

Seoul Metropolitan Region : Growth Patterns and Policy Agenda



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I . Profile of the Seoul Metropolitan Region (SMR)

Profile of Seoul Metropolitan Region(SMR)

(4/35)



- Political, economic and cultural center of the Korea
- Population : 46% of the national total (21.4mil.)
- Area : 12% of total national area (11,753 km²)

Profile of the SMR (5/95)

• Administrative structure

- Seoul Capital City
 - Incheon City
 - Kyonggi province
- (25 cities and 6 counties)

• Changes in the population

(unit : 1,000 persons)

	1980	1990	1995	2000
Seoul	8,364	10,613	10,231	10,373
Incheon	1,084	1,818	2,308	2,563
Kyonggi	3,850	6,156	7,650	9,280
SMR	13,298	18,587	20,189	21,354



Concentration in the SMR (6/95)

• *Leading role in the growth of Korea*

- high concentration of population, economic and other activities

• *Positive Side:*

- growth engine of national economy

• *Negative Side:*

- overcrowding
- cause of regional disparity

Share of the SMR

(2000)

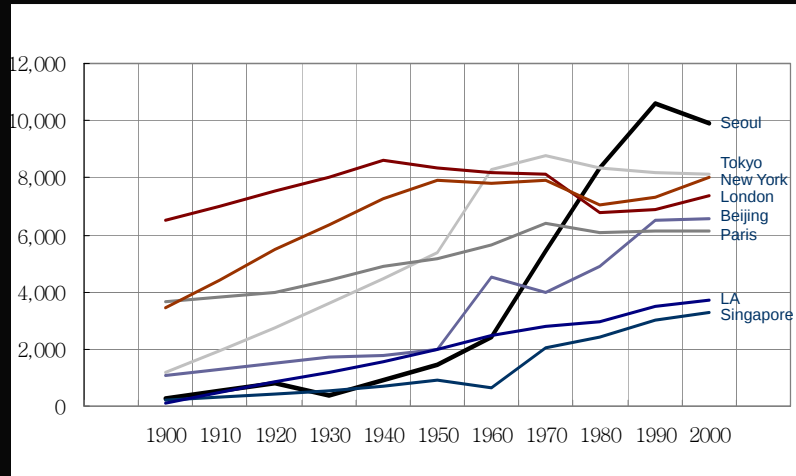
Indices	Share of the SMR
Area	11.8%
Population	45.6%
GRDP	46.4%
Business Establishments	43.7%
Manufacturing Establishments	48.8%
Bank Deposits	66.1%
Bank Loan	61.5%
Universities	42.3%
Government organizations	69.4%
Public Enterprises	83.3%

(7/35)

Population Growth Trends of Major World Cities

II. Growth Patterns of the SMR

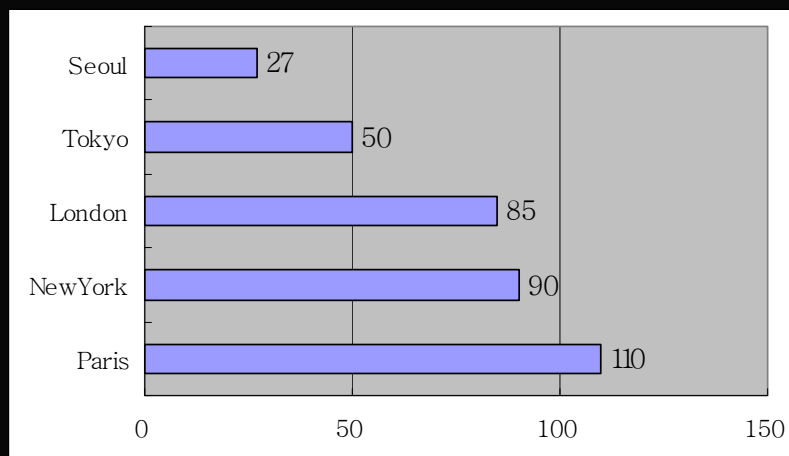
unit:1,000 person



(8/35)

Years taken from 1 mil. To 5 mil.

