Day Program

1. Seoul at a Glance

Hi Seoul, Soul of Asia

- ❑ Capital of the Republic of Korea with 600 years of history
- ❑ Area : 605.6 km²
- ❑ Population : 10.3 M
- ❑ Internet Penetration Rate : 100%
- ❑ World No. 1 e-government
- ❑ Host of 1988 Summer Olympics, 2002 World Cup



A Clean and Attractive Global City

2. Traffic Conditions & Policies

Traffic Conditions

- ❑ Vehicles : 2,857 thousands
(Passenger Cars 2,140 thousands)
- ❑ Subway : 8 lines, 286.7 km
- ❑ Bus : 402 routes, 7,792 buses
- ❑ Road : 8,067km (Road Ratio 21.8%)
- ❑ Cyclist Way : 648.8 km
- ❑ Mode Share (%)



Subway	Bus	Cars	Taxi	Others
35.0	27.8	26.1	6.3	4.8

2. Traffic Conditions & Policies

● Key Environment-Friendly Traffic Policies

Promotion of Public Transport

- Extension of Subways & Service Improvement
- Reform of Public Transport System (Integrated Transfer, BMS, Routes Reorganization)
- Exclusive Bus Lane

Reduction of Traffic Volume

- Weekly No Driving Day, TDM for Enterprises
- Congestion Charge, Parking Demand Management

Expansion of Green Transport

- Expansion of Cyclists and Cyclist Ways
- Pedestrian-First Policy, Car Free Ways

Reduction of Vehicle Emission

- Low Emission Vehicle (Hybrid, CNG Vehicle)
- Retrofitting or Remodeling to LPG Engine of in-use Diesel Vehicles
- Diffusion of Cleaner Fuel (Bio-Diesel, Natural Gas)

2. Traffic Conditions & Policies

● Reform of Bus System

□ Reorganization of Bus Routes

- 4 Types : Trunk (Blue), Feeder (Green)
Circular (Yellow), Wide area (Red)

□ Semi-Public Operation System

- Route Bidding System, Jointed Revenue Management

□ Integrated Transfer Fare System

- Bus to Subway Transfer, Free or Discounted Transfer (5 times)

□ IT-based High-tech Management

- BMS with GPS, Smart Card (T-money)

□ Extension of the Exclusive Median Bus Lane



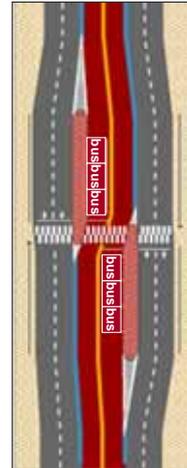
3. Exclusive Median Bus Lane

• What is the Exclusive Median Bus Lane ?

- Buses run the median lanes of roadways.
- Bus stops also locate in the middle of roadways.
- Other vehicles are not allowed to use MBL



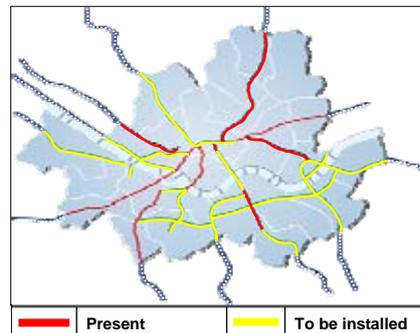
Improvement of Bus Services & Public Transport System



3. Exclusive Median Bus Lane

• Running MBL

- Introduction in 1996, Extension in 2004
- 7 Routes, 67.9 km
- To be extended to 12 routes, 117.6 km (by 2010)



Exclusive Curbside Bus Lane
- 66 routes, 209 km (since 1985)

3. Exclusive Median Bus Lane

● Effects of MBL (1)

❑ Punctual

- Arrival Time Deviation
 $\pm 1\sim 2$ min

❑ Rapid

- Speed Up 18~82%

❑ Safe

- Accident Decrease 13.6%



3. Exclusive Median Bus Lane

● Effects of MBL (2)

❑ Comfort

- Passengers Increase 15~38%

❑ Environment-Friendly

- Emission Reduction (Diesel Bus to CNG Bus)



Promotion of Environment-Friendly Transport

4. Weekly No Driving Day Program

What is the Weekly No Driving Day Program?

- Voluntarily choosing one day among weekdays as a no driving day
- Citizens movement to not drive one's car on the pre-selected day each week



Air Quality Improvement

Congestion Relief

Energy Savings

4. Weekly No Driving Day Program

Outline of Weekly No Driving Day Program

Introduction	<ul style="list-style-type: none"> ■ Proposal from NGO (2003.7)
Eligible Vehicle	<ul style="list-style-type: none"> ■ Non-commercial vehicles carrying less than 10 passengers
Application Method	<ul style="list-style-type: none"> ■ By Internet (http://www.no-driving.seoul.go.kr) ■ By visiting the community, district office or city hall
Time Applied	<ul style="list-style-type: none"> ■ 7 a.m. to 10 p.m. on a selected day (Excluding Saturdays, Sundays, Public holidays)
Implementation	<ul style="list-style-type: none"> ■ Receive a set of e-tag & sticker ■ Attach e-tag to windscreen & sticker to rear window ■ Do not drive on a selected day

4. Weekly No Driving Day Program

Incentives for Participants

By Public Organization

- 5% Reduction in Auto Tax
- 50% Discount on Congestion charge
- 10~20% Discount on Public parking fees



By Private Sector

- 1~6 cents/L Discount on Gasoline price
- 10% Discount on Car maintenance cost
- Free or Discount on Car washes



4. Weekly No Driving Day Program

Upgrade of Weekly No Driving Day Program

Introduction of RFID (Radio Frequency Identification) to verify compliance and provide differentiated incentives for sincere observer

Application and Receipt of e-tag



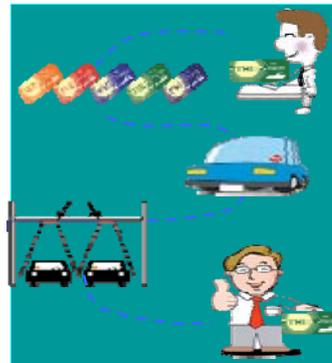
Attachment of the Tag to the car



Verification of Compliance
by RFID Readers



Incentives for Sincere Participants



4. Weekly No Driving Day Program

● Participants with e-tag

□ Participant Cars with e-tag (2006)

- 653 thousands (Participant Rate : 30%)

□ Participants by day

(Unit : thousands)

Total	Mon	Tue	Wed	Thu	Fri
653	172	148	145	99	89
(%)	(26.3)	(22.7)	(15.2)	(15.2)	(13.6)

4. Weekly No Driving Day Program

● Expected Effects

1 million cars participating...

3.7% Decrease in traffic volume
3% Increase in operating speed
10% Reduction of emission
3.5 $\mu\text{g}/\text{m}^3$ Reduction of PM₁₀
50 m US\$ annual savings in fuel costs



Air Quality Improvement & Clean City



Thank You

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