

Quality of Life

During the early phases of post-war development in Korea, the focus was primarily upon rebuilding the nation's infrastructure and establishing a solid industrial base, a prioritizing that helped the country rise from the devastation of colonization and war but did little to assist with key issues of quality of life beyond elemental issues of survival. Korea has come so far in such a short time it is finally entering an age in which the government is able to create programs dedicated to improving quality of life. The happiness of the Korean populace is now an explicitly stated goal of Korean development policy. While happiness is common value, the forms it may take in individual lives vary widely, and this understanding presents challenges to those charged with the task of

measuring quality of life. The economic-based objective, index-oriented evaluation of happiness has been replaced by an evaluation that includes social and subjective indices as well. Among policy makers, achieving majority consensus on defining this index has been difficult. At the present time a variety of research results on measuring happiness are reported by central and local governments, the academic community, and the business community. Economic and objective indices when compared with social, subjective indices reveal major differences in that the former uses one single measurement (monetary value) and its utility when evaluating an individual's happiness is limited. The latter, on the other hand, uses a flexible variety of measurements that can be interpreted

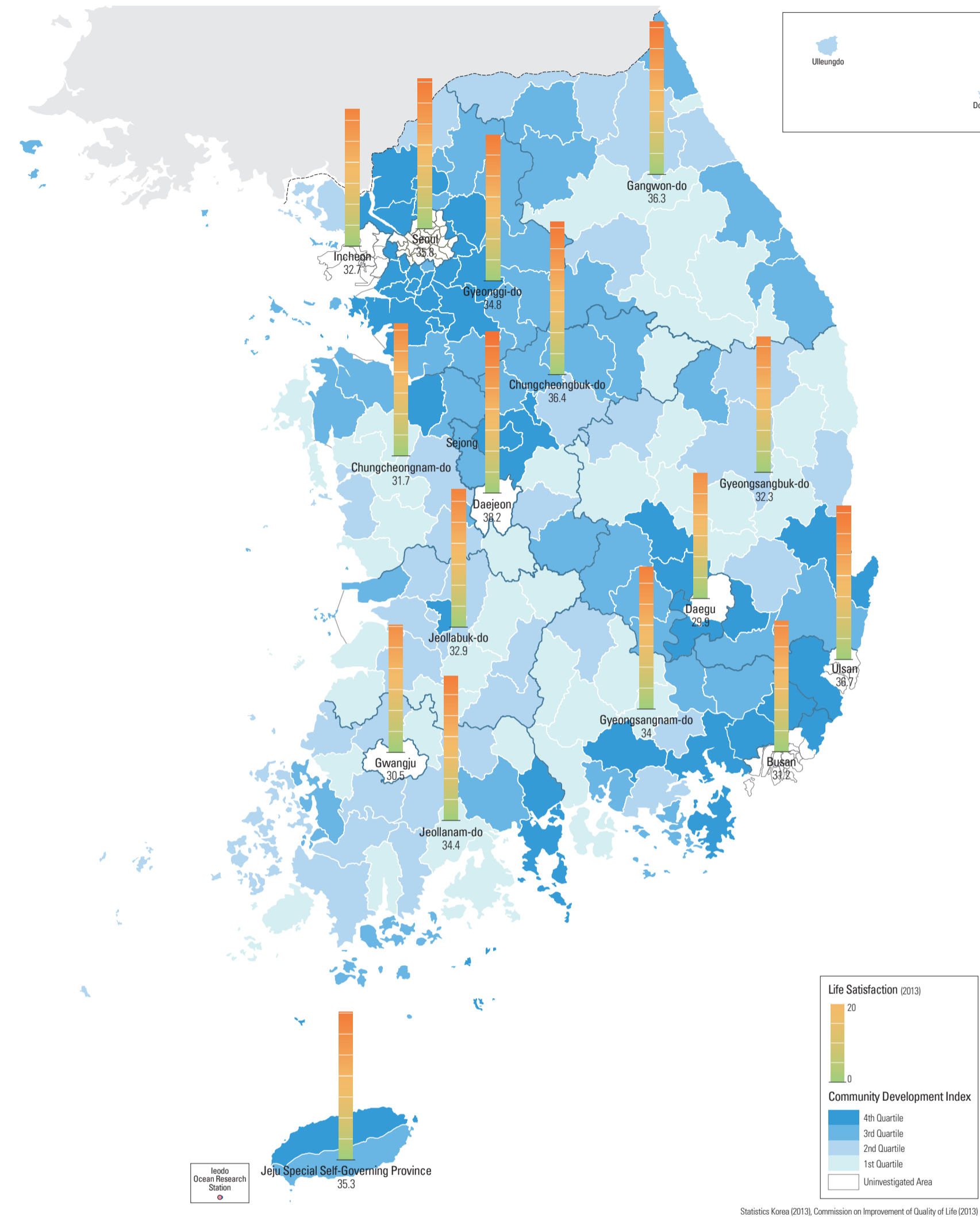
differently according to different contexts.

This difference does not simply mean that the criterion for the evaluation of happiness should be one single measurement or a mixture of multiple measurements, but rather it means that the interpretation of the level of happiness within a society should require multiple conceptual approaches that allow for philosophical and ideological differences. The concept Quality of Life (QoL) itself is under active scrutiny so that happiness levels are no longer defined solely through monetary indices, but through ever-broadening perspectives on just what happiness means thereby facilitating more precise measurements of the welfare of both individuals and the society-at-large.

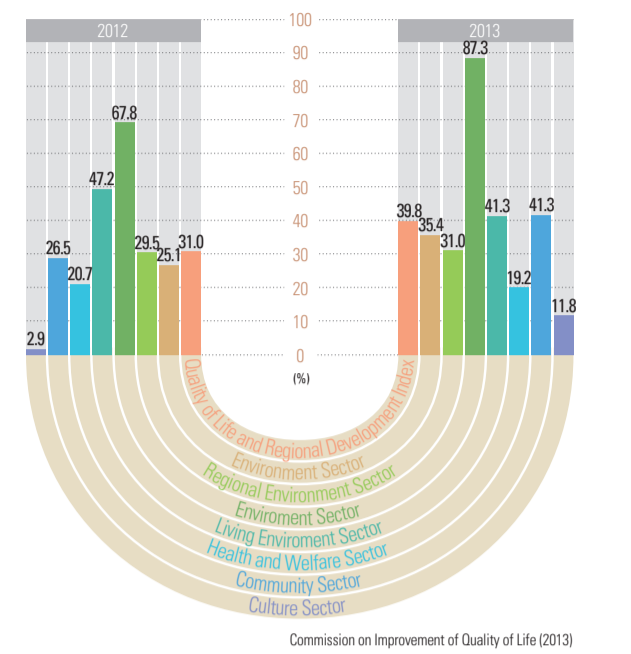
The Committee on Quality of Life Enhancement in the Prime Minister's Office is an official organization that evaluates the quality of life in Korea on a year-to-year basis. Local governments also make efforts to evaluate the quality of life of their people and from these evaluations they derive policy implications. Many private organizations also define their own quality of life index according to their own focus and criteria, but they also try to evaluate the quality of life of both with local communities and the society at large.

Quality of Life Indices

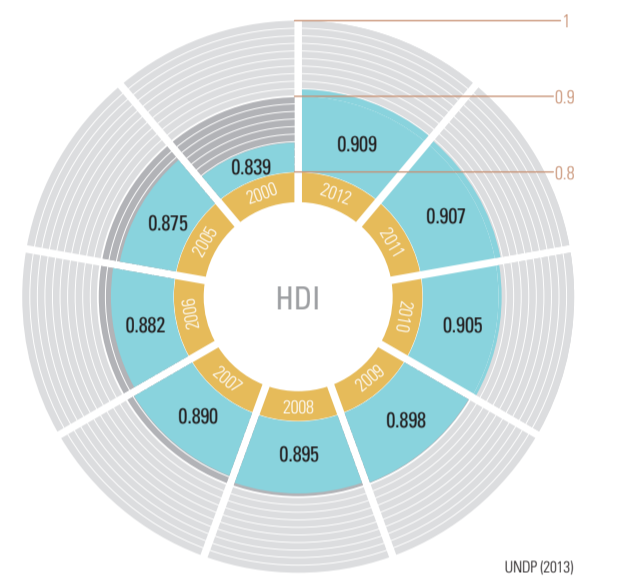
Happiness Index (Life Satisfaction Level)



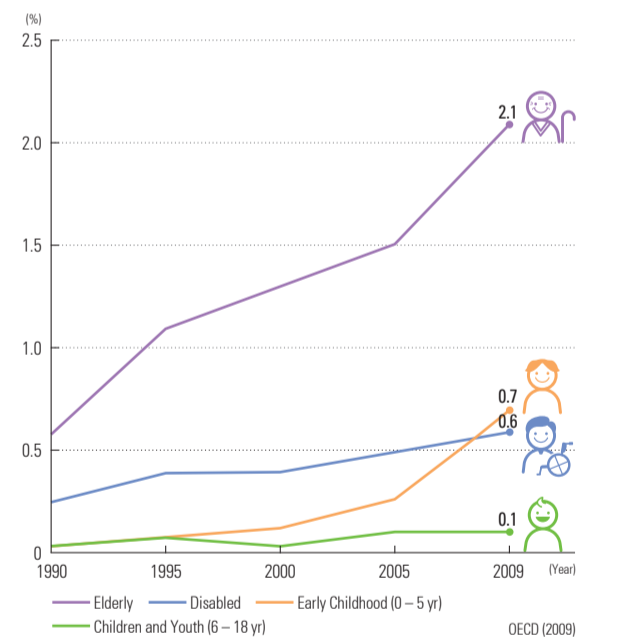
National Statistics of Quality of Life by Sector