II. Growth Patterns of the SMR



Population Density

I .Profile of the SMR

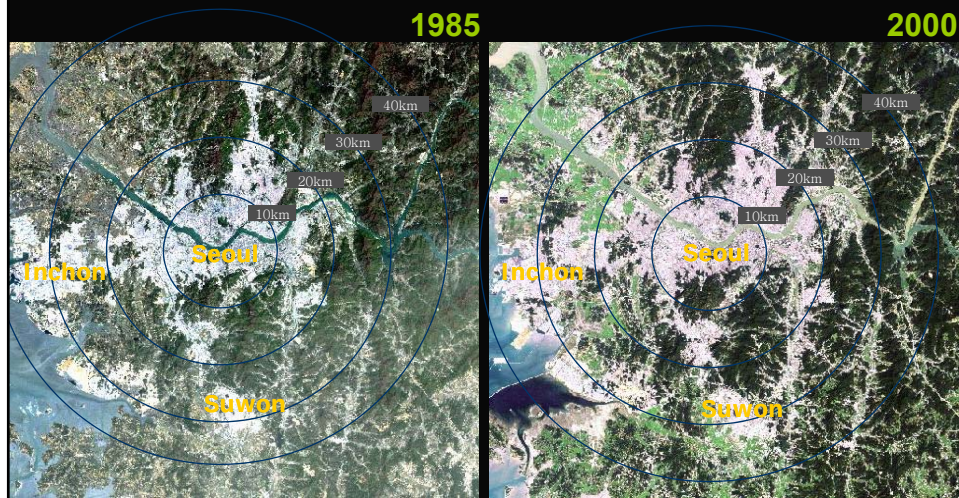
Major Metropolitan Regions in the World (2000)

(Based on the administrative area)

	Seoul (SMR)	L.A. (L.A, Orange country)	London (South East region)	Paris (Ile-de-France)	Tokyo	New York (Tri-state)
Area (km ²)	11,753	12,500	26,976	12,072	13,494	32,792
Population (mil.)	21.4	12.4	18.2	11.0	33.5	29.3
Population Density(/ha)	18.2	9.9	6.8	9.1	24.8	8.9

II . Growth Patterns of the SMR

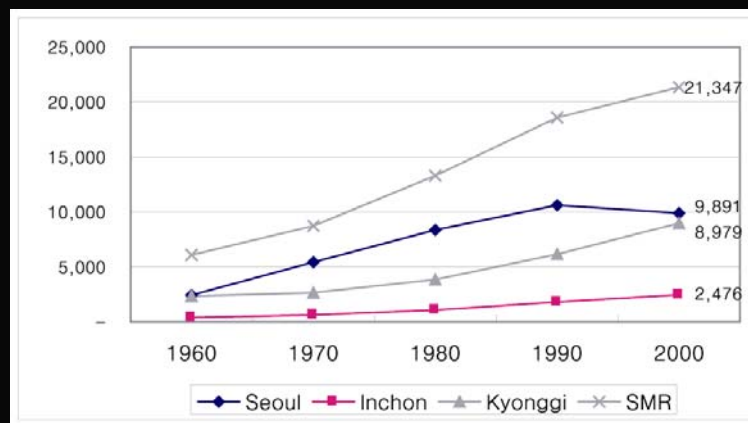
Physical Growth Patterns (11/35)



- Rapid urbanization of the SMA expanded from Seoul
- Dispersed pattern with new development corridors
- Leap-frog type urban sprawl beyond the RDZ

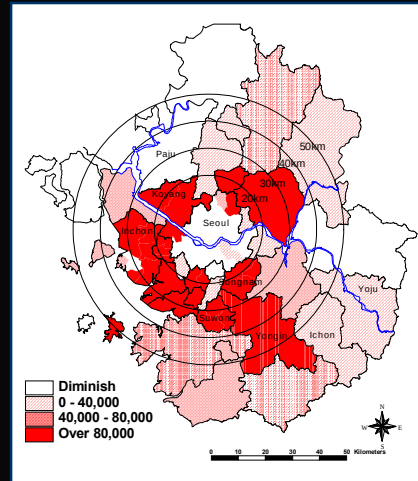
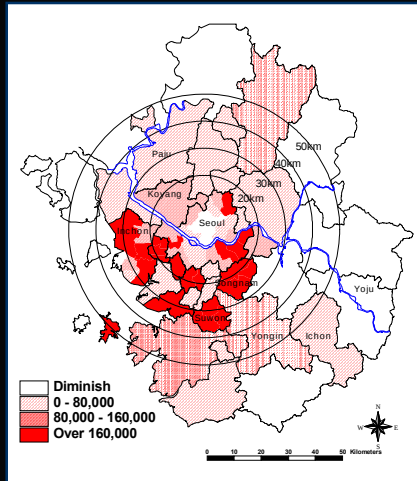
Population Growth Pattern('60~'00)

