# HIERARCHICAL STATUS OF BUSAN & CHANGES OF SPATIAL STRUCTURE FROM THE VIEWPOINT OF URBAN BASIC PLANNING

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#### 1. Urban character of Busan in the 21st century

#### Urban growth goal

Busan aims to a leading city around the world which has port, airport and high-information facilities through establishing the growth of international ocean and logistics city as the urban development purpose.

#### Potentiality of urban growth

The vantage conditions of location combining marine and inland transport.

- Busan has vantage conditions of location that can combine marine and inland transport system such as a port, a railroad and an airport because it is located to the gateway to the Pacific rim area and the economic area in Northeastern Asia.
- Due to the promotion of cooperative exchanges in Northeastern Asia, Busan promises to be a trade base as the starting point of traversing railway such as TCR in China and TSR in Siberia.

The great potentialities in harbor logistics

• Busan has great growth potentialities as a port logistics city because trade services proportionate to a hub port in the international route are intensified through the construction of Busan New Harbor and preparation of logistics complex.

The extension of tourist and recreation role by graceful natural environment and the tourist development in the eastern part of Busan

• Busan tries to create comfortable urban space through preserving and using rich natural environment, and to make itself international tourist and resort area through the development in the eastern part of the city.

Busan has a firm foothold in high-degree knowledge industries based on rich human resources according to the increase in economic activities population(15 to 64-year-old people) and university graduates, and in promising industries such as automobile, software and film industry.

#### The urban character of Busan in the 21st century

- Port logistics city: the advanced city equipped with port and logistics facilities equal to World top 5 ports.
- Information industry city: the producing city set up with information and high-tech industry structure meeting the information age.
- Cultural and tourist city: the international city full of cultural, artistic and tourist assets.

• Welfare and environment-friendly city: the welfare city provided with comfortable environment for high living quality.

#### 2. The future image of Busan in the 21st century

#### International point of view : the gateway city to the Pacific rim and northeastern Asia area

- Excellent conditions of location in the Pacific rim economic area
- Outstanding geopolitical advantage suitable for the gateway city to the northeastern Asia
- Performing an important role as a hub port in the international route

#### National point of view : the nucleus city equal to the National Capital region

- Balanced land development and establishment of land spatial structure which has multiple core
- Shared accomplishment of economic, informational and financial function centralized upon the National Capital region
- Functional reinforcement as the foothold of production, logistics and distribution

#### Local point of view: the core city in Southeastern economic area

- Establishment of the position as the 2nd city in Korea and the core city in metropolitan area
- Establishment of high-tech foundation by preparing science and industry complex
- Establishment of self-sufficient local economic areas and promotion of local industry

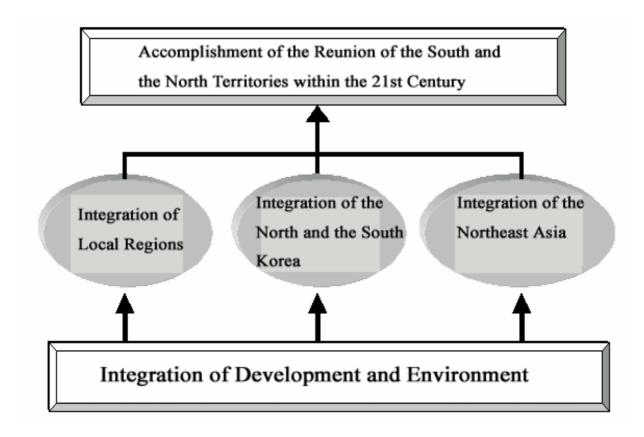
#### Urban point of view: nature environment-friendly city and ocean city

- Ocean-oriented urban development centering on high-tech and tourist industry
- Adoption of general demands for high living quality
- Extension of water front spaces and emphasis on harmony with natural environment

# HIERARCHICAL STATUS OF BUSAN FROM THE VIEWPOINT OF NATIONAL PLANNING

## 1. The 4th Multipurpose Land Development

## 1) Basic theme of the plan : realization of reunified national land



2) Growth object of Busan

#### Basic policies

- Establishment of foundation as ocean and logistics industry capital, and the foothold of international finance
- Rational reorganization of urban spatial structure and transport system, and preparation of comfortable living environment
- High-degree industry structure and reconsideration for central management of local economic area
- Practical use of tourist resources and development of international cultural and tourist city
- Promotion of high-tech and film industry for industry growth in the new millennium age