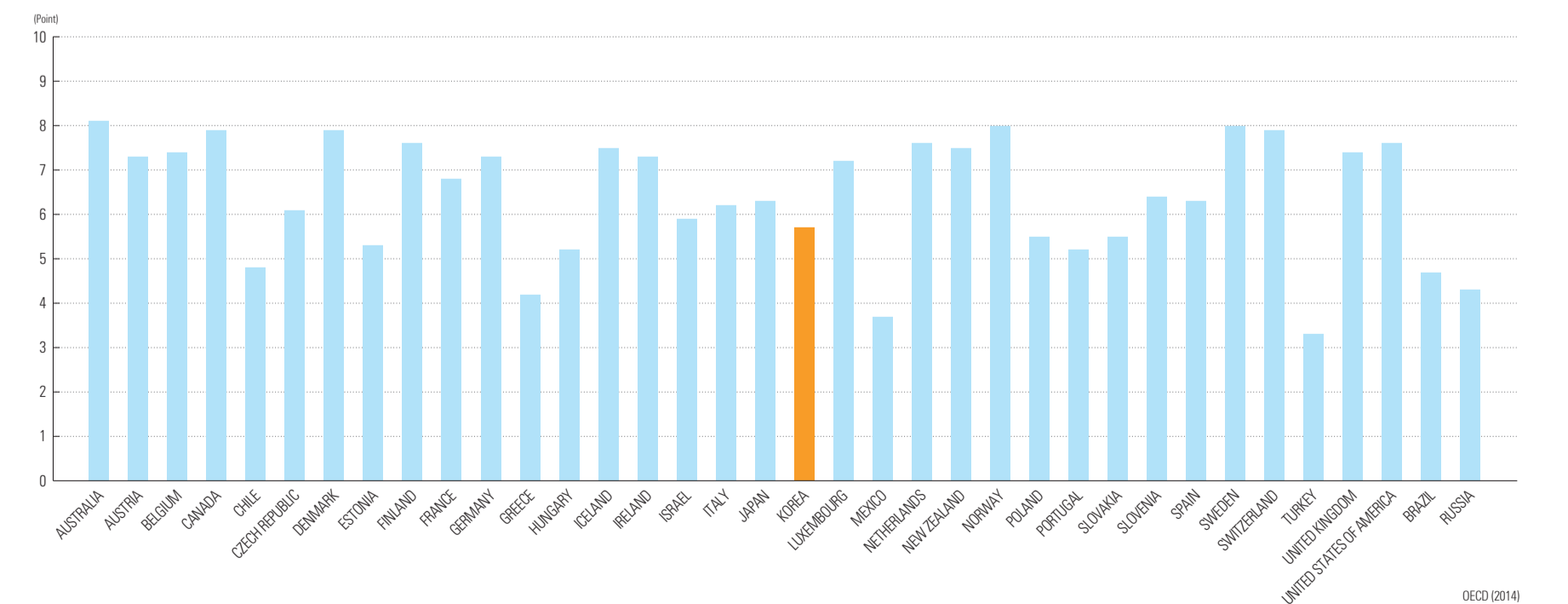
Human Development Index (HDI)



Welfare Budget Spending of GDP by Sector



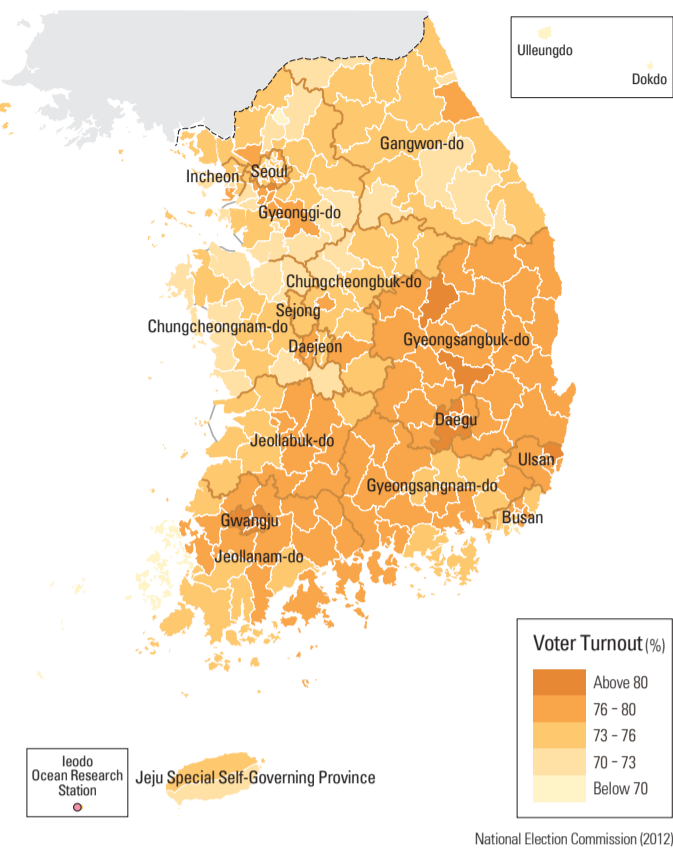
Level of the Quality of Life by Country



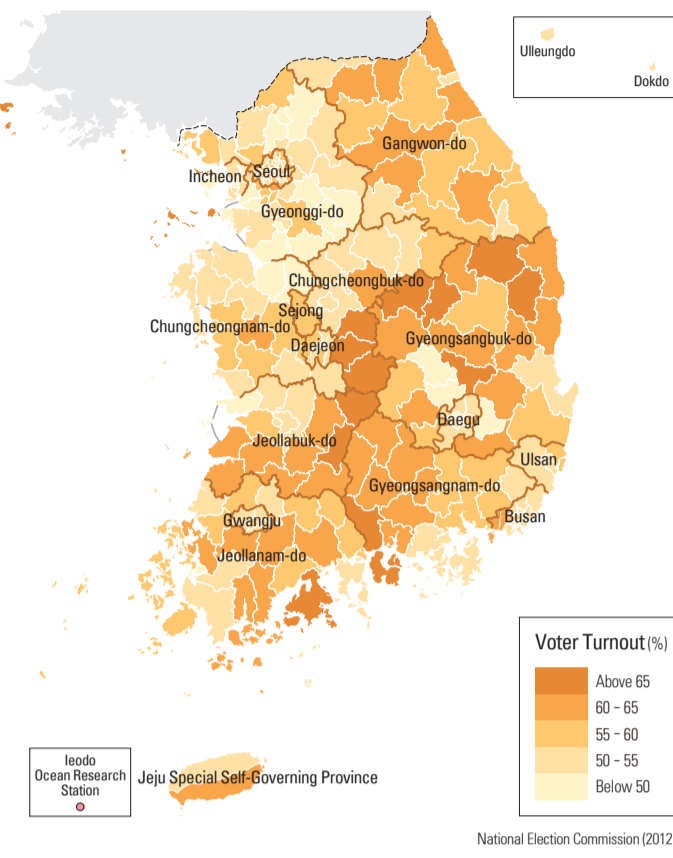
The Better Life Index is an interactive web-based tool created to engage people in the debate on well-being, and through this process learn what matters the most to them. The tool invites viewers to compare wellbeing attitudes across countries according to the importance you give to 11 topics: community, education, the environment, civic engagement, health, housing, income, jobs, life satisfaction, safety, and work-life balance. Korea was recently ranked 27th out of 36 countries including the 34 member countries of the OECD, Russia, and Brazil. Korea was ranked very high in education, but low in the work-leisure balance and life satisfaction. This result primarily comes from the fact that Korean employees work long hours and have therefore have relatively little time for leisure. Moreover, the income gap is an issue that spotlights a huge difference in income by 10.5 times between upper 10% and lower 10% on average.

Public Participation

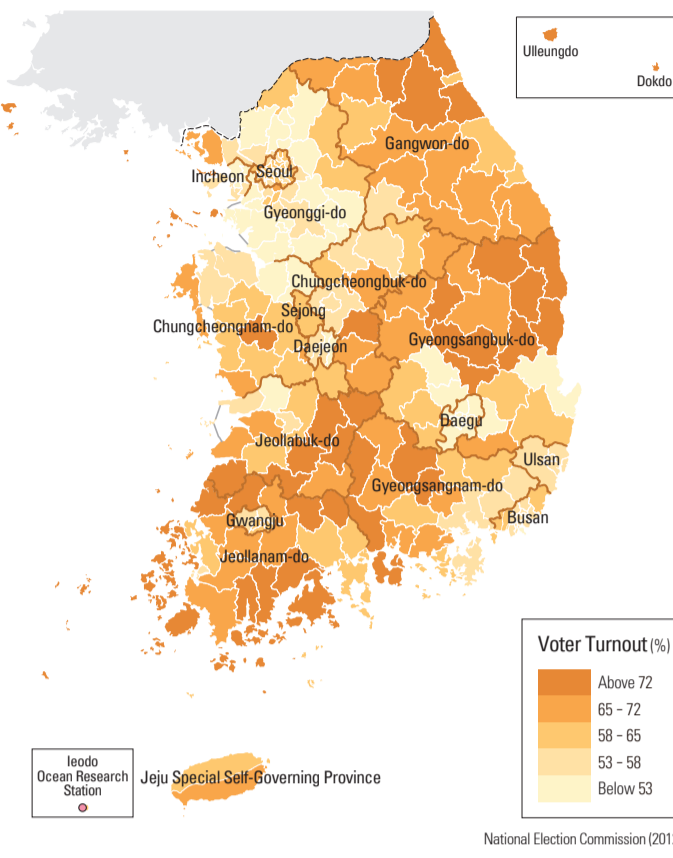
Voter Turnout in the 18th Presidential Election



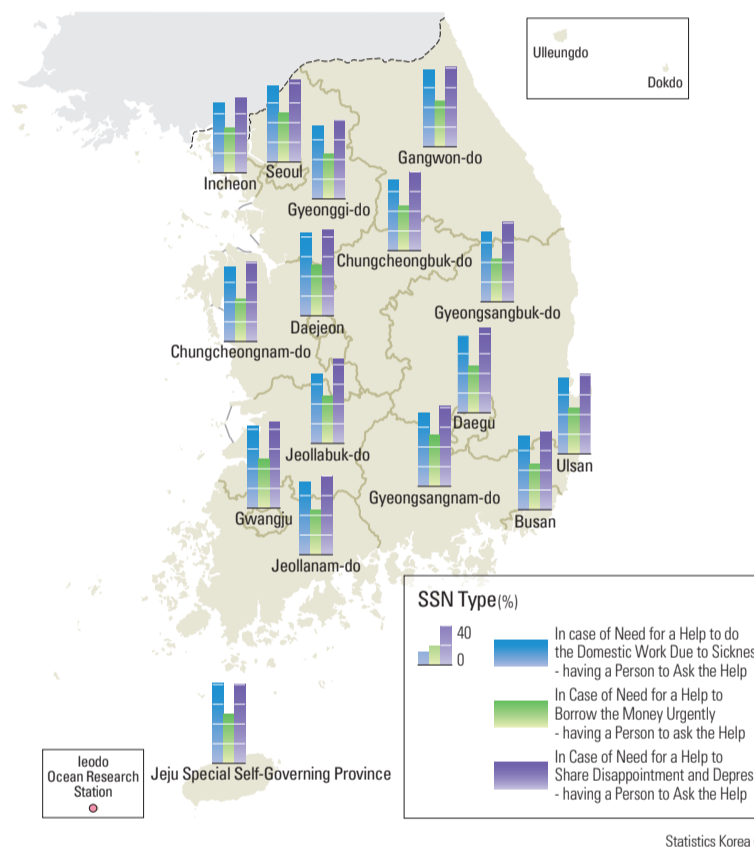
Voter Turnout in the 19th General Election