II. Growth Patterns of the SMR



Population Growth Patterns

II. Growth Patterns of the SMR



Estimated Population of the SMA in 2020

IV. Policy Agenda

Projected to Add approx. 4mil. More in next 20 years

- 21.4 mil. (2000) → 25.5 mil. (2020)
(source : Office of Statistics)

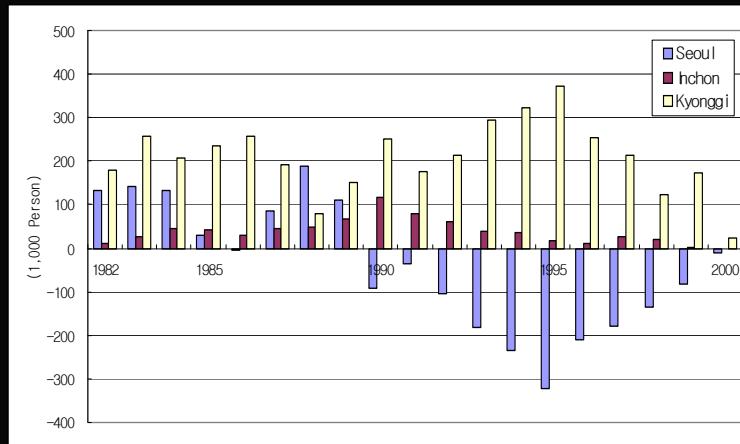
Estimated Land to Accommodate Increased Population

- About 300km²
(If 120 persons/ha is taken as a guide)
* Demand about half of Seoul's Total Administrative Area

(15/35)

Net In-migration by Regions

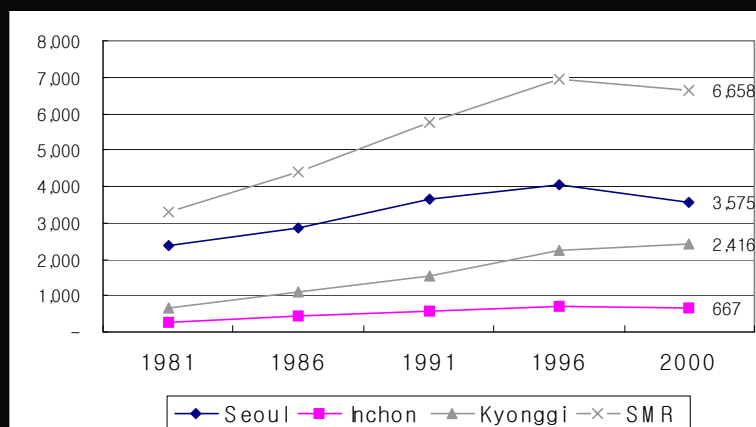
II. Growth Patterns of the SMR



(16/35)

No. of Employment by Regions

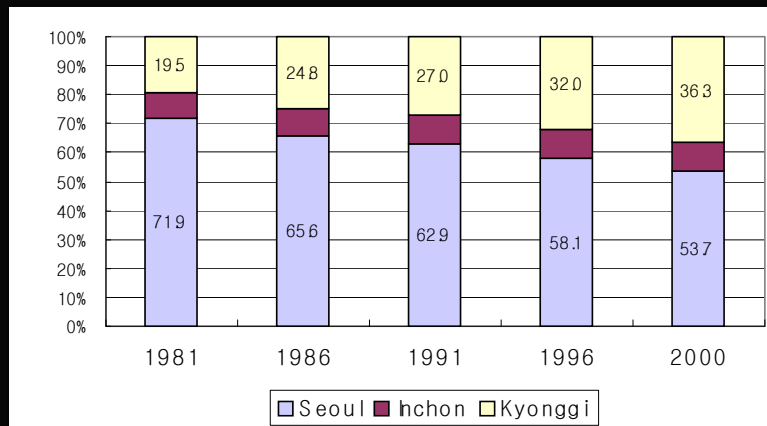
II. Growth Patterns of the SMR



(17/35)