#### Growth object

(1) Establishment of foundation as ocean and logistics industry capital

Construction of national infrastructure such as Busan New Port and rapid transit railways

- Establishment of the base for advancing into the Asia Continent as the gateway to the Pacific rim area through constructing Busan New Port and rapid transit railways

Establishment of the foothold for international trade and finance

- Realization of international ocean city through functional reinforcement of Busan New Port as a foothold port in Northeastern area in Asia and preparation of international free trade zone in and around Busan New Port.

Establishment of the distribution foothold for marine products

- Promotion of the international distribution foothold for marine products through preparation of general distribution complex equipped with package process system of marine products

(2) Reorganization of urban spatial structure and preparation of comfortable living environment

Reorganization of urban spatial structure and specialized development by regional groups

- Creation of maximum development effect through the following specialized function development by regional groups; International and tourist function in the eastern part, trade and financial function in the central part, and productive and logistics function in the western part of the city

Improvement in living quality through comfortable living environment

- Establishment of general management system for preservation of ocean ecosystem and marine resources in the southern and eastern coastal areas, and for the development of nature environment-friendly coastal areas.

Expansion of infrastructure in metropolitan transport system

- Expansion of urban infrastructure as the core city in Northeastern industry and tourist area in Korea through the establishment of circular transport system connected with national transport system

(3) Reconsideration for central management of local economic areas

Performance of central management in the Busan and neighboring areas

- Reinforcement of central management in the local economic area through the share in the central management in the Nation Capital region

Intensive development of knowledge-based strategic industries

- Promotion of high value-added industries such as growth-promising industries (port logistics, tourism, finance, software, film industry), and high-degree structure industry (automobile parts, shoes, shipbuilding materials, fashion, marine products proceeding industry)

- Promotion of local economy through preparation of the atomic energy research center at Jeonggwan, Gori, and Gijan in the eastern part of Busan and introduction of new materials and parts industry at this area

(4) International cultural and tourist city

Preparation of the central tourism area in the southern and eastern coastal areas

- Construction of nature environment-friendly international tourist facilities such as the tourism complex linked with Asian Game golf course in the eastern part of Busan and the ocean resort facilities cultivating ocean sports

- Construction of the sightseeing and ocean resorts in harmony with the sea in the central part of Busan

- Construction of the tourist places connected various industries such as the New Port, international airport, logistics complex, and Jisa science complex, etc inter-western part of Busan

Practical use of local cultural resources as tourism goods

- Promotion of the international film festival and ocean festival as international events

- Construction of the folk village for restoration of Gaya culture and preservation of natural environment at Eulsukdo

- Practical use of the experience in Asian Game and World Cup as the chance to promote the local culture

(5) Promotion of high-tech and film industry growth in the new millennium age

Promotion of the industries related to information and software

- Construction of the infrastructure necessary to high-tech information city through the establishment of the business data bank in Asian-Pacific area and metropolitan general informational communications network linked with Busan Information Complex

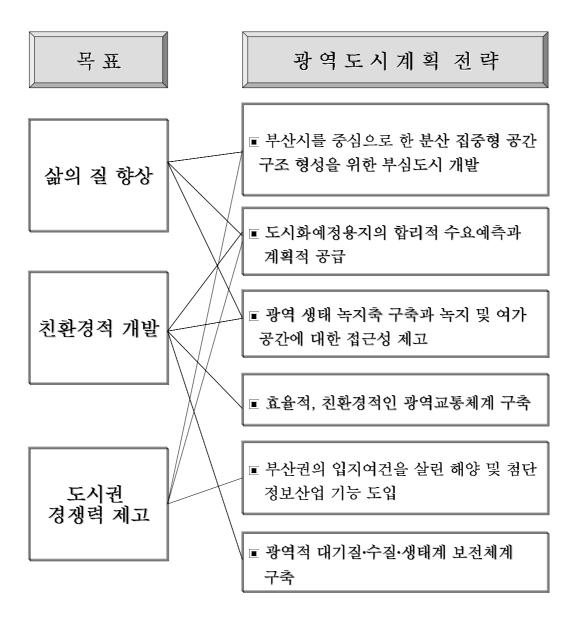
Promotion of film industry

- Promotion of Busan International Film Festival through the establishment of the foundation for developing film industry