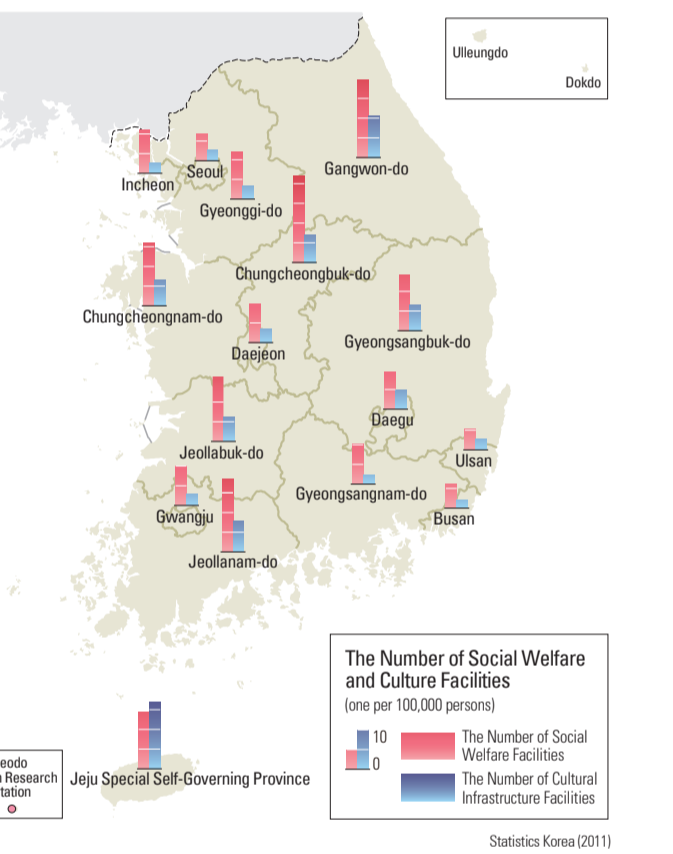
Voter Turnout in the 6th Local Election



Social Support Network



Social Welfare and Culture Facilities



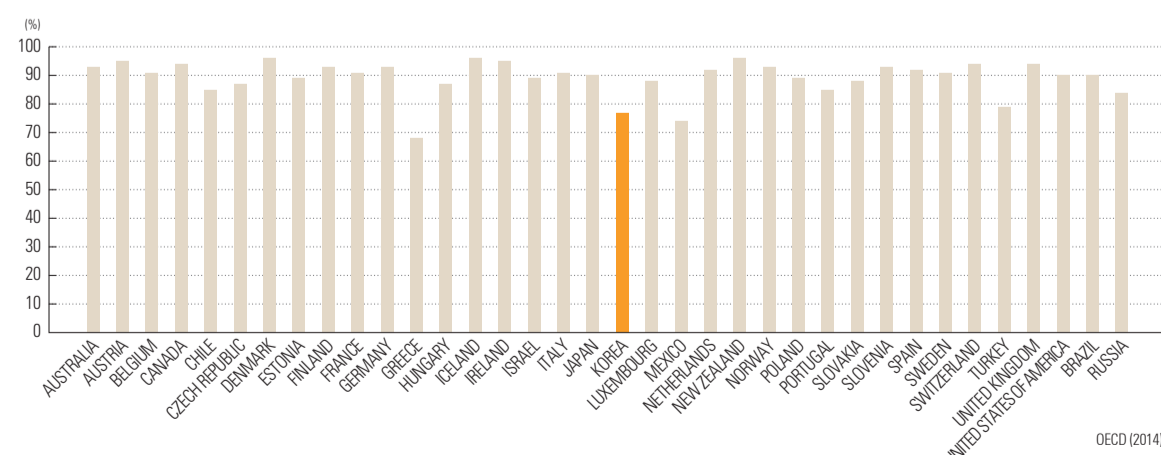
Through social participation, citizens measure the current standards of quality of life of themselves and the overall quality of life of the society that they belong to. It also allows them to search for ways to improve their quality of life and to monitor their fulfillment. The tradition of active social participation of individuals and groups in a civil society is at the root of democracy and allows for a deeper sense of belonging and greater healthiness and resiliency.

Social participation may take different forms. The most representative of these is participation in social decision making primarily through voting in both elections at the central government level, presidential elections and parliament elections, as well as those occurring at the local level. Voter turnout has trended downward from the 1945 Liberation up to the present, which suggests that increasing citizen participation in the political process should be a high priority. Active participation in politics is an important way to improve the quality of life. Individual social support networks and access to social welfare facilities and cultural facilities are also important to the evaluation of the quality of life.

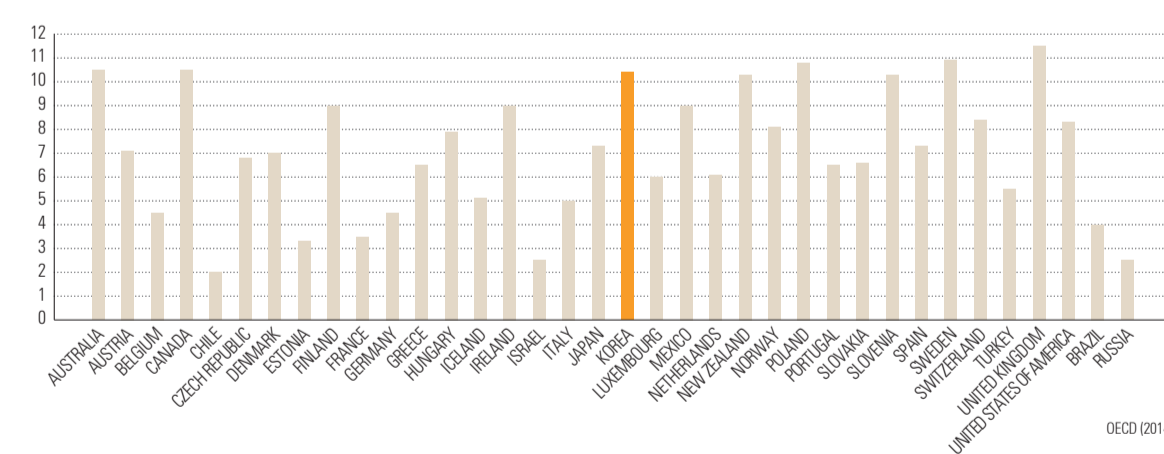
Social Support Networks represent the percentage of people who have friends or relatives to rely on in case of need. The frequency of contacts with others and the quality of personal relationships are other important determinants of the quality of life. Consultation on Rule-making is the level of government transparency during the drafting of regulations. Specifically, it reflects the extent to which formal consultation processes are built-in to the regulatory law-making process. Perception of

government reliability is crucial to the social coherence and general happiness. Voter turnout is defined as the percentage of the registered population that voted during an election. High voter turnout is desirable in a democracy because it increases the chance that the political system reflects the will of a large number of individuals, and that the government enjoys a high degree of legitimacy.