Employment shares of the SMR by Region

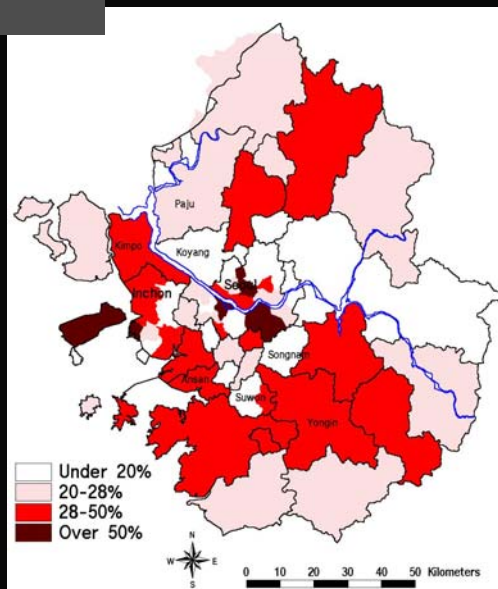
II. Growth Patterns of the SMR



(18/35)

Employment of Population by Sub-regions

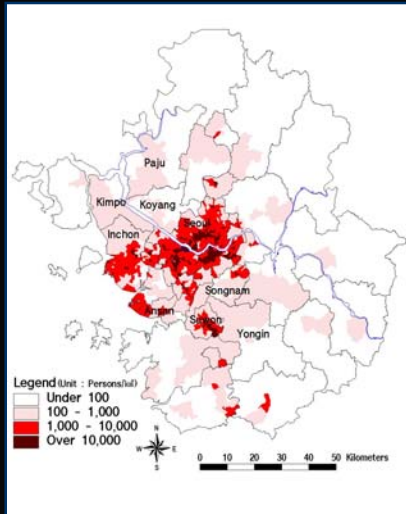
II. Growth Patterns of the SMR



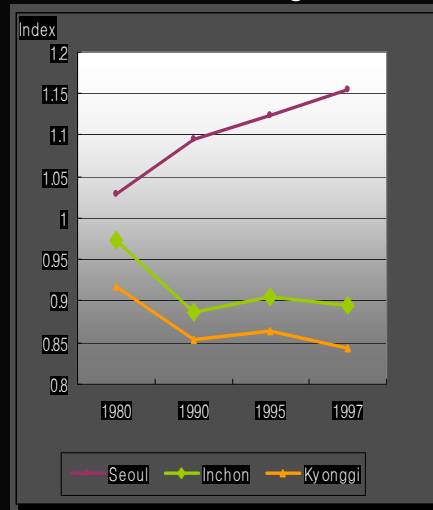
Employment /Job-Housing balance

II . Growth Patterns of the SMR

Employment density ('97)



Trend of Job-Housing balance

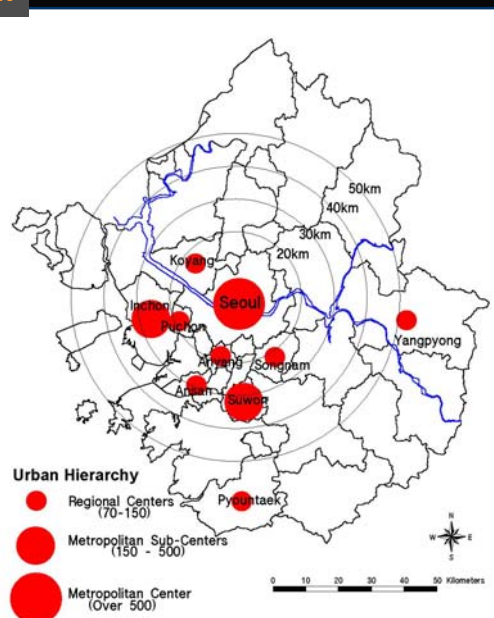


Urban Hierarchy System

II . Growth Patterns of the SMR

Metropolitan Center	Seoul	3,241
Metropolitan Sub Center	Incheon	388
	Suwon	156
Regional Center	Songnam	103
	Puchon	101
	Anyang	91
	Yangpyong	79
	Ansan	92
	Pyongtaek	82
	Koyang	75

