TOPIS

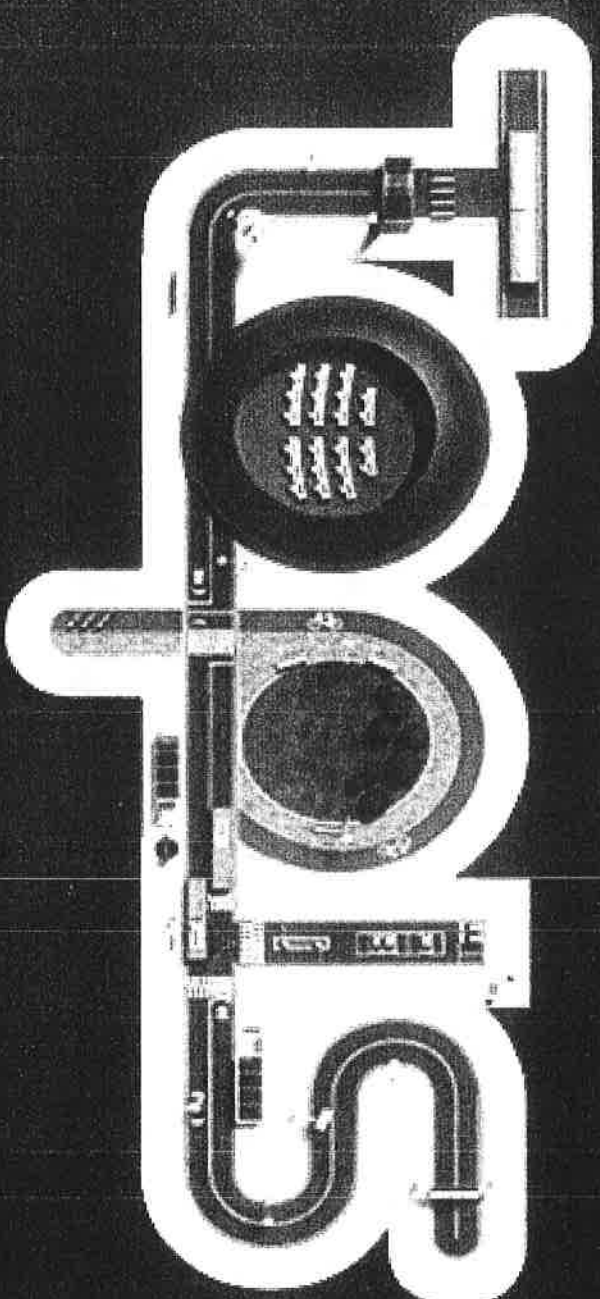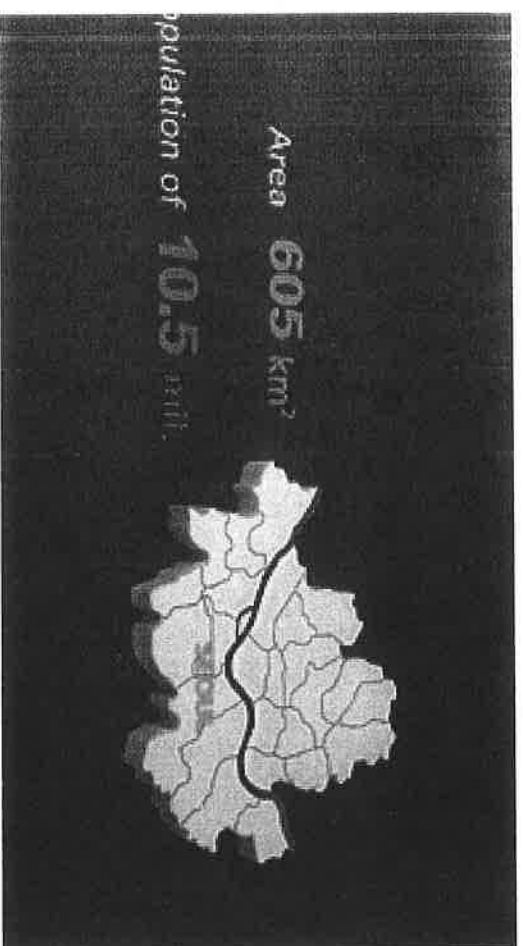## SEOUL
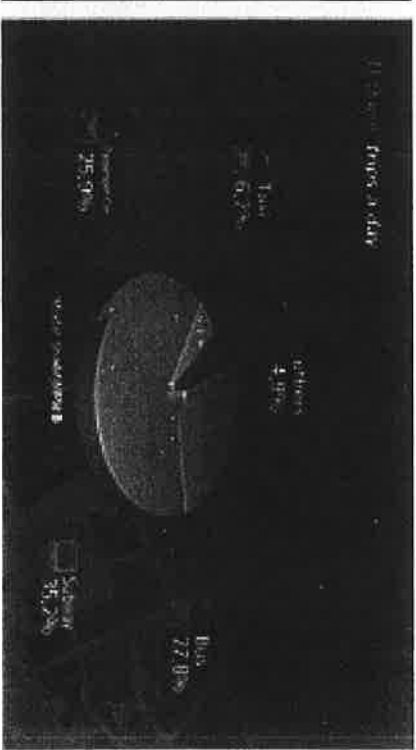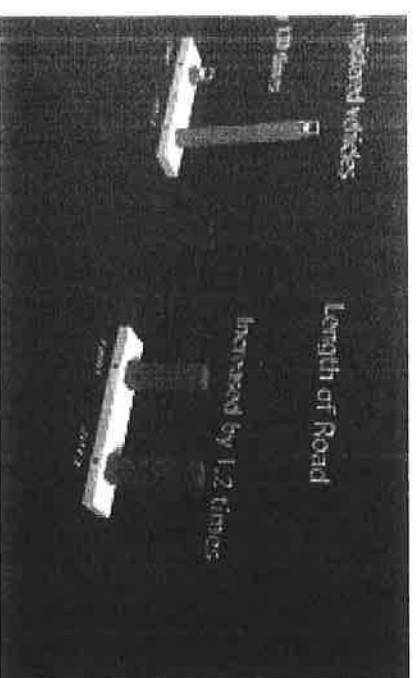
Transportation OPeration & Information Service