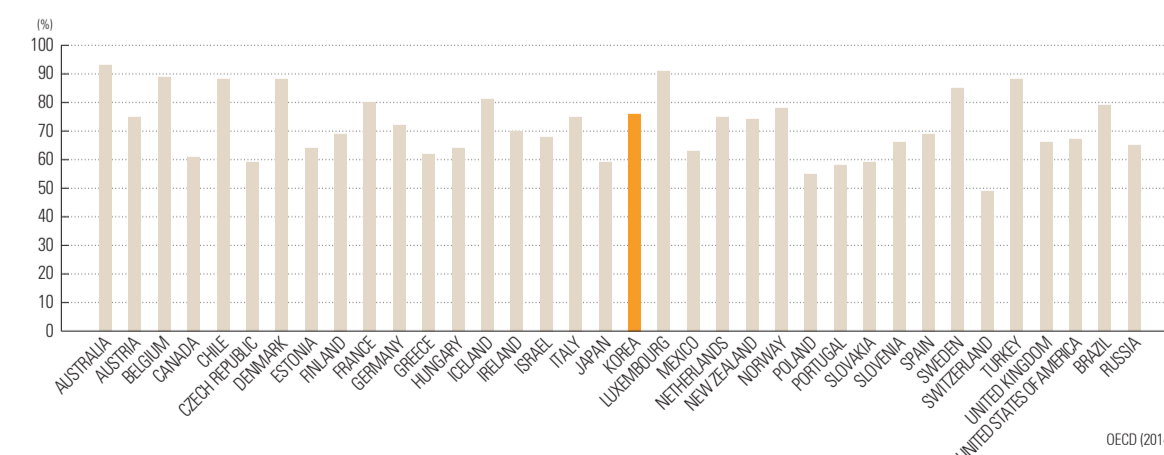
Quality of Support Network



Consultation on Rule-making

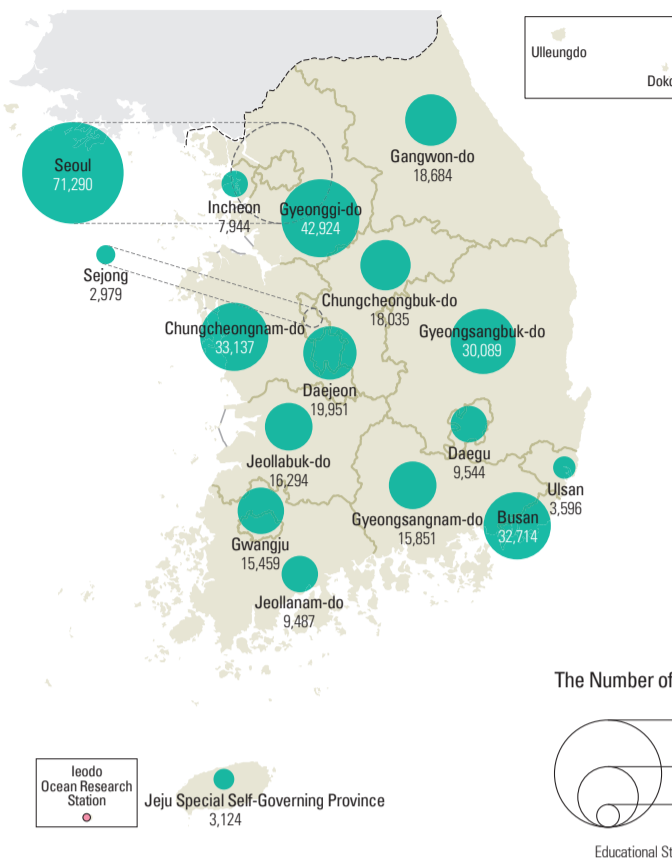


Voter Turnout

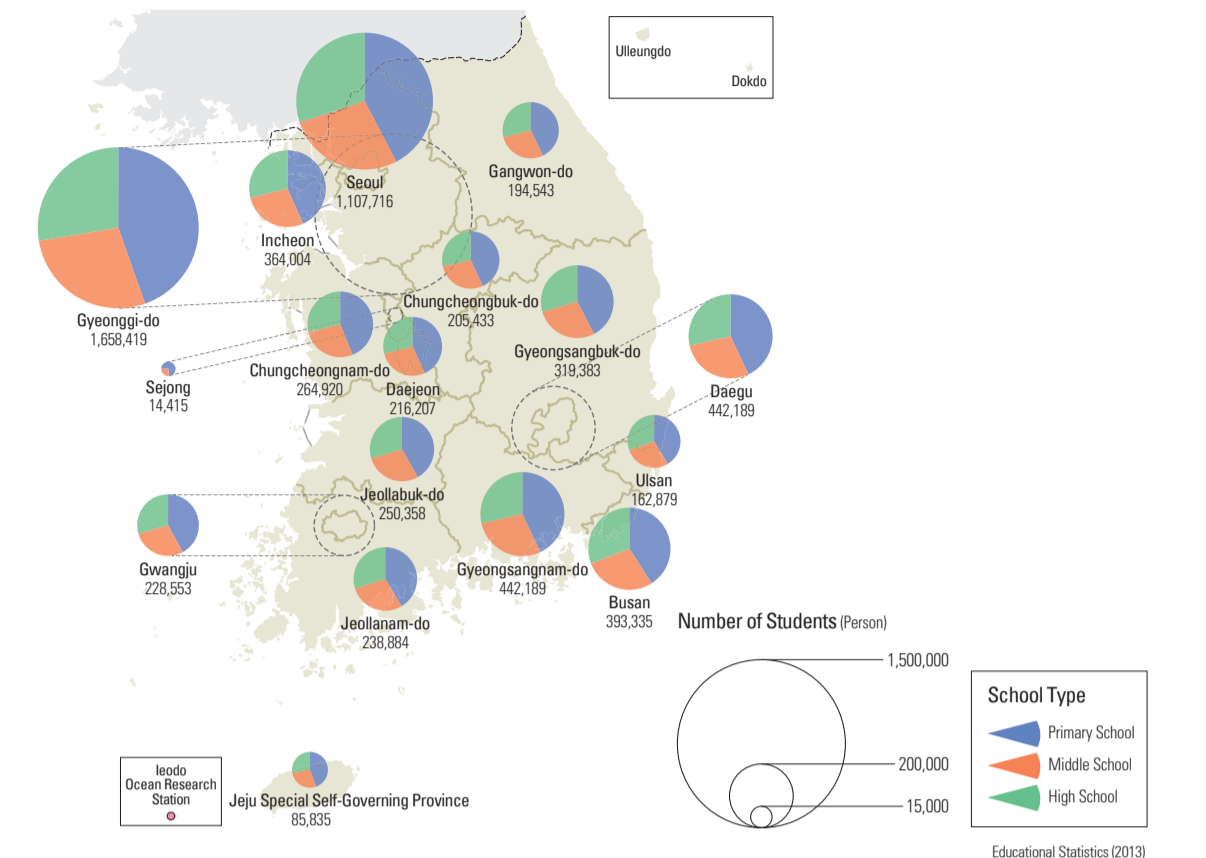


Education

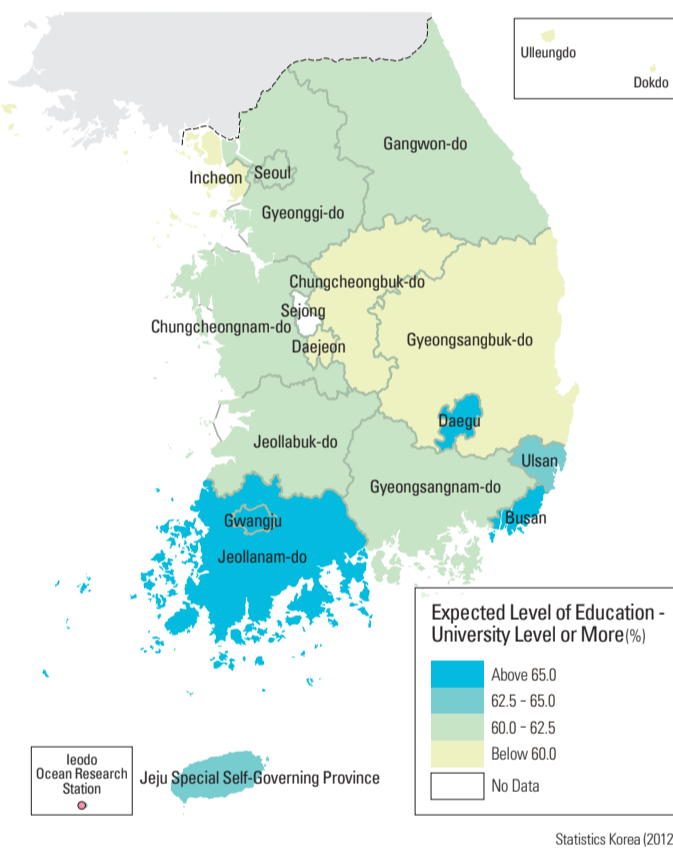
University Entrance Quota by Si · Do



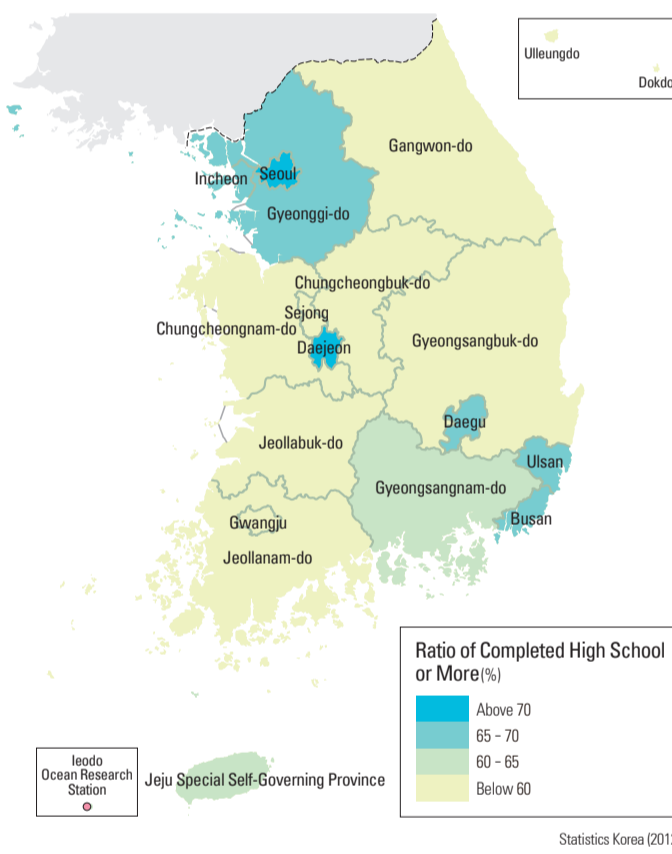
Number of Students of Primary, Middle and High Schools by Si · Do



Expected Level of Education by Si · Do



Percentage of People Who Completed High School or More by Si · Do

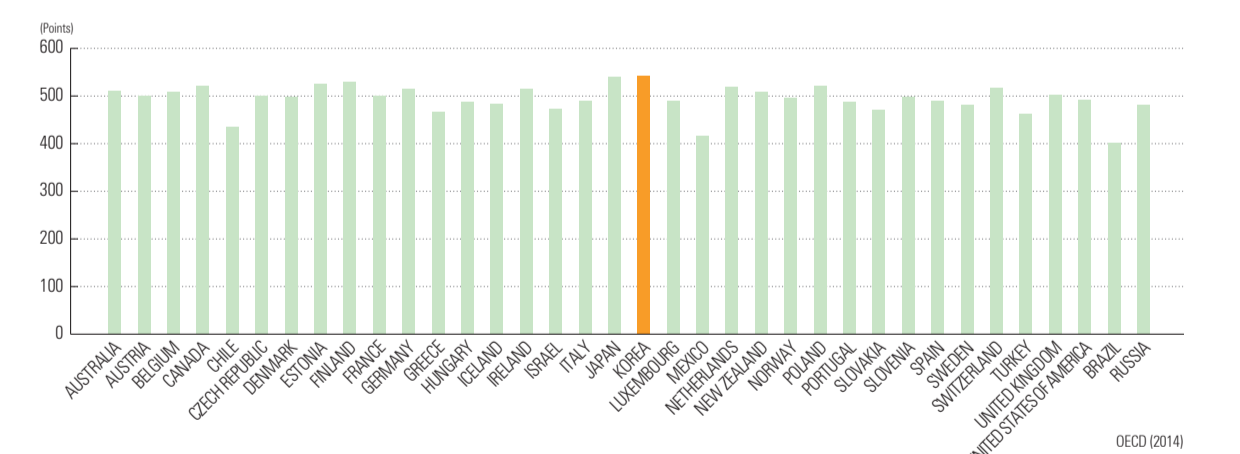


Korean culture has been deeply influenced by Confucianism, which has resulted in a high level of enthusiasm for education. Since the liberation from Japanese imperial rule in 1945, Korean society has experienced socially and economically difficult periods throughout which education has played an important role. First, education has helped to emphasize the role of the citizen in a democratic society. Second, education also provides the tools for enhancing both personal and national growth. The OECD emphasizes the great importance of education in general, but it also promotes equity of educational opportunities because it recognizes the very clear correlation between the quality of life of both individuals and the society-at-large and over all educational accomplishments. In order to determine both the quality and the availability of educational opportunities in Korea, statisticians measure the ratio of citizen completing basic education from region to region as well as the correlation between educational accomplishments and the productivity of individuals and the country as a whole. Because Korea's population is aging, there has been a decrease in the school-age population. In fact, the university enrollment quotas are expected to soon become larger than the number of secondary school students, which suggests that a restructuring of universities may become necessary.

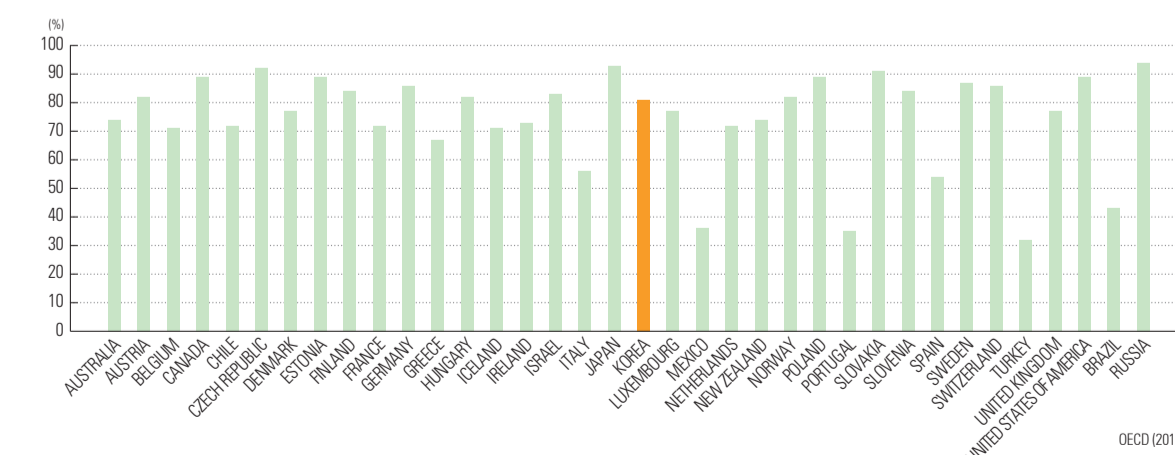
The number of years in education is the average duration of formal education in which a five-year old child can expect to enroll during his/her lifetime until the age of 39. In a fast-changing knowledge-based economy, education is about learning skills for life. Educational attainment is defined as the percentage of people aged 25 to 64 having at least an upper-secondary (high-school) degree. Students' skills refer to the average performance

of students aged 15, according to PISA (Programme for International Student Assessment). This reflects the extent to which students near the end of their compulsory education (usually around age 15) have acquired some of the knowledge and skills that are essential for full participation in modern society, particularly in reading, mathematics, and science.