Benison's Method



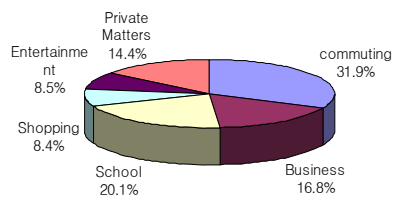
III. Mobility Patterns of the SMR

Mobility Patterns

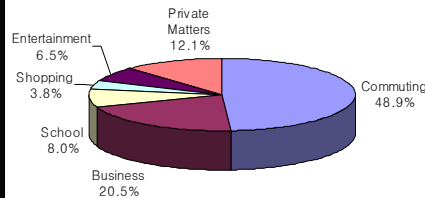
(22/35)

III. Mobility Patterns of the SMR

Proportion of Trip Purpose
in the SMR



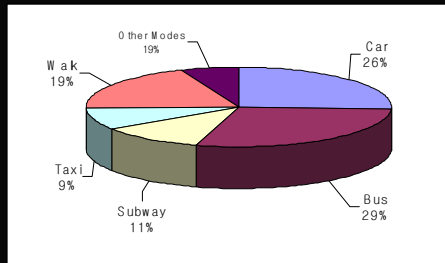
Proportion of Interregional Trip
Purposes in the SMR



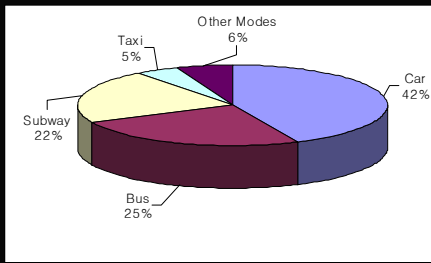
Mobility Patterns

III. Mobility Patterns of the SMR

Modal Shares of Trips in the SMR



Mode shares of Interregional Trips in the SMR



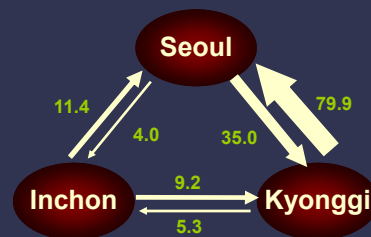
Mobility Patterns (24/35)

Interregional work trip patterns of the SMR in 1980



1980

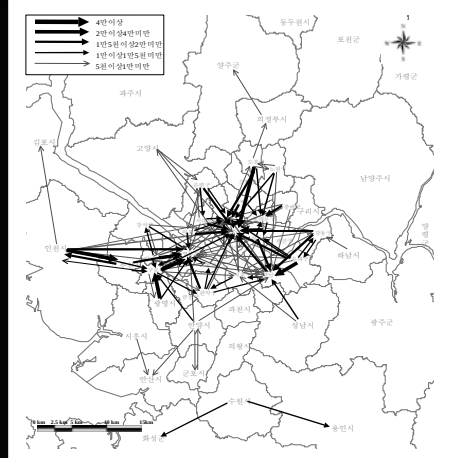
Interregional work trip patterns of the SMR in 2000