English

Information on Transportation in Seoul

- Area : 605 km2
- Population : 10.5 million
- Registered Vehicles : 297 million vehicles (increasde by 130 times from 1980)
- Total Road Length : 8,102 km (increasde by 1.2 times from 1980's)
- Tip Production : 31.9 million trips per day

Area **605** km²

opulation of **10.5** *mil.*

registered vehicles

Length of Road

increased by 1.2 times

31.9 mil. trips a day

Change in Transportation Policy (1950 ~ 1999)

- Inadequate Transportation Infrastructure (1950~1969)
- Expansion of Urban Infrastructure (1970~1989)
- Urban Expansion and Transportation Problems (1990~1999)

Change in Transportation Policy

Inadequate Infrastructure (1950~1969)

Trolly Cars disappeared

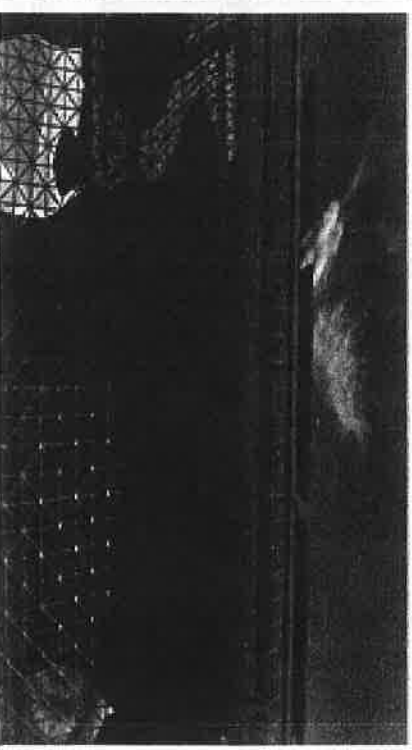Build Urban Infrastructure (1970~1989)

The Beginning of Subway

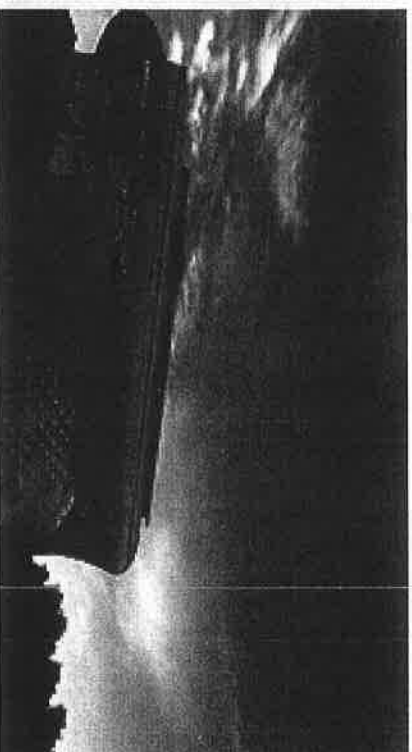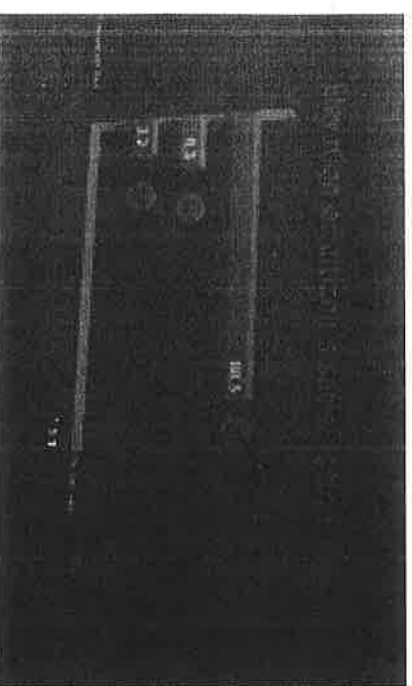Build Increase of Passenger Cars
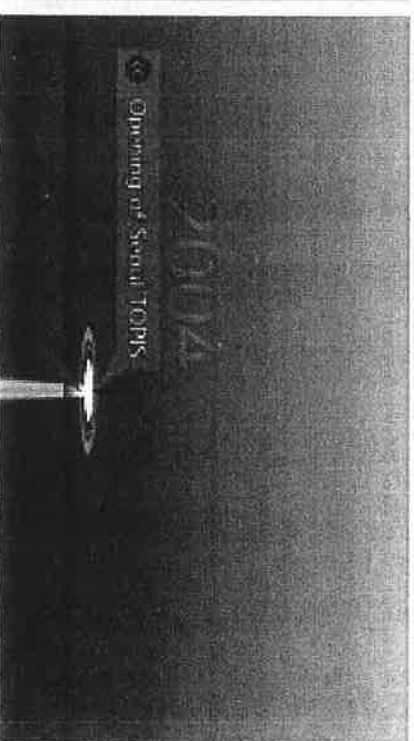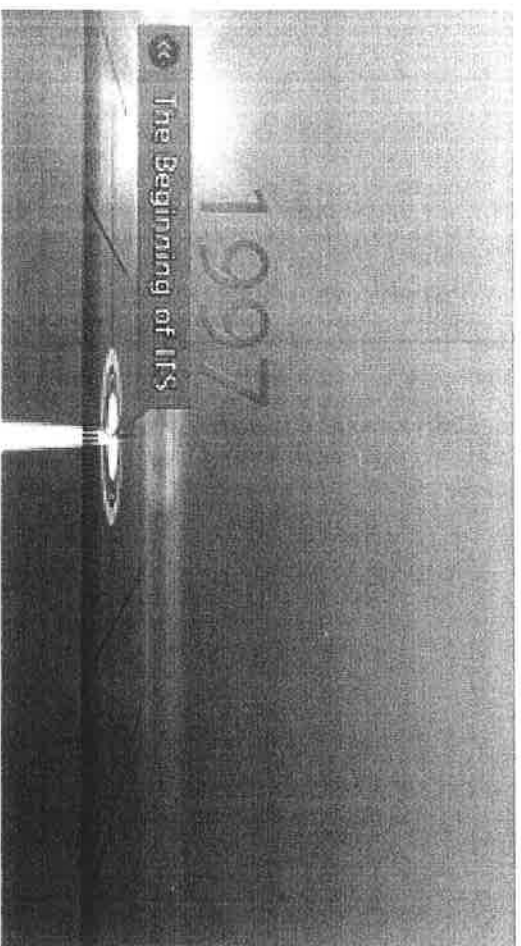
Effects from Transportation Policy