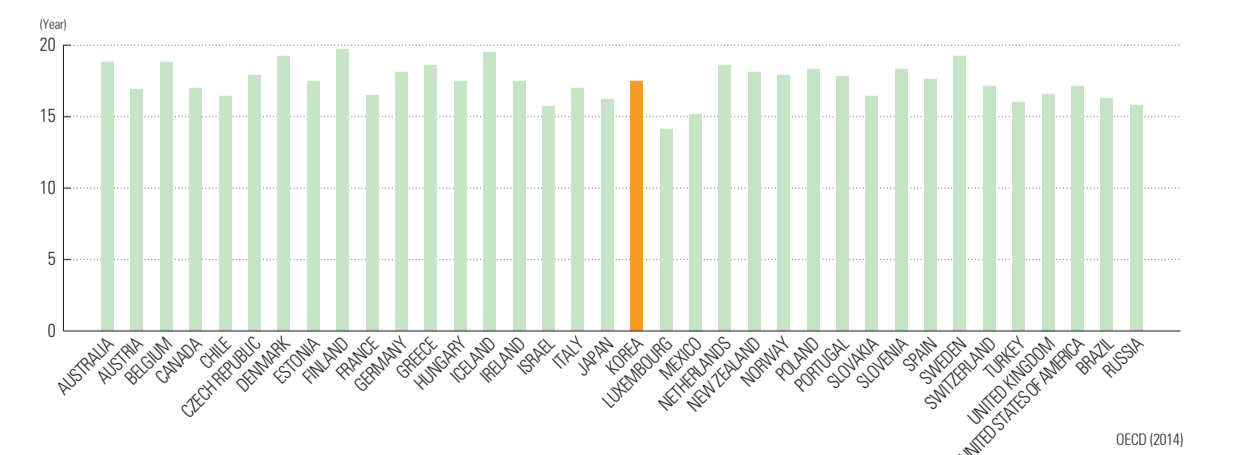
Students' Skills



Percentage of Adults Who Completed High School or More

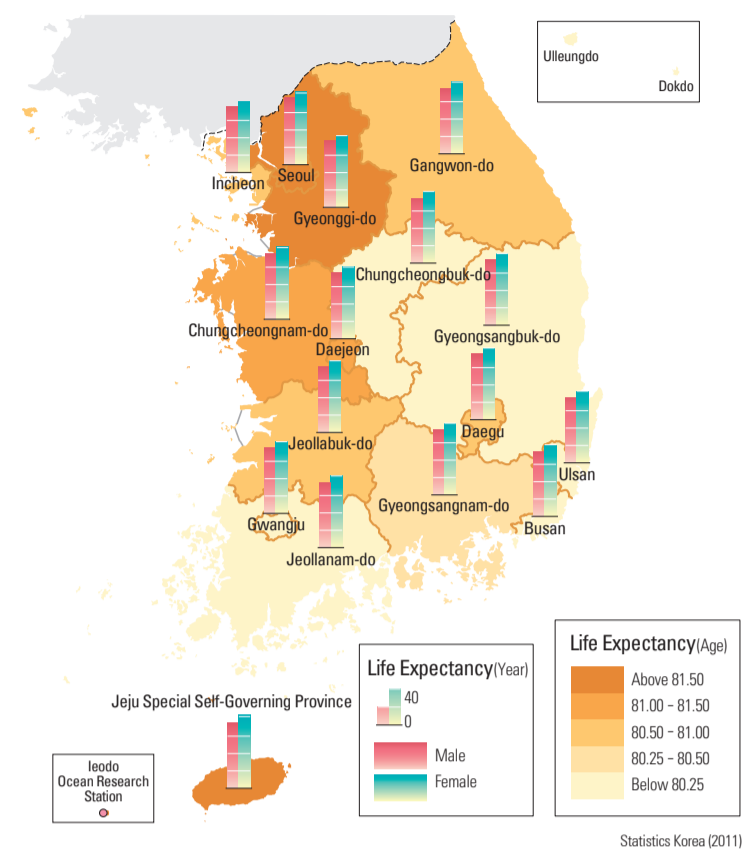


Years in Education

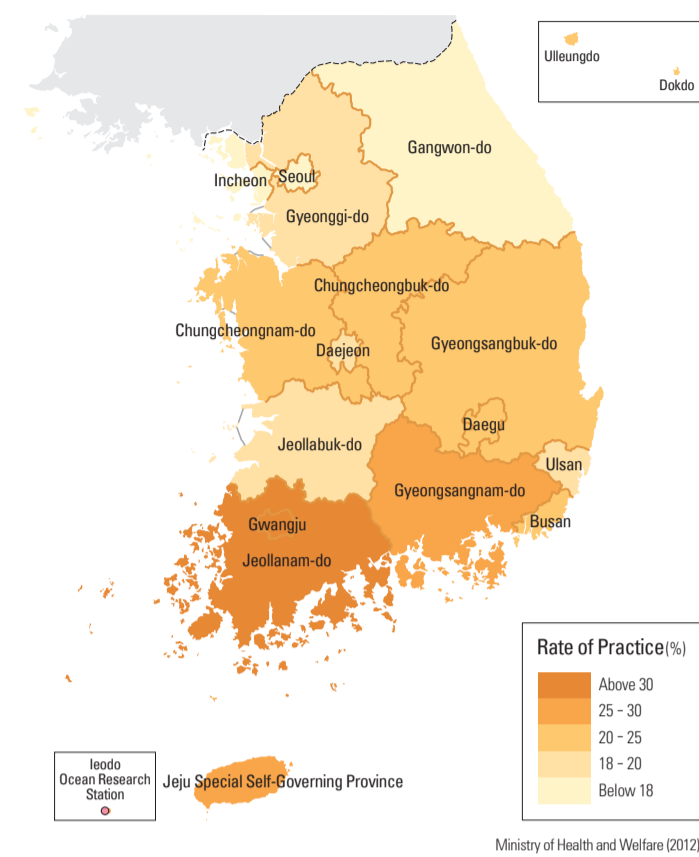


Health and Safety

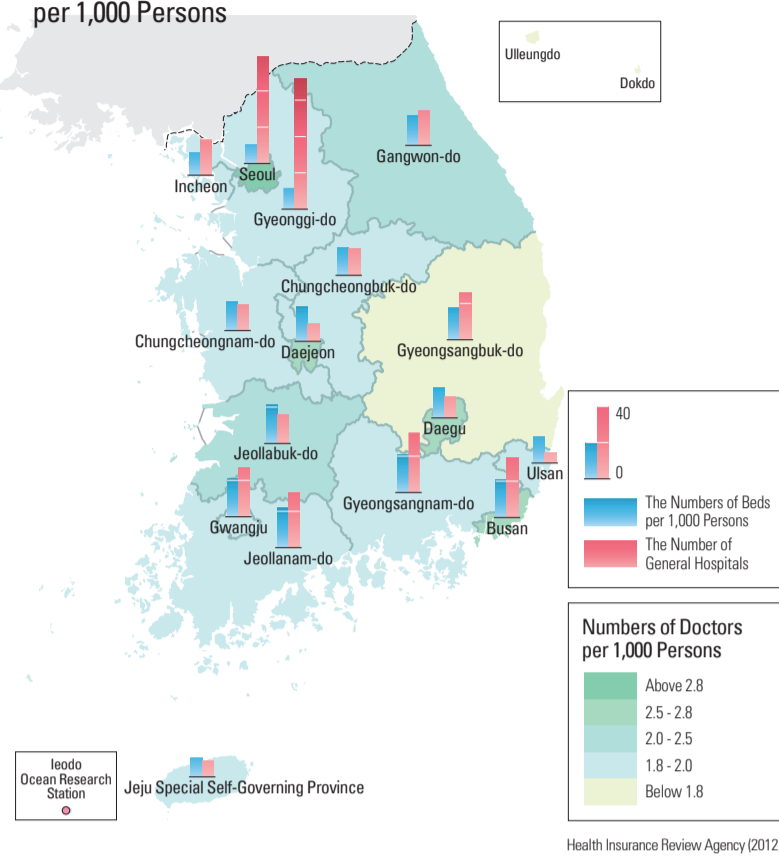
Life Expectancy



Rate of Practice of Physical Activity

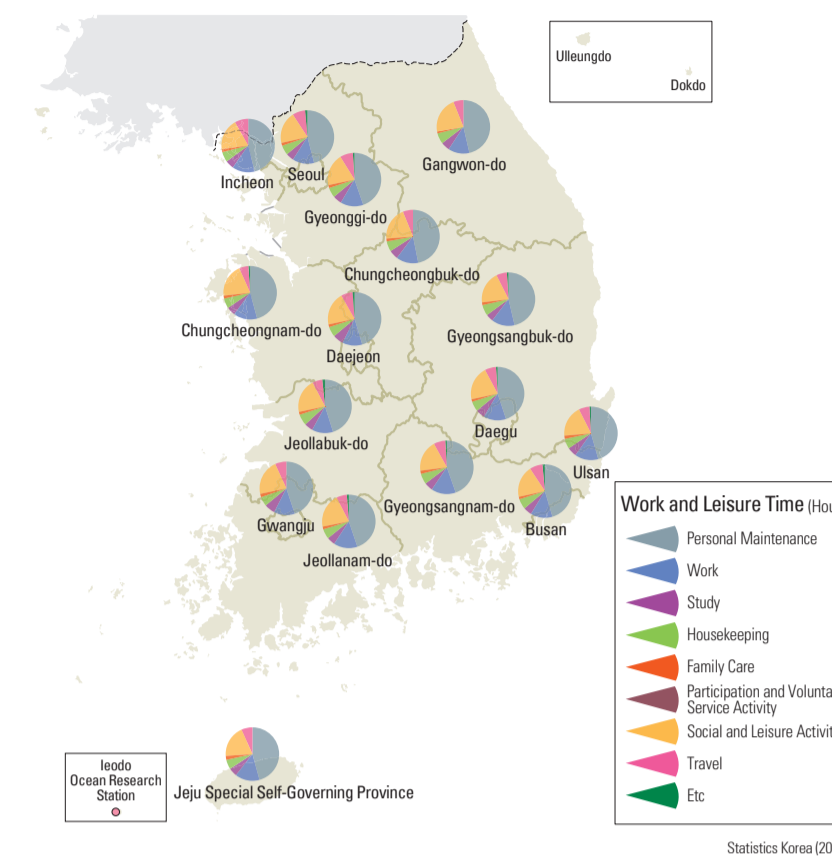


Number of General Hospitals and the Numbers of Beds and Doctors per 1,000 Persons