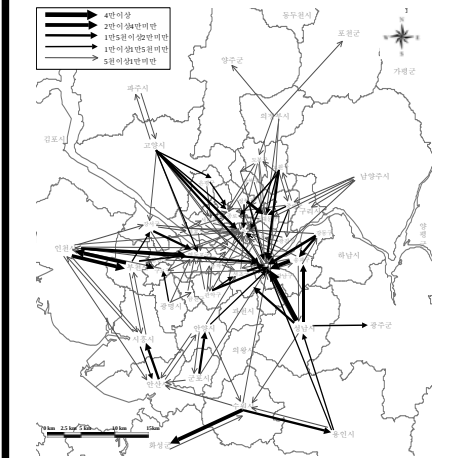
2000

수도권 통근통행패턴

1990년



2000년

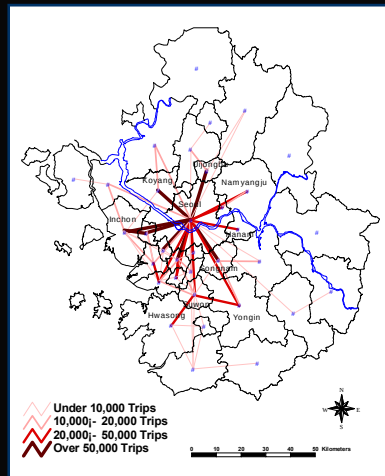


Commuting Patterns

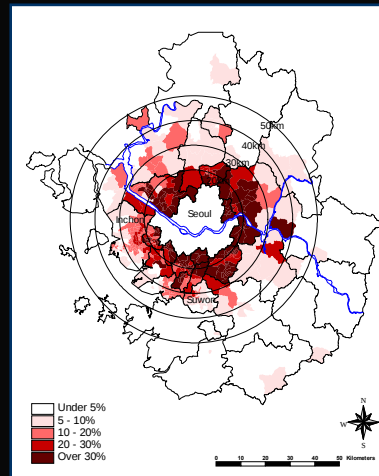
(26/35)

III. Mobility Patterns of the SMR

Commuting Trip in SMR ('97)

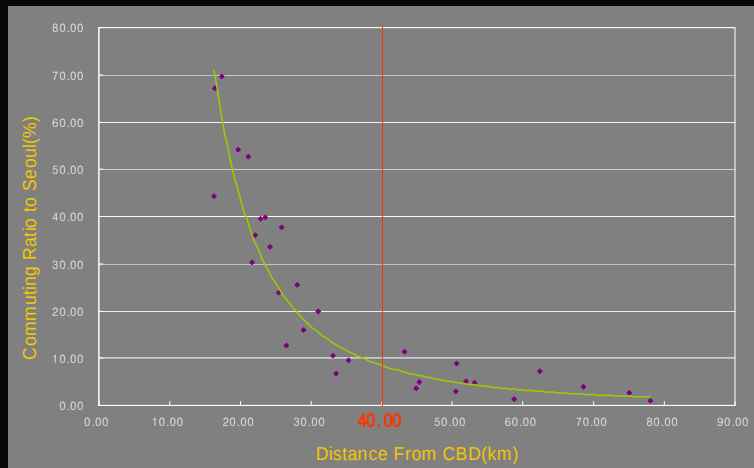


Commuting Ratio to Seoul ('97)



Commuting Patterns (27/35)

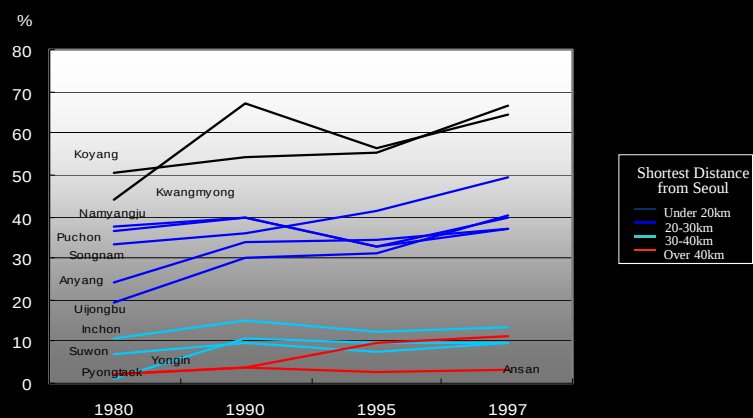
Commutation Ratio to Seoul by Distance from Seoul CBD