Increase of Passenger
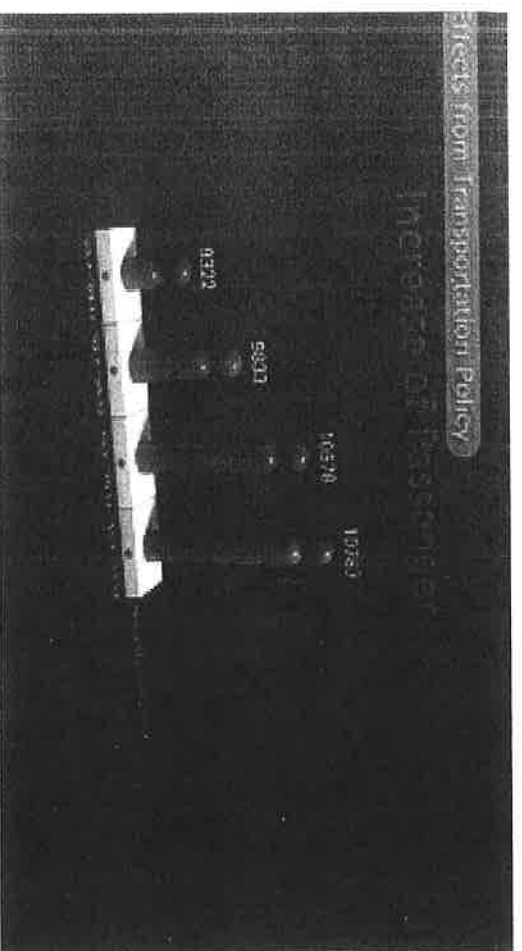
Effects of Policies on Traffic and Transportation

- Consistent increase of public transportation users
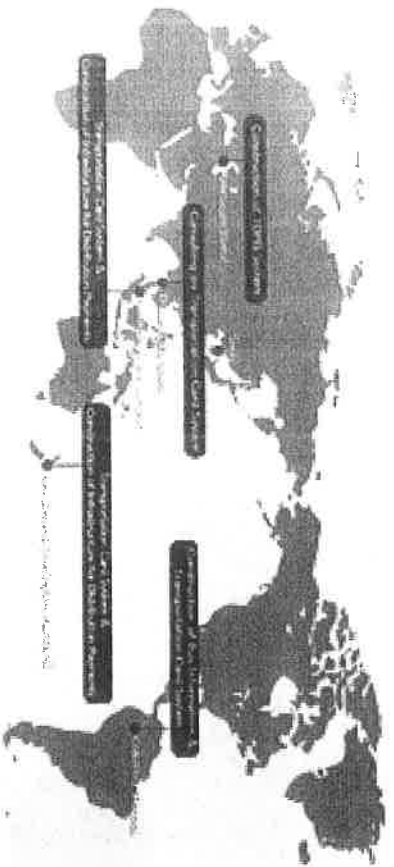- Improved satisfaction of citizens with public transportation

5

History of TOPIS (1997 ~ 2004)