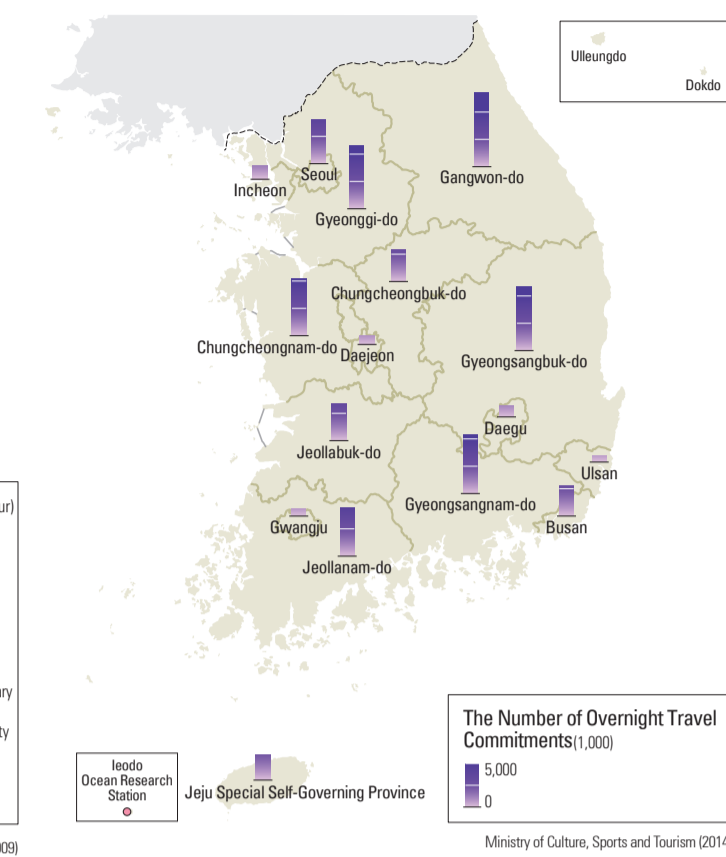


Personal Satisfaction and Work-leisure Balance

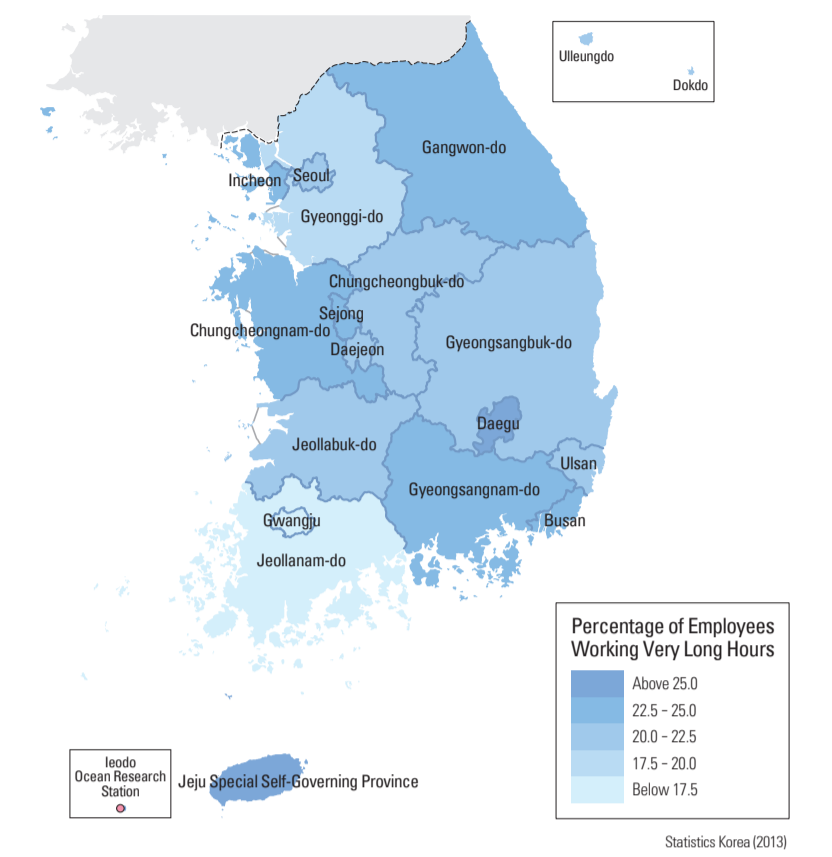
Work and Leisure Time Use (by Region)



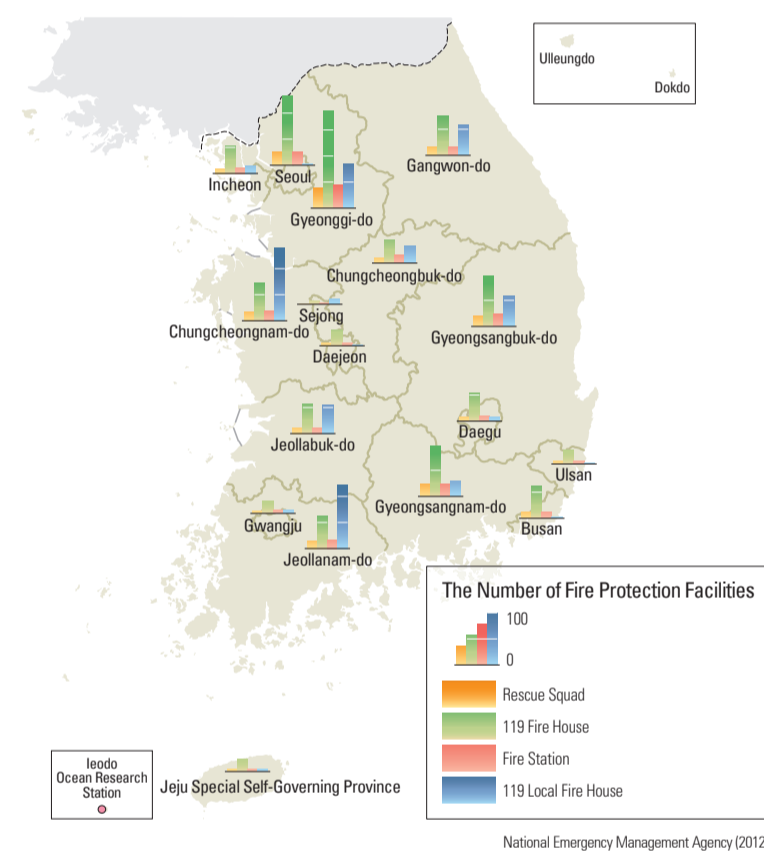
Travel Commitment



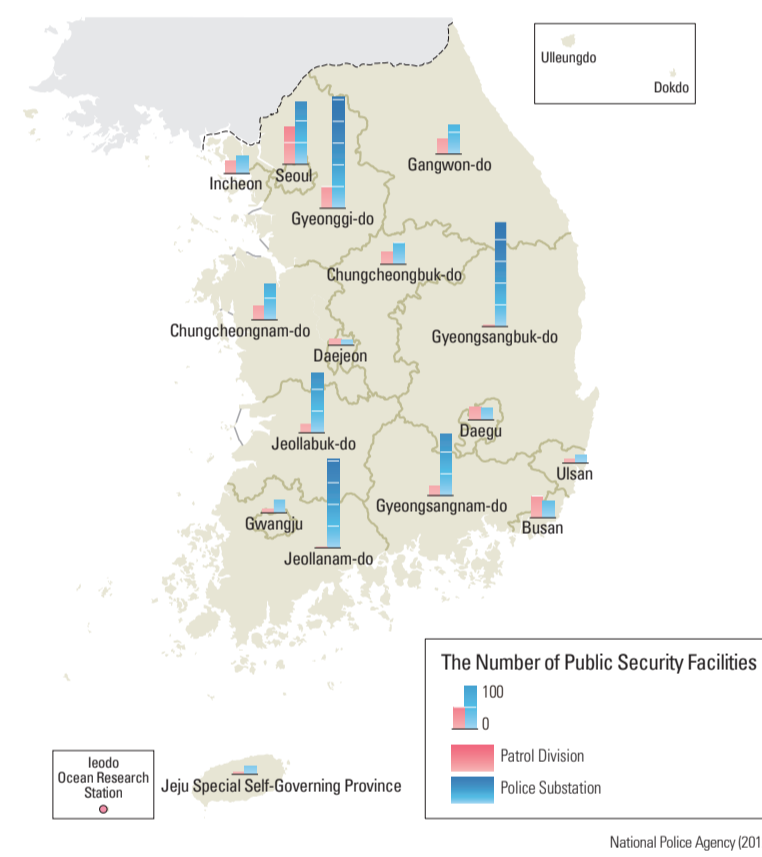
Percentage of Employees Working Very Long Hours



The Number of Fire Protection Facilities



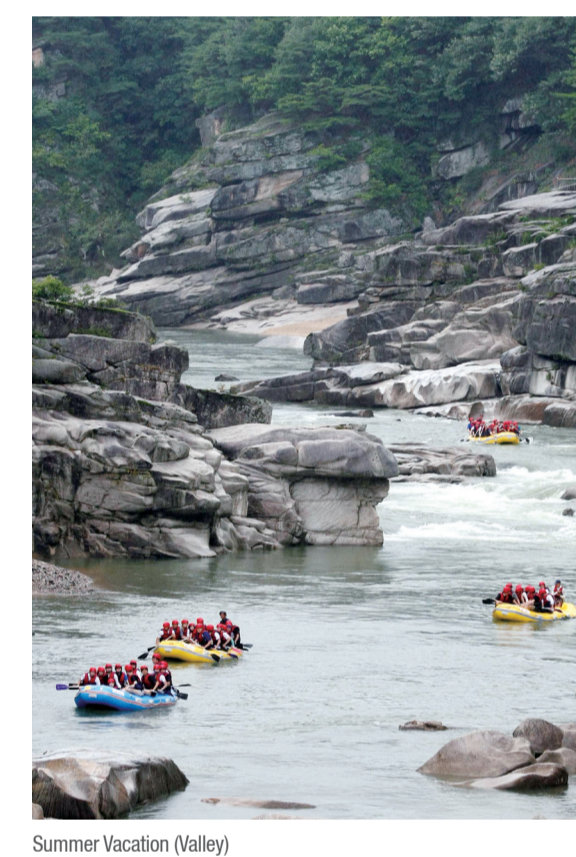
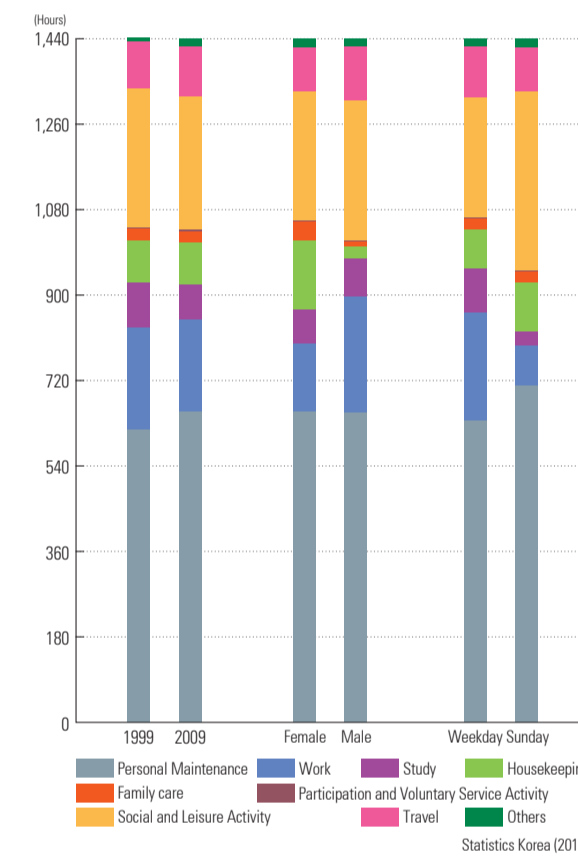
The Number of Public Security Facilities



Public safety and public health are two critical measures of the quality of life of any society. One of the most widely used measures of public health is life expectancy, the average number of years a person can expect to live. Life expectancy is very high in the capital region and in Jeju. The reason for this may be that the capital region has the better medical infrastructure, and Jeju has more green space and better services and amenities-- though there are significant differences between si-gun-gu units within these regions. The difference between life expectancy for men and women is as high as 7 years as of 2011. While the number of years of life expectancy is important, how well the elderly manage their health is also an important factor to monitor.