Interregional Commuting Trip Pattern

III. Mobility Patterns of the SMR

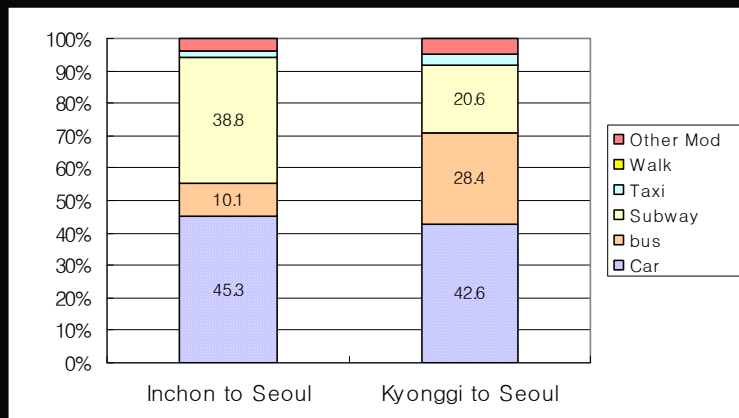
Trends in Commuting to Seoul ('90~'97)



Traffic Modal Patterns to Seoul ('97)

III. Mobility Patterns of the SMR

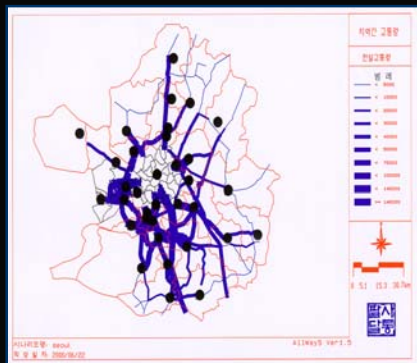
Mode Shares of Trips to Seoul by Regions



Traffic Volume on the Main Interregional Roads

III. Mobility Patterns of the SMR

Interregional Traffic Volume ('98)



IV. Policy Agenda

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Major Policy Responses of Central Gov't

IV.Policy Agenda

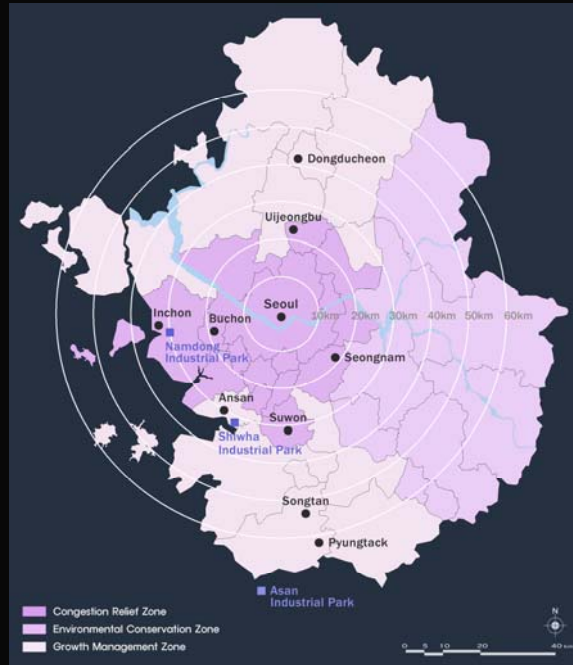
Major Policies and Control Measures

- The Restriction of Population Growth in Seoul (1964)
- A Comprehensive Decentralization Policy for Seoul (1969)
- Designation of Greenbelt around the Seoul (1971)
- Regulation of factory and higher education institutions
- The Capital Region Management Law enacted (1984)
 - The First Capital Region Management Plan established
- The Capital Region Management Plan was revised (1997)
 - Discriminated zoning, Ceiling system on factory establishment
 - Controlling large size of development activities,
 - Congestion charges (applied to Seoul only) etc.

Currently, Capital Relocation Policy is in progress and in dispute.

Current Policy Framework of the SMR

Zonal Division of the SMR



Management Strategies for the SMR

IV. Policy Agenda

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Zonal Division	Location	Strategies
Congestion Relief Zone	Core areas covering Seoul, Incheon, Suwon and 13 other cities surrounding Seoul City	- Regulation of population concentration - Dispersal of factory, university, public offices - Prohibit new establishment of industrial site, new university and new public office
Environmental Conservation Zone	Fringe areas of the outer ring of Seoul located in the basin of upstream Han River (7 cities, 8 counties)	- Prevention of water pollution in Han River Basin - Natural resource preservation and promotion of recreational activities
Growth Management Zone	Suburban areas located Southern and Northern of the Capital Region (3 cities, 5 counties)	- Relocate facilities from congestion relief zone - New town development and expansion of existing sub-regional centers