- Construction of Traffic Management System in 1997
- Opening of TOPIS in 2004

The Beginning of ITS

1997

First time ever for Local Government

Traffic Management System for Expansion Region

Nambu Expressway 2003
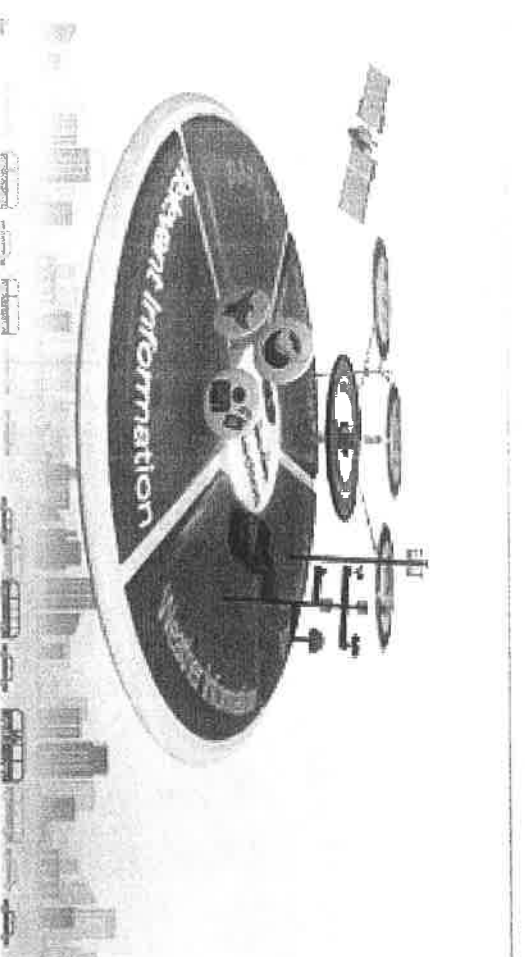
AVHS for Urban Expressways

2004

Opening of Seoul TOPIS

Expansion of Traffic Management System

- Many nations have adopted the advanced transportation system of Seoul

ADVANCED TRAFFIC MANAGEMENT SYSTEM
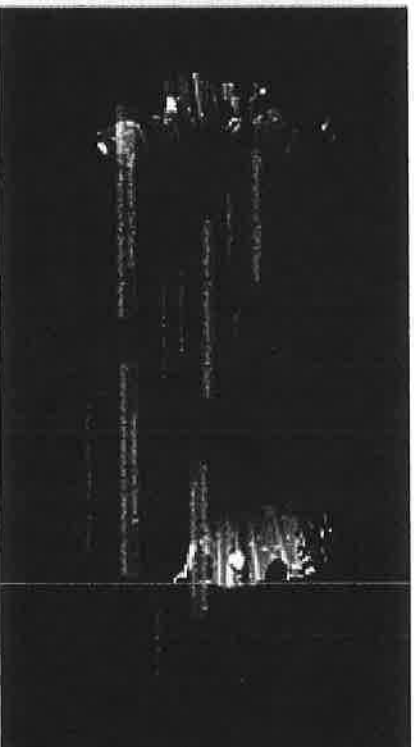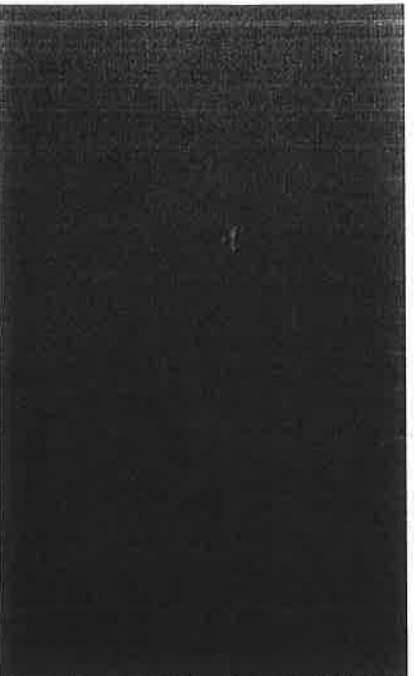
Collection and Processing of Traffic Information
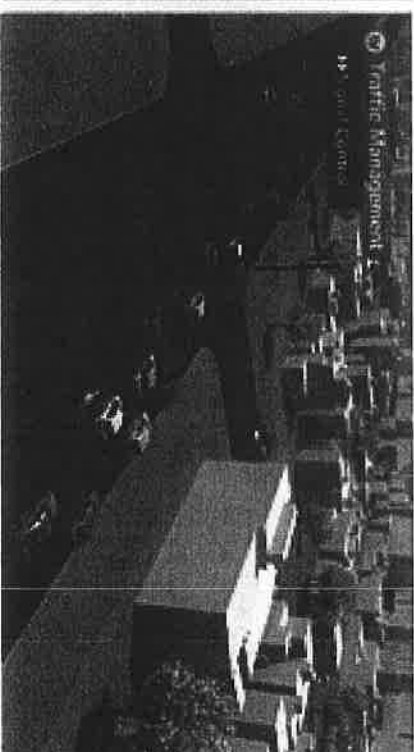
- Leased Communication Network / In-house Communication Network
- Loop Detector / Visual Detector
- CCTV / Onroad Weather Information System (RWS)
- Collection of Relevant Information
  (Metropolitan Police Agency, Meteorological Administration, Citizen's tip-off)
- Real-time Processing System upon Collected Information