The regional distributions of the fire department and police substations are the indicators that indirectly show the regional ability to properly respond to the criminal action and accident in the region. As for the better operation of such important safety agencies and organizations for the better response to the criminal mishap and accident disaster, the discussion recently becomes active on the pros and cons of the locally distributed organization system considering the distinct characteristics of the region and the centralized organization system unifying the nationwide matters for the timely and strong implementation.

Work and Leisure Time Use (by Year, Sex and Day)

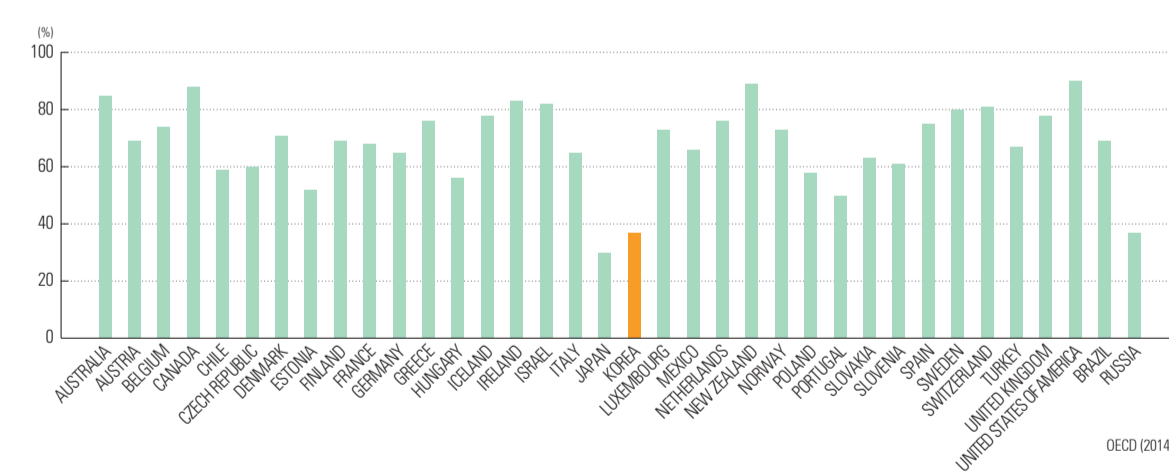


Twenty-four hours a day is given to everyone equally. A work day with long hours implies a direct decrease in quality of life and also places a constraint on participating in other important activities outside of work. These constraints may directly lead to social exclusion and social justice problems, particularly between regions and/or between social classes. Because there are obvious connections between time available for non-work activities and quality of life, Statistics Korea has been conducting a nationwide time use survey once every 5 years since 1999. The survey investigates individual time use and individual attitudes toward time use, which provides a framework measuring quality of life.

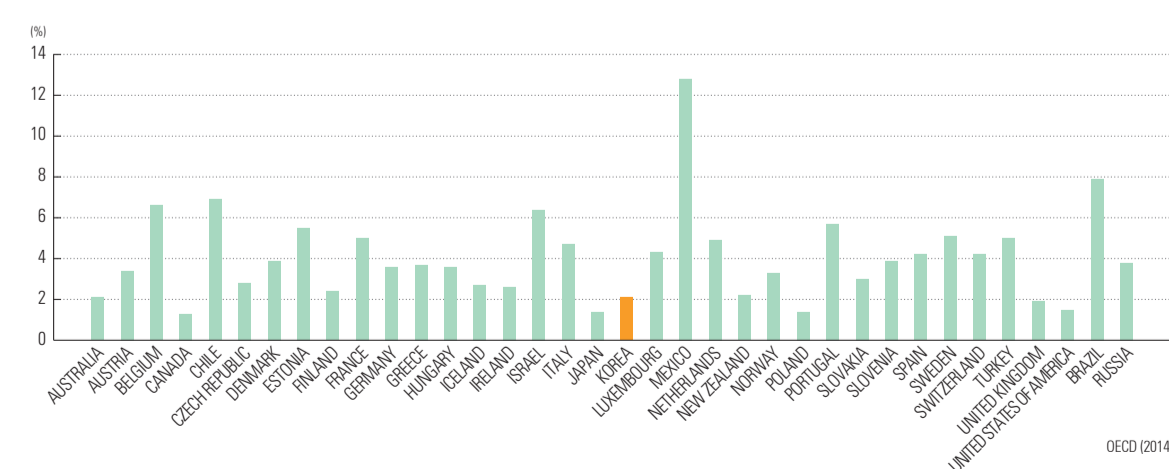
Life Expectancy is average number of years a person can expect to live. There have been remarkable gains in life expectancy over the past 50 years in OECD countries. Life expectancy is the most widely used measure of health even though it only takes into account the length of people's life and not their quality of life. Self-reported health is the percentage of people reporting the status of their own health. The commonly-asked question, "How

is your health?" is one way of collecting data on self-perceived health status. Despite the subjective nature of this question, the answers received have been found to be a good predictor in gauging the need for future health care policies. The assault rate is percentage of people who report having been assaulted in the previous year.

Self-reported Health



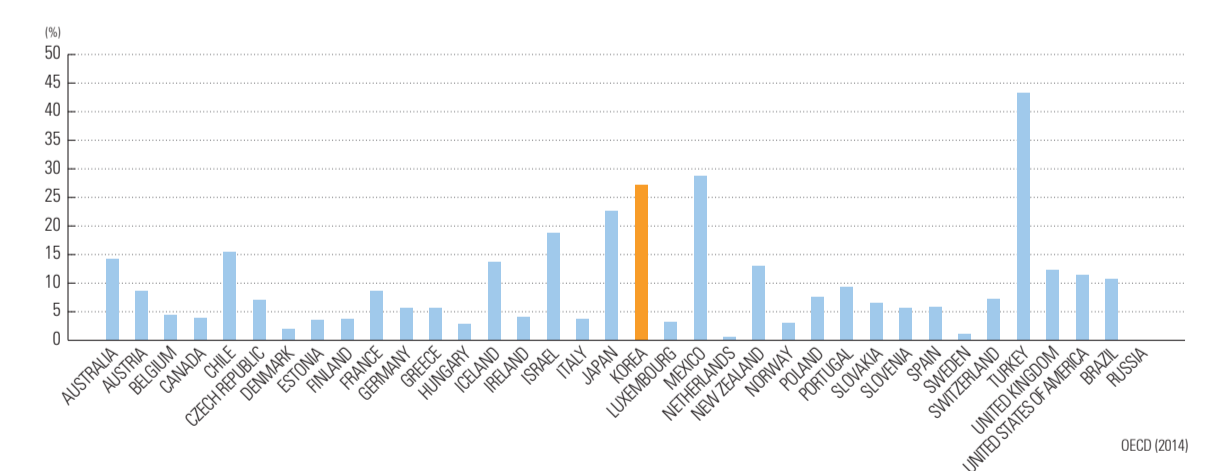
Assault Rate



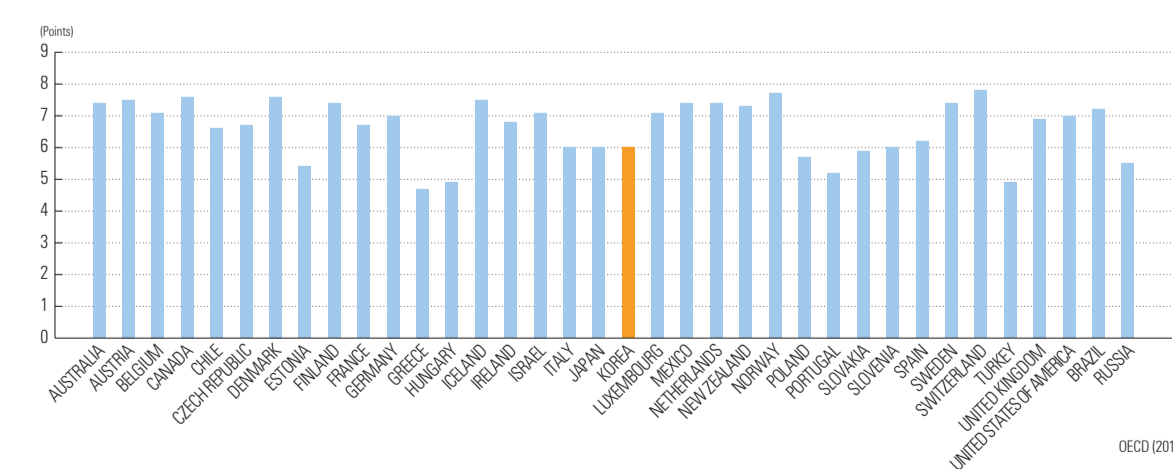
Life Satisfaction is an index that measures the average self-evaluation of life satisfaction on a scale from 0 to 10. It measures how people evaluate their life as a whole rather than their current feelings. It captures a reflective assessment of which life circumstances and conditions are important for subjective well-being. Time devoted to the index Leisure and Personal Care is the

average number of minutes per day spent on leisure and personal care, including sleeping and eating. The index Employees Working Long Hours is percentage of employees working more than 50 hours a week on average. Long work hours may impair personal health, jeopardize safety, and increase stress.