Challenges to the Policy Responses

IV. Policy Agenda

- **The Common Goal of Regional Policy since 1960s:**
 - to steer people and industries away from Seoul to local provinces
- **Major Criticism**
 - After 4decades, regulatory policy is not quite effective in achieving intended policy goal
 - the containment policy is generally defined as the number of population and major facilities
 - the true nature of concentration in the SMR is not just the volume of population itself but the social cost that it entailed (e. g. congestion, pollution, land price etc.)
- **Challenges for the SMR**
 - More deliberated and direct solutions need to be developed
 - More collaborative growth management system at regional level is needed
(Devolution of central power + Capacity building of local authorities, Corporate Sector, NGOs)

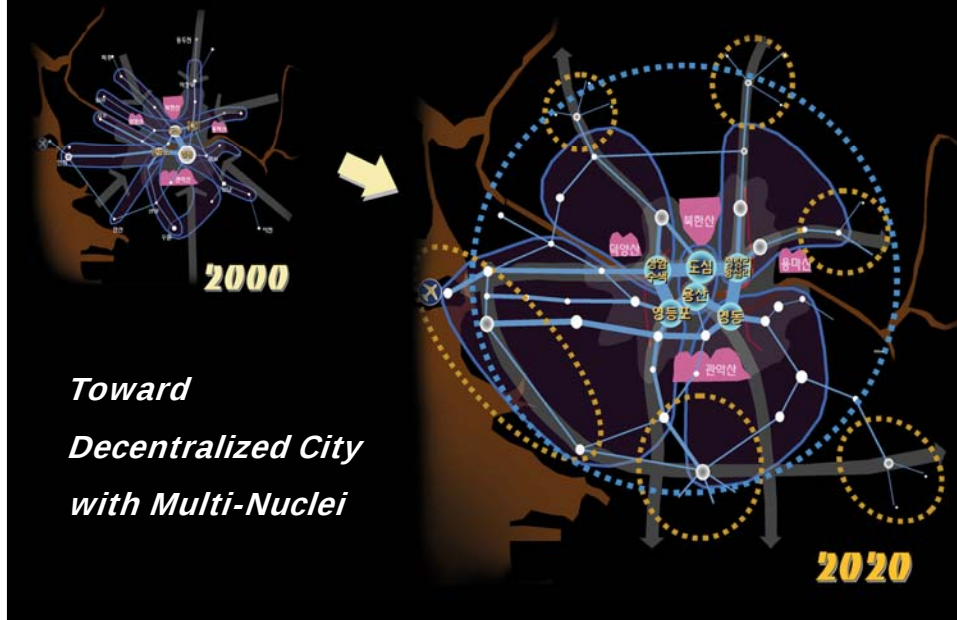
Implementing regional solutions at the local level seem to be key

Policy Agenda for the SMR

IV. Policy Agenda

- *Seoul-Oriented and Mono-centric Spatial Structure*
- *Urban Sprawl Along Major Arterial Roads*
- *The Urban Consumption of Agricultural Land and Environmentally Sensitive Area*
- *Job-Housing Mismatch*
- *Lack of Interregional Functional Mix*
- *Automobile Dependent Traffic System and Congestion*
- *Lack of Interregional Cooperative System*

Spatial Structure of the SMR



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Key Issue for Discussion

● Spatial Restructuring

- What policy measures would be effective in implementing sub-regional centers in the metropolitan areas?
- What measures would be used to encourage employment in residential centers in the metropolitan areas?

● Land Use Planning

- What criteria is used to differentiate land-use categories such as urbanized land, developable land and conservation area?
- What kind of measures could be effective to conserve environmentally sensitive areas at the metropolitan level?

● Transportation Planning

- How do you cost and fund metropolitan-wide transport service system?
- What kinds of policy tools are effective to encourage more transit-oriented development?

● **Region-wide public facilities**

- How do you ensure balance in the provision of public facilities and services at the metropolitan level?
- What kind of measures are effective to secure site for NIMBY facilities? (e.g. disposal facilities, waste treatment facilities)

● **Policy implementation**

- What are most important factors and issues in setting up cooperative mechanism among various interested parties such as central government, local authorities, corporate sector and NGOs?
- Who should fund the required region-wide urban infrastructure and public services?