Collection of Traffic Information

Traffic Volume

CCTV

ADVANCED TRAFFIC MANAGEMENT SYSTEM
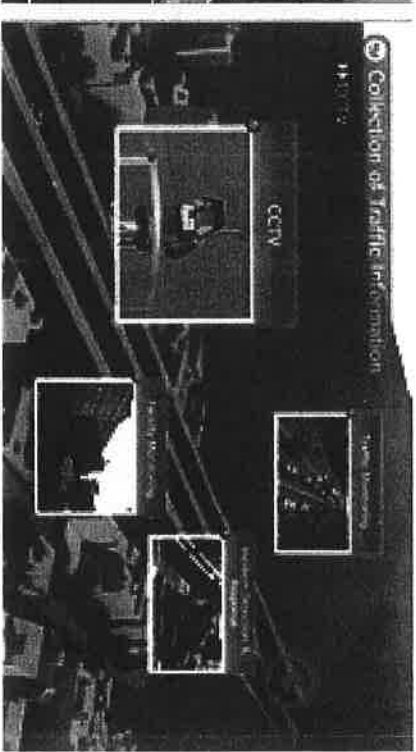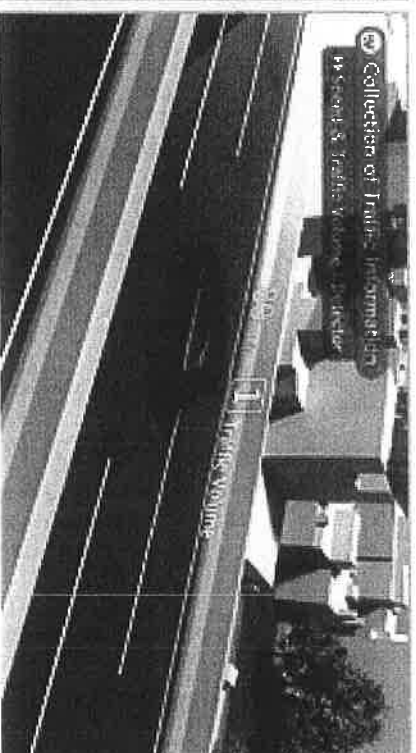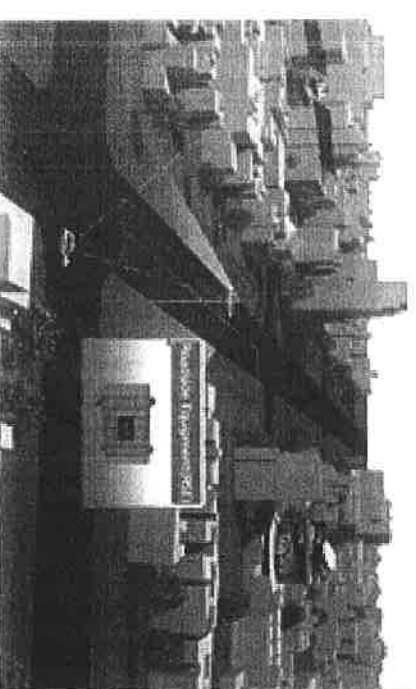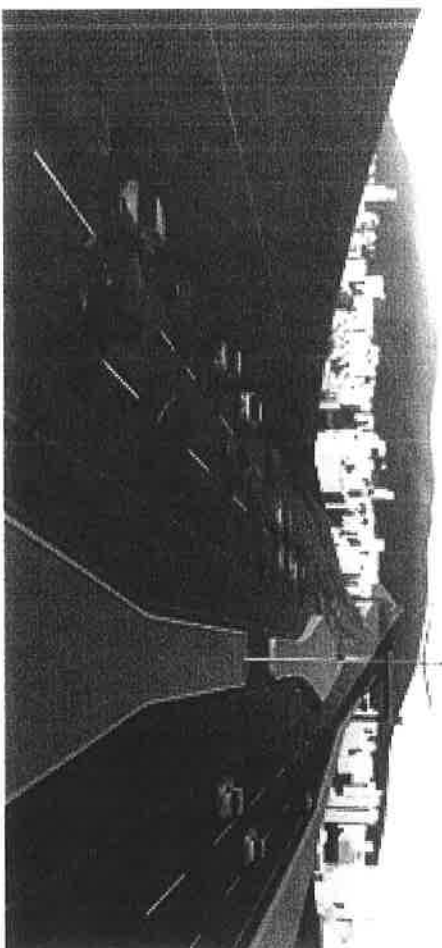
Responsive System of Traffic Management

- Automatic Incident Detection
- Information via Variable Message Signs
- Lane Control System / Ramp Metering System
- Signal Control
- Incident Simulation & Traffic Analysis System

Smart Public Transportation-Oriented City based on Advanced IT
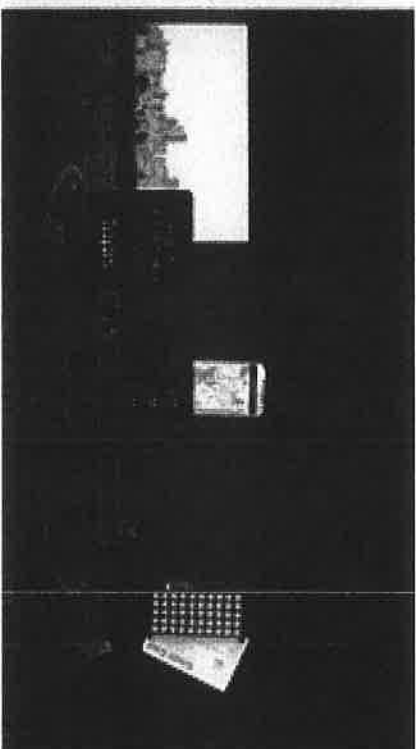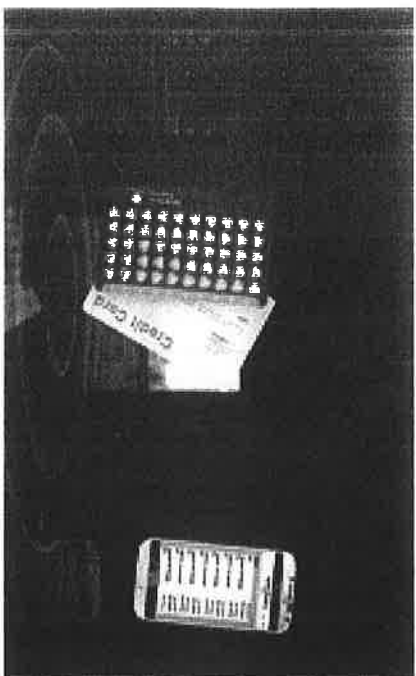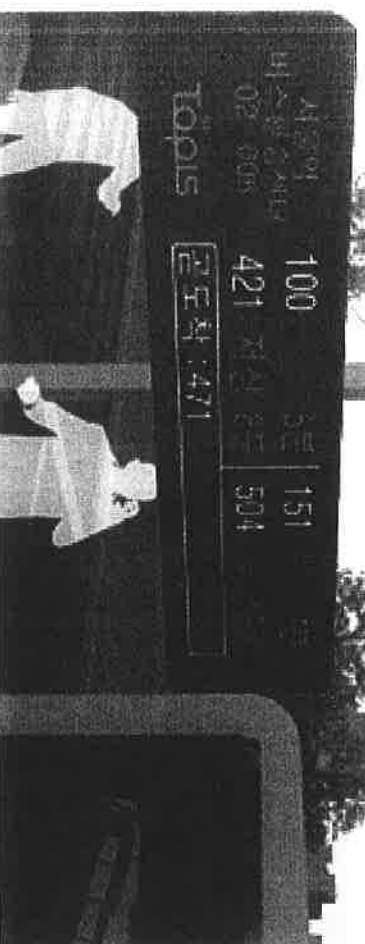
Smart Public Transportation-Oriented City