- Construction of the firm foundation facilities such as the film theme park, and theater complex for the development of film industry

#### 2. The Busan metropolitan planning in 2020

Goals and strategies



Goal	Urban planning for the Great-Sphere
Improvement of Quality of Life	Development of sub-urban center to form Busan as the center of the region
	Supply of prospective urban areas according to rational programs
Environment-friendly Development	Establishment of axes of ecological greens in the great-sphere and Improvement of accessibility to them
	Efficient and environment friendly great-sphere- region

#### **Potentiality**

- Various historic sites and possibilities of cultural and tourist city
- Beautiful ocean sightseeing sites and important preservation sites including to the worldfamous site for migratory birds
- The foothold city in the northeastern area in Asia which has easy approach to Beijing, Shanghai and Vladivostok

## Hierarchical Status of Busan

The foothold city of international exchange performing the central role related to logistics, information, and tourism in the Pacific rim area

• The city taking the lead in port logistics function as the gateway to the northeastern area in Asia

- The city doing shared accomplishment of economic, informational and financial function centralized upon the National Capital region
- The city taking the lead in tourism function in the southern coastal area
- The city performing the central management in the southeastern economic region in Korea

#### 3. The tourist development planning in southern coastal area

## 1) Planning goals

- Creation of the places promoting international exchange and relieving the strained situation in the eastern and western region in Korea
- Maximization of local potentiality through the development of the tourism products peculiar to Busan
- Contribution to the local economy through tourist development

## 2) The basic policies

- Specialization in tourism function and establishment of a tourism zone
- Establishment of worldwide-famous tourist sites through the practice use of local specialty
- Promotion of ocean tourism by the improvement in coastal service facilities
- Improvement in traffic facilities for efficient traffic system
- Expansion of software field for the promotion of tourism
- Preservation of natural environment and minimization of environmental losses

## 3) Improvement policies of urban tourist area in Busan

#### Goal

Busan aims to the international ocean and tourist city in the northeastern area in Asia in the 21st century by intensifying the tourism field among the city functions and improving the image of the tourist city.

#### Improvement policies

- Improvement and expansion of the city functions satisfying the demand for the city resort in Busan and neighboring areas
- Preparation of developing foundation for the international ocean and tourist city through the improvement of the areas near the passenger terminal and attraction for luxury ships

#### Functions necessary to strategic reinforcement

- Reinforcement of function as the gateway to the southern coastal area by unifying and connecting various transport facilities and establishing the basis for transport network
- Expansion of the developing effect at tourist-attracting sites to tourist sites peculiar to Busan such as traditional fish markets and hot springs by connecting both of sites
- Networking of various tourist sites such as bathing resorts and coastal tourist places from Haeundae to Geoje Island and establishment of the tourist zone by the improvement of established tourist sites and new ones

#### Marketing target

Young Korean, Chinese and Japanese people, and Chinese people doing distinguished service to the state and companies

## 4. Ocean Capital 21 plan

## 1) Vision of Busan as the ocean capital

#### Slogan

Ocean capital Busan leading blue revolution

- Establishment of the ocean capital integrating industries, capable persons, central services related to the sea as the leading city in the age of Blue Revolution in 21st century

#### Vision by fields in the ocean capital Busan

- The hub port city equipped with world top-class infrastructure
- The foothold city set up with global logistics facilities for marine products
- The advanced ocean city with abundant ocean qualities
- The information city full of well-informed persons related to the sea
- The city performing central management in the decision-making and information exchange related to the sea

#### 2) Goals of Ocean Capital 21 plan

#### Construction of the first ocean and logistic city in the world

• Busan aims to leap out of the third city in the field of the simple transportation proceeding of container in the world to the first city in the field of international complexed logistics industry producing high value added

#### The first ocean environment, cultural and tourism, and IT city in Asia

- The first ocean environment city in the field of the conservation of ocean environment, preservation of water front space, and settlement at ocean space in Asia
- The leading and core city in the advanced ocean tourism by the promotion of cruise tour and the construction of huge oceanariums