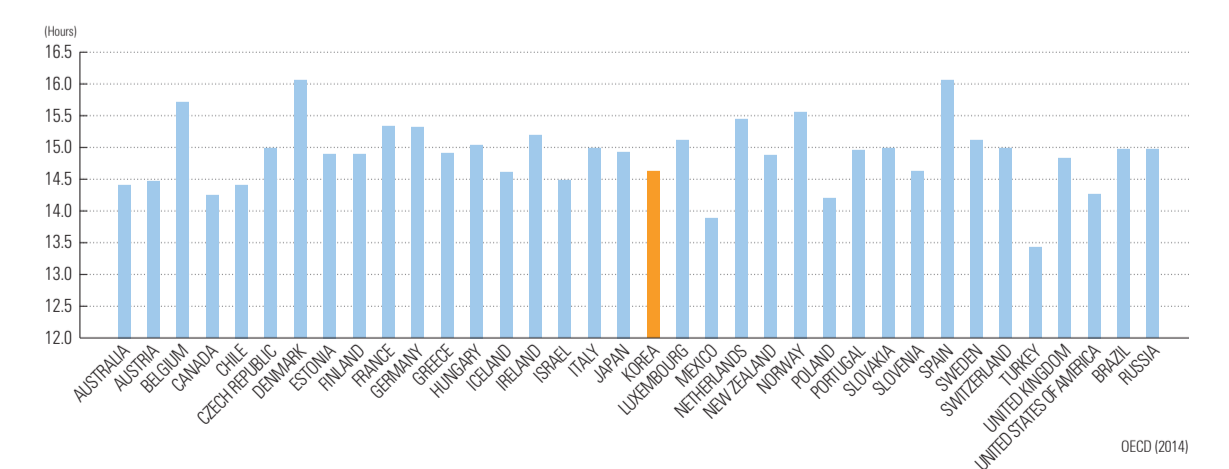
Employees Working Very Long Hours



Life Satisfaction

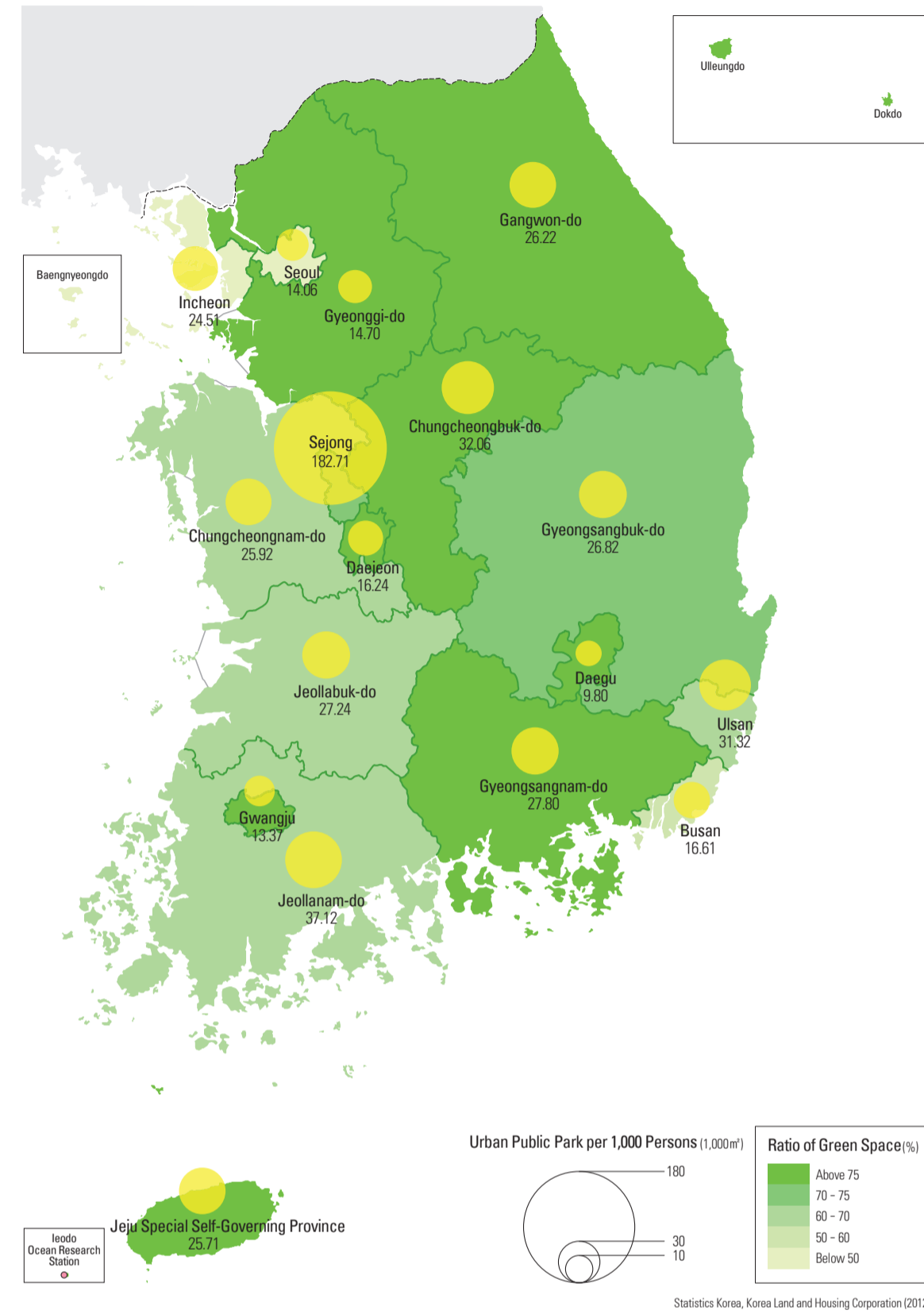


Time Devoted to Leisure and Personal Care

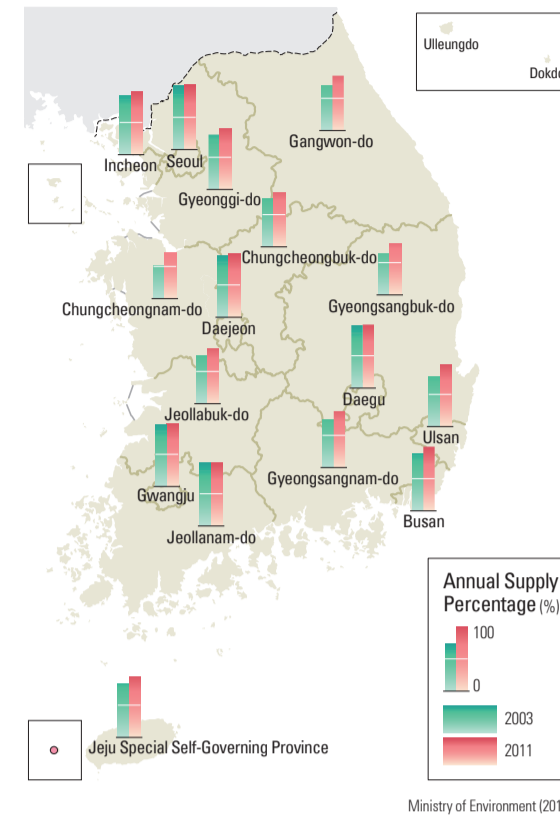


Living Environment

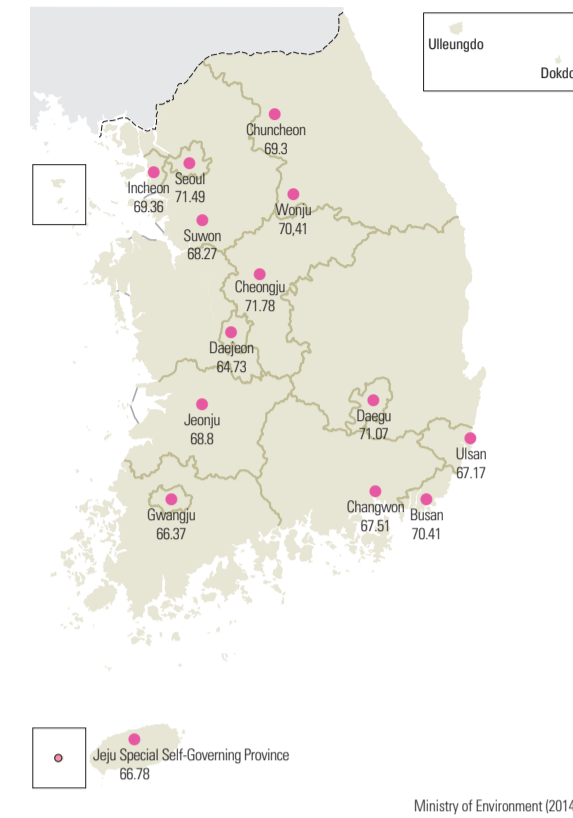
Green Space and Urban Public Park Ratio



Water and Sewage Supply Percentage



Environmental Noise (dB)

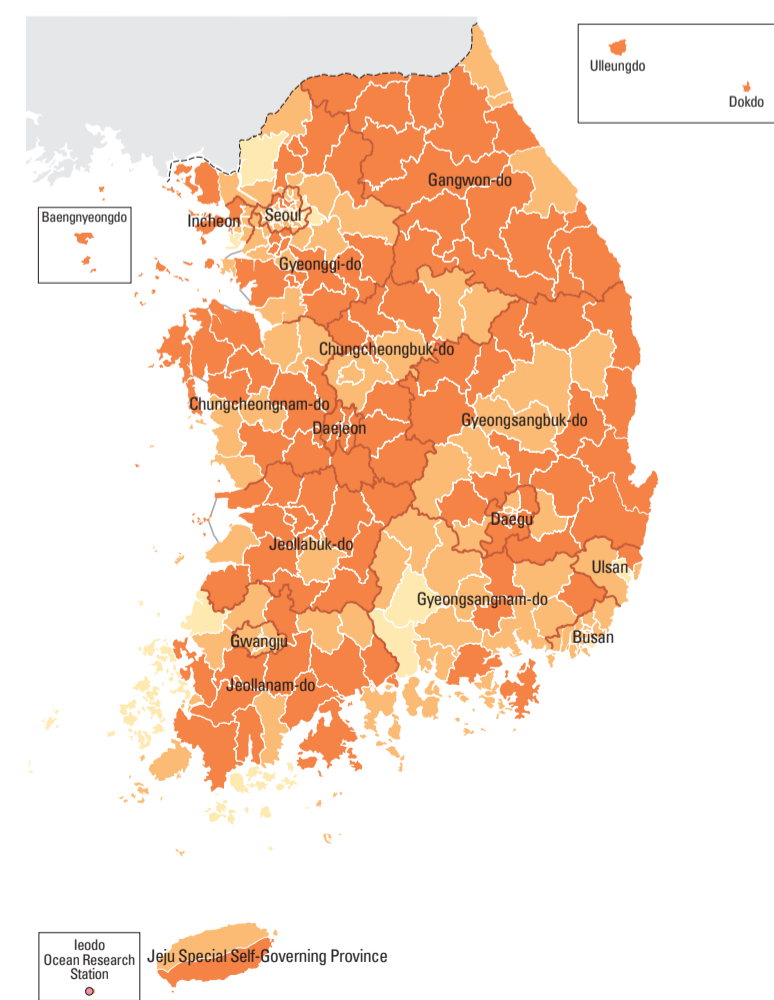


A higher quality of life typically is associated with such amenities as green spaces and public parks, conveniences such as water and sewage provision, and necessities such as the reduced risk of noise and radioactivity, as well as general risk management. The Sejong Multifunctional Administrative City contains an overwhelmingly high percentage of public parks. Large local governments' green tract ratios show that Gangwon-do, Gyeonggi-do, Chungcheongbuk-do, and Gyeongsangnam-do, which are all located within mountainous areas, contain a larger share of green spaces, but there are significant variations in such ratios between si-gun-gu (city-county-district) within larger local governments. The broad provision of both clean water and waste management is also a high priority especially in light of the fact that Korea is the representative country of water shortage within the OECD. Noise pollution is a pronounced problem in large cities, particularly in those with heavy industry and