- Construction of Smart Public Transportation-Oriented City based on Advanced IT

15

PUBLIC TRANSPORTATION INFORMATION SYSTEM

Bus Information System (BIS)

BIT

Topis

| A760역 | | 100 | | 151 |
| 내소사입구 | | 421 | | 504 |

▶ Smart Phone

Bus Information System (BIS)
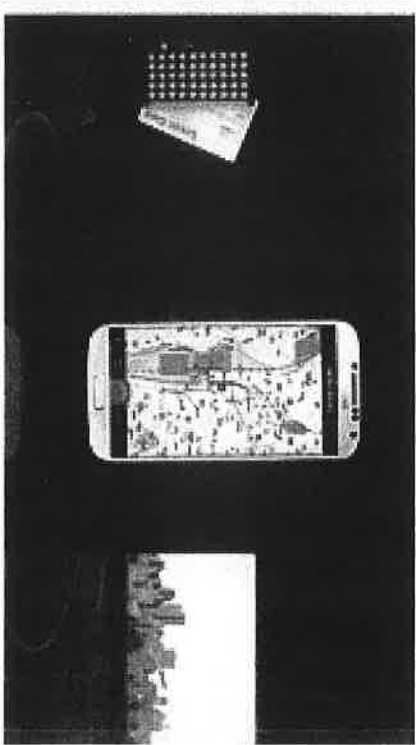
■ Bus Information System (BIS) ▶ QR Card

Bus Information System

- Information Available through Various Media
  (BIT, Smart Phone, ARS, QR Code, Official Website)
- Information Shared by Over 1.4 Million People on Daily Basis
- Implementation of Integrated Public Transportation Information Service