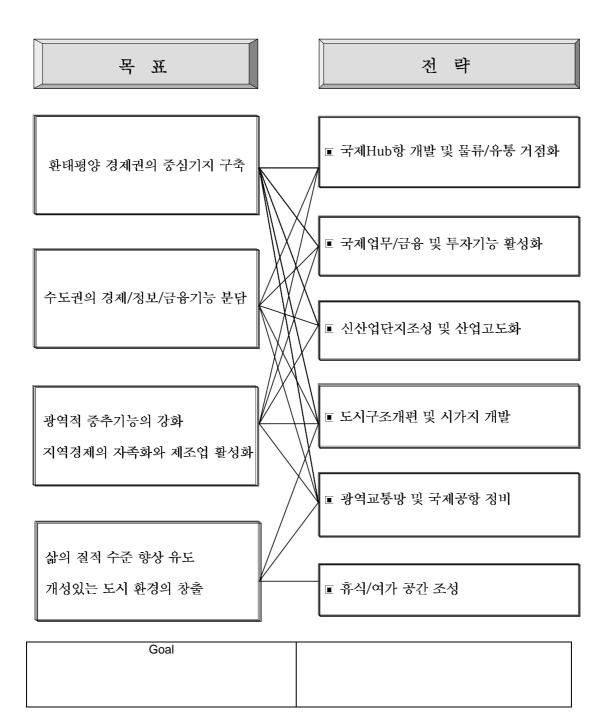
#### Promotion of the city creating new ocean industries

• Intensive promotion of port logistics industry as the growth engine to Busan economy, and creation of 100 thousand employees until 2011 through the promotion of high-tech venture industries

# URBAN BASIC PLANNING AND CHANGES OF URBAN SPATIAL STRUCTURE

1. Busan urban planning in 2011 and urban spatial structure

Goals and strategies



Establishment of a central base for the Pacific- rim economic region	Development of an international hub port
Allotment of economic, informational, and financial functions of the capital area	International business and trade
	Establishment of new industrial complexes
Reinforcement of central functions of the great- sphere, Achievement of self-reliance in regional economy, and activation of the manufacturing industry	Improvement of the urban structure

## The basic frame of urban spatial structure

## (1) Premises of establishing the basic frame

- Establishment of structural unit by 3 levels
- Development policies and connection with 3 regions divided into the western part, central part, and eastern part of Busan
- Speciality and share of urban function by structural levels
- Reinforcement of the center of circular transport system

(2) Urban system : urban spatial structure organized into 2 center of the city, 6 secondary centers of the city, 2 zone centers

Centers of the city

- Established center of the city: function of international trade and distribution
- Seomyeon center of the city: function of administration, finance, business, and culture

Secondary centers of the city

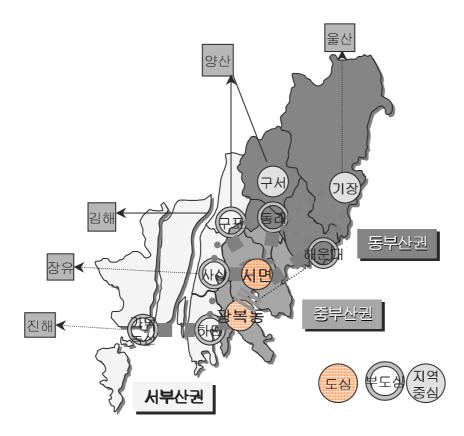
- Gadeok-Noksan secondary centers of the city : function of high-tech industry, research and logistics
- Hadan secondary centers of the city: function of recreation and education
- Sasang secondary centers of the city : function of industry and metropolitan services
- Gupo secondary centers of the city: function of distribution and metropolitan services
- Dongnae secondary centers of the city : function of tourism and recreation
- Haeundae secondary centers of the city : function of information and tourism

# Zone centers

- Gijang zone center : function of coastal tourism and pastoral recreation
- Guseo zone center : fuction of housing and education

# Urban spatial structure

Urban spatial structure : urban system organized into 2 center of the city, 6 secondary centers of the city, 2 zone centers