Precision on Bus Information

94 %

User Satisfaction

96.1 %

서울교통정보센터 Seoul Transport Operation & Information Service
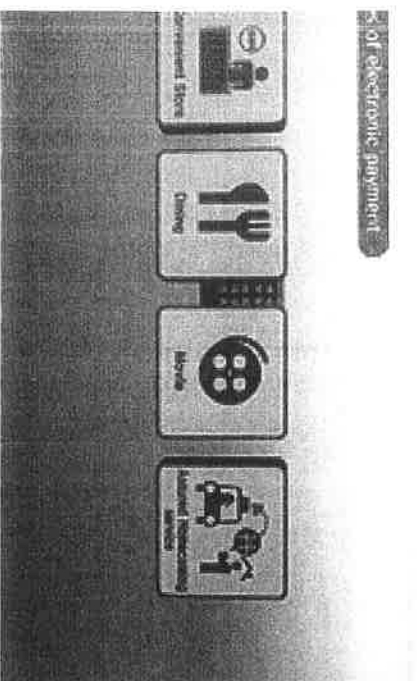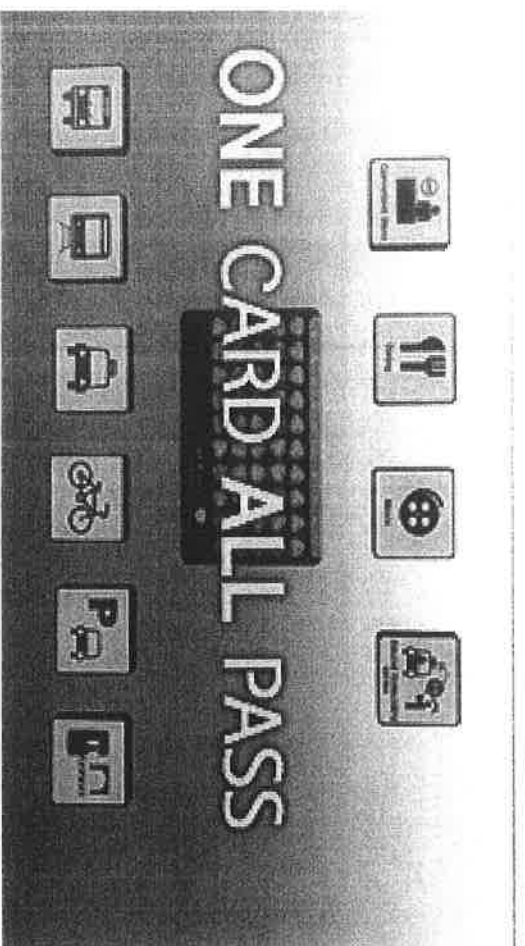
ONE CARD ALL PASS
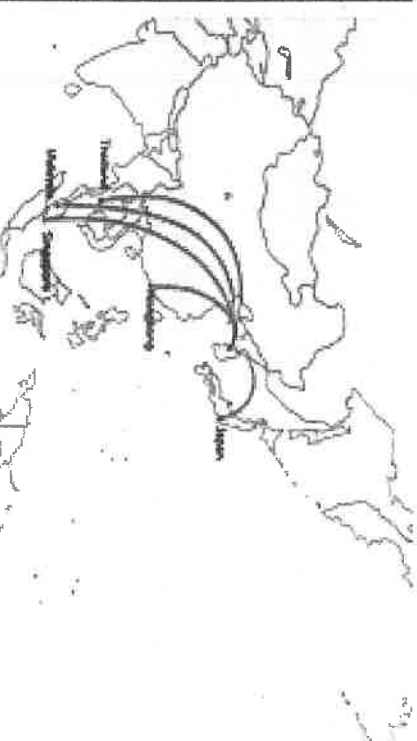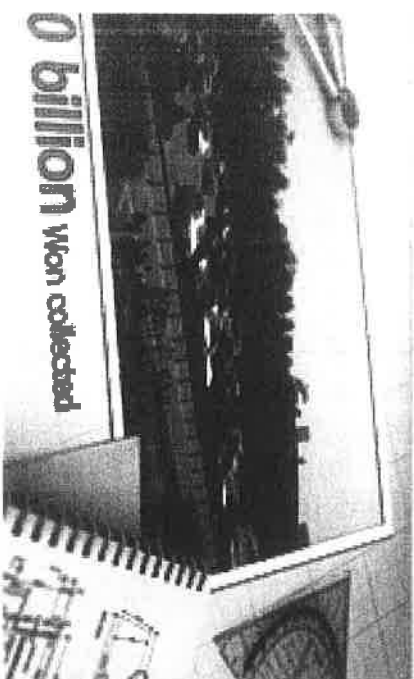
Utilization of Electronic Payment System

- ONE CARD ALL PASS
- Expansion of Transportation Card System
  (Nation-wide Compatibility & Standardization / International Compatibility
  and Standardization)

>> It is on its way currently to a Seamless Fare

>> Expansion of Transportation Card System

of electronic payment

UNMANNED REGULATION SYSTEM

Smart Public Transportation-Oriented City, Seoul

- 3 Million Annual Enforcements
- 120 Billion Won Collected
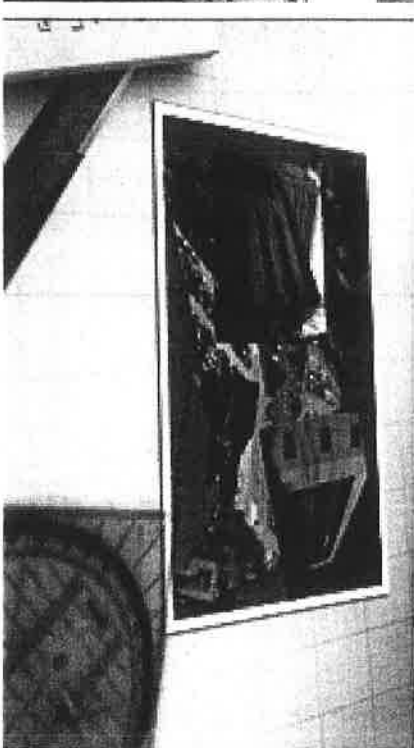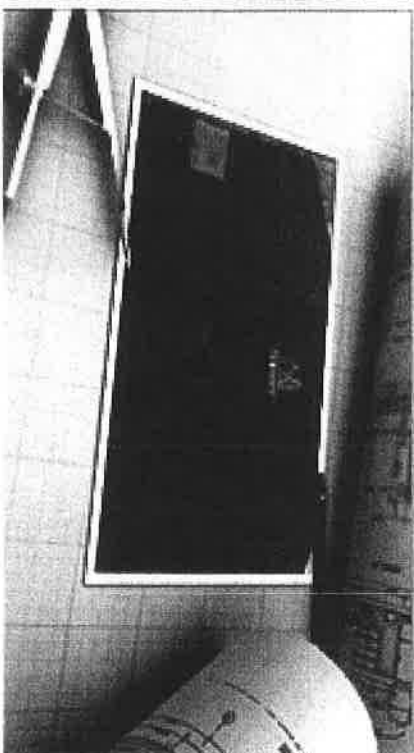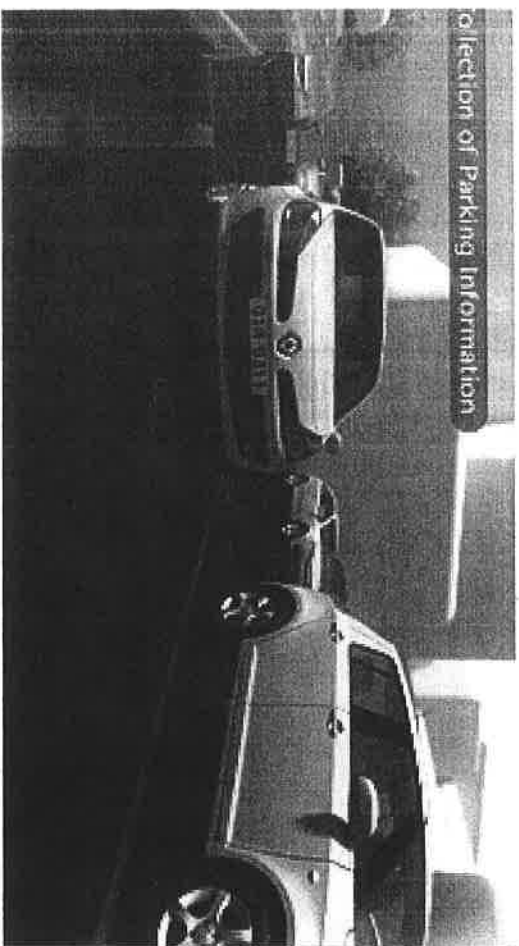- Capital Resource collected from penalties is to be reinvested to build public parking facilities