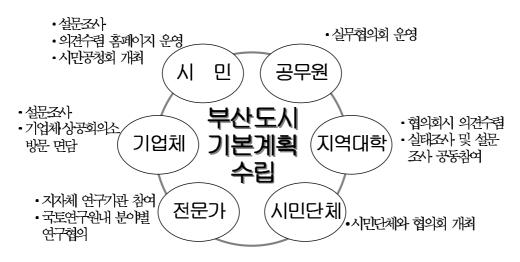


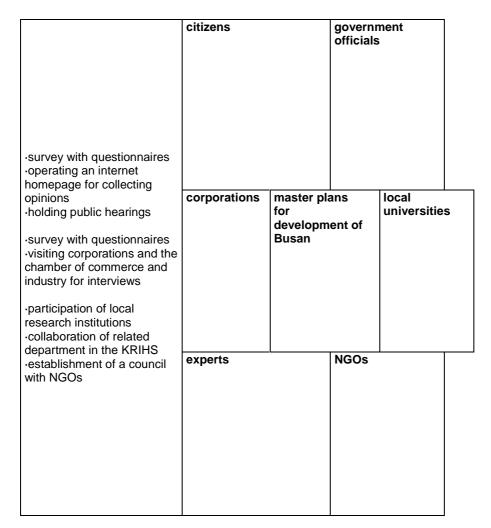
# 2. Busan urban planning in 2020 and urban spatial structure

# Establishing process of planning

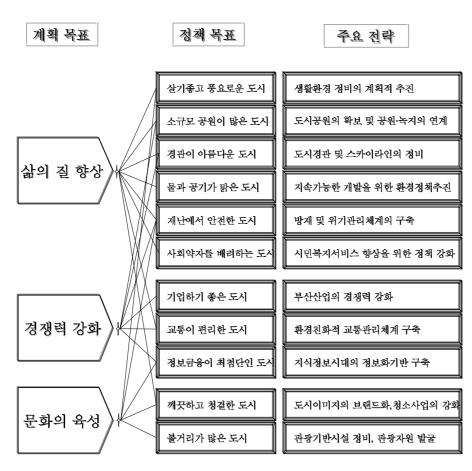
(1) Collecting opinions upwardly

(2) Collecting opinions by participating groups





Goals and strategies



Objectives of Planning	Objectives of Policy	Major Strategy	
Improvement of quality of life	the city of quality life and economic abundance	initiating programs to maintain life environment	
	the city with many small parks	increasing urban parks and linking parks and greens	
	the city of beautiful scenery	rearranging urban scenery and skyline	
	the city with clean water and atmosphere	initiating environment policies for sustainable development	

	the city with safety from disasters	establishing a system to prevent disasters and manage crises	
	the city with care of the weak in the society	reinforcing policies to improve welfare service	
	the city with good environment for business	strengthening competitiveness of industries in Busan	
Reinforcement of competitiveness	the city with convenient transportion	establishing management system for environment-friendly transportation	
	the city with state-of-the-art information and banking	establishment of basis of informationalization to cope with the era of knowledge and information	
Nurture of culture	the clean and neat city	making the image of the city a brand, and reinforcement of scavenging programs	
	the city with many attractions	maintaining tourism facilities and developing tourism resources	

Basic strategies for the reorganization of urban spatial structure

(1) Premises of establishing spatial structure

• Overall consideration of the administrative boundries, mountainous lines from north to south, and greenbelt lines at the waterside

- Reorganization of spatial structure considering urban fuctions and tranport systems and green belt areas
- Practical use of planned lands for urban development by the removal of limited development districts
- Reinforcement of circular transport system radiating in all directions

(2) Urban system: urban spatial structure organized into 1 center of the city, 5 secondary centers of the city, 5 zone centers

#### Center of the city

• Gwangbok-dong-Seomyeon center of the city : function of administration, international trade, business and culture

Secondary centers of the city

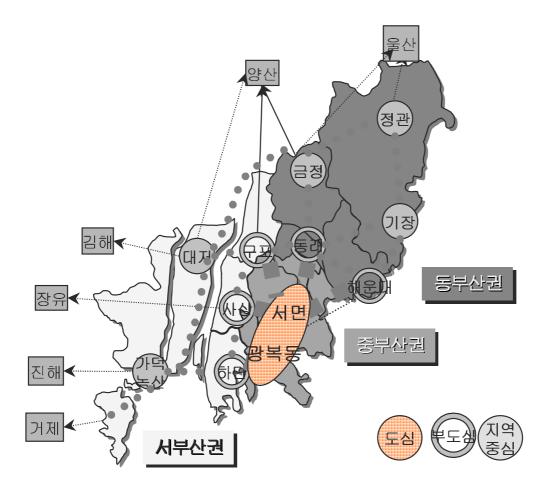
- Hadan secondary center of the city: function of recreation, education and preservation of nature environment
- Sasang secondary center of the city: function of industry, distribution, metropolitan services
- Gupo secondary center of the city: function of distribution, logistics and metropolitan services
- Dongnae secondary center of the city: function of tourism, recreation and education
- Haeundae secondary center of the city: function of information, tourism and convention center

#### Zone centers

- Gadeok Noksan zone center: function of logistics, high-tech industry and research
- Daejeo zone center: function of housing, distribution, and physical training center
- Geumjeong zone center: function of housing, education, and physical training center
- Jeonggwan zone center: function of housing and high-tech industry
- Gijang zone center: function of coastal tourism, pastoral recreation, culture and physical training center

Urban spatial structure

# Urban spatial structure : urban system organized into 1 center of the city, 5 secondary centers of the city, 5 zone centers



3. Mutual comparison between 2011 and 2020 plannings and population change according to spatial structure

<b>Mutual comparison</b>	between 2011	and 2020 plannings
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Classification	Basic urban planning in 2011 (1996)	Basic urban planning in 2020 (2003)
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plan conditions	overall development of Gadukdo , connection of rapid transit railways, preparation of North Port business complex, 수영 information complex, and 지사 high-tech science complex reorganization of administrative districts including Gijang -gun holding 2002 Asian Game	reorganization of limited development districts development of the eastern part of Busan development of Sentum City development of the western part of Busan
plan guidepost	planned population : 4.50 million planned district : 1,052.85km²	planned population : 4.50 million planned district : 950.82km²
urban structure	2 centers of the city, 6 secondary centers of the city and 2 zone centers - center of the city : established center of the city, Seomyon center of the city - secondary center of the city: Gadeok Noksan, Hadan, Sasang, Gupo, Dongnae, Haeundae - zone center : Gijang, Guseo	1 center of the city, 5 secondary centers of the city and 5 zone centers - center of the city: Gwangbok-dong-Seomyon - secondary center of the city : Hadan, Sasang, Gupo, Dongnae, Haeundae - zone center : Gijang, Jeonggwan, Geomjeong, Daejeo, Gadeok-Noksan
use of lands	Speciality of the center, secondary center and zone center North Port business complex, Suyeong information complex, Munhyeon-dong finance complex overall development planning of Gadeokdo urban development of Jeonggwan	specility and systematization of the center and secondary center of the city tourist complex in the eastern part of Busan, distribution complex in the western part of Busan the adjustable districts and prompt removable districts among limited development districts
transport	construction of circular road system expansion of connected road to Gijang-gun	construction of circular road system and road system radiating in all directions, reorganization of urban trunk construction of metropolitan railway system and urban railway system construction of New Port and transport system at the rear of the Port
parks & green belts	moutainous areas from north to south establishment of metropolitan parks and green belts connected between coastal areas and in- land areas establishment of local ocean tourist areas including Orukdo- Haeundae텉ongjeong-Gijang 톐gwang preparation of amusement park with natural environment at Ulsukdo	moutainous areas from north to south and geen belts at the waterside tourist belts rinked to neighbering cities preparation of Busan international port area, and Green City in the eastern part of Busan as the tourism foothold preparation of natural emvironment park in the mouse area of Nakdong river preparation of water front

information & commmunication	linking to super-speed national informational communication network construction of informational communication facilities such as Teleport	construction of industrial information system and urban information system construction of living information and administrative information system construction of information infra such as high speed information networks and unified management system of information system