3 million annual enforcements

0 billion won collected

PARKING INFORMATION SYSTEM

Collection of Parking Information

USN Sensor

Wireless Transmitter

Processing of Parking Information

USN Sensor

Provision of Parking Information

>> Cheonggye Stream Street Parking Facility

>> Parking Information System(PIS) Display Station

Collection & Processing of Parking Information / Information on PIS Facilities
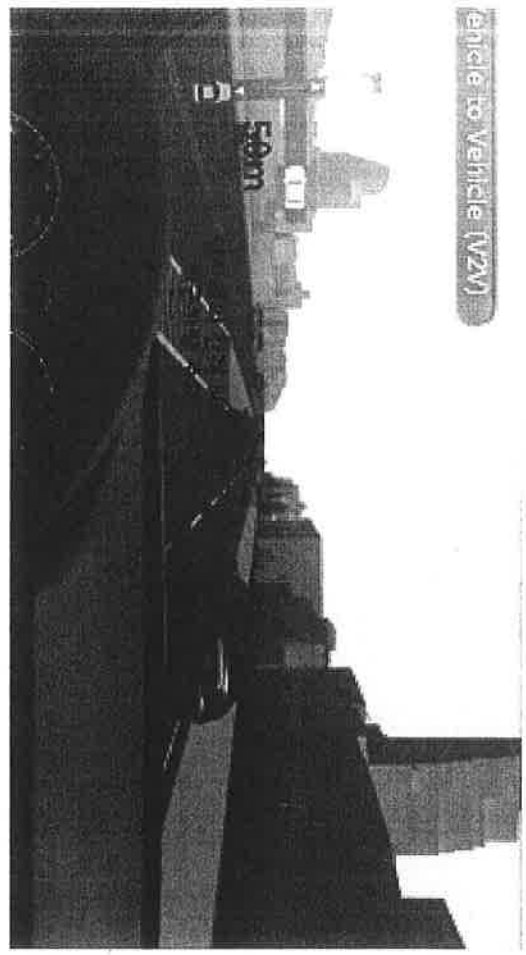
- Automatic Assessment of Parking Information using USN Sensor
- Real-time Parking Information through Parking Information System
- Public Parking Facility nearby Namsan Park / Public Parking at Chunggye creek
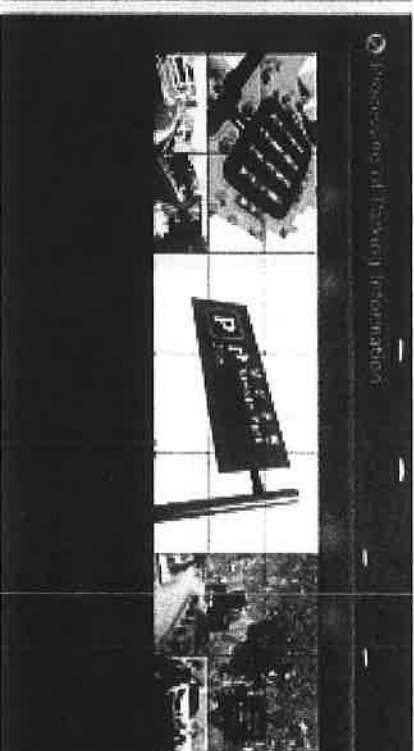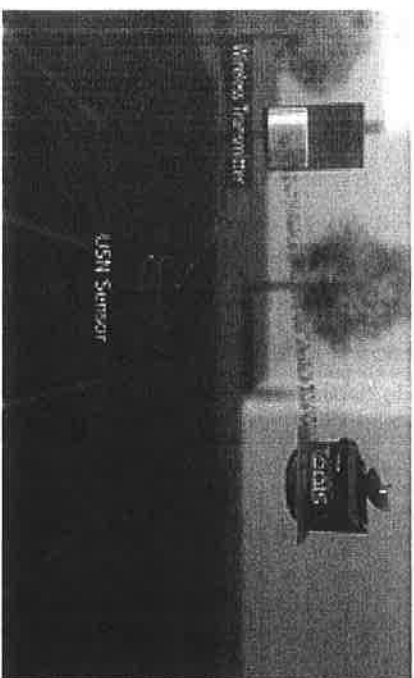
Vehicle to Vehicle (V2V)

Vehicle to Infrastructure (V2I)

Traffic Forecasting System - V2V / V2I

- Vehicle-to-Vehicle Communication
- Vehicle-to-Infrastructure Communication