# Population change according to spatial structure

# Prospects for population in 2011 according to basic Busan urban planning

Rank	Spatial structure 1994		2001	2006	2011
	established center	630,442	534,000	477,000	444,000
center of the city(2)	Seomyeon center	1,256,847	1,228,000	1,210,000	1,207,000
	subtotal	1,887,289	1,762,000	1,687,000	1,651,000
	Gadeok·Noksan	75,043	127,000	191,000	270,000
	Hadan	383,234	415,000	454,000	498,000
	Sasang	301,383	335,000	394,000	483,000
secondary center of the city(6)	Gupo	271,279	289,000	309,000	352,000
	Dongnae	321,355	325,000	332,000	354,000
	Haeundae	294,773	411,000	420,000	442,000
	subtotal	1,647,067	1,902,000	2,100,000	2,399,000
	Gijang		100,00	155,000	160,000
zone center (2)	Guseo	312,188	306,000	298,000	290,000
	subtotal	377,480	406,000	453,000	450,000
Total		3,911,836	4,070,000	4,240,000	4,500,000

# (unit : person)

Rank	Spatial structure		1999	2006	2011	2020
center of the city	Gwangbok- dong·Seomyeon center		1,688,387	1,645,000	1,630,000	1,600,000
(1)		subtotal	1,688,387	1,645,000	1,630,000	1,600,000
		Hadan	391,228	400,000	415,000	430,000
		Sasang	298,566	324,000	346,000	370,000
secondary center of the		Gupo	306,985	320,000	335,000	350,000
city (5)	Dongnae		301,875	306,000	315,000	324,000
	Haeundae		409,038	423,000	439,000	456,000
	subtotal		1,707,692	1,773,000	1,850,000	1,930,000
		Gadeok, Noksan,	25,945	55,000	144,000	230,000
	Gadeok∙ Noksan	Daejeo	38,400	88,000	100,000	120,000
		subtotal	64,345	143,000	244,000	350,000
zone center	Gijang	Jeonggw an	22,755	39,000	100,000	140,000
(5)		Gijang	51,800	92,000	99,000	130,000
		subtotal	74,555	131,000	199,000	270,000
	Geumjeong		296,475	309,000	329,000	350,000
	subtotal		435,375	583,000	772,000	970,000
total		3,831,454	4,001,000	4,252,0000	4,500,000	

# Prospects for population in 2020 according to basic Busan urban planning

Population change according to spatial structure

#### (1) Population change at the center of the city

When the population indicator in 2001 (1,762,000 persons) prospected by 2011 basic urban planning made in 1994 is compared with the actual population indicator in 1999(1,688,387 persons), the decrease in population was made in rapid progress contrary to its expectation.

This fact shows that the city expands rapidly into other neighbouring areas and core sites at the urban spatial structure are rapidly increased in number.

This fact has important complementary role in the prospects for population indicators in 2006, 2011, and 2020 when 2020 basic urban planning is established, therefore the fact becomes the ground on the download adjustment in the indicator.

#### (2) Population change at the secondary center of the city

The difference in the number of secondary center of the city (6 in 2011 basic urban planning and 5 in 2020 basic urban planning) is made because the progress in New Port development has been delayed and its developing effect has been made slowly.

When the population indicator in 2001 (1,775,000 persons) prospected by 2011 basic urban planning is compared with the actual population indicator in 1999(1,707,692 persons), these indicators shows that the population at the center of the city has rapidly moved into the secondary center of the city.

This fact shows that urban spatial structure has rapidly expanded into other neighboring areas because of the increase in population due to the establishment of spatial functions at the secondary center of the city and the trunk radiating in all direction.

#### (3) Population change at the zone center

The rank in spatial structure of Gadeok and Noksan becomes the zone center, and then the areas are divided into the Gadeok and Noksan region and the Daeseo region. The Gijang area is also divided into the Gijang region and the Jeonggwang region. This fact shows the subdivision of urban spatial structure.

The population indicator in 2001 (533,000 persons) at 5 zone centers prospected by 2011 basic urban planning explains higher state than the actual population indicator in 1999(435,375 persons).

This shows the fact that the population is transiently increased at the secondary center rather than the fact that the population at the center and secondary center of the city has rapidly moved into the zone center of the city. In 2020 when port, logistics, tourism and recreation industry at the zone centers are fully established and the population at the zone centers reaches 1 million, the balanced urban spatial structure will be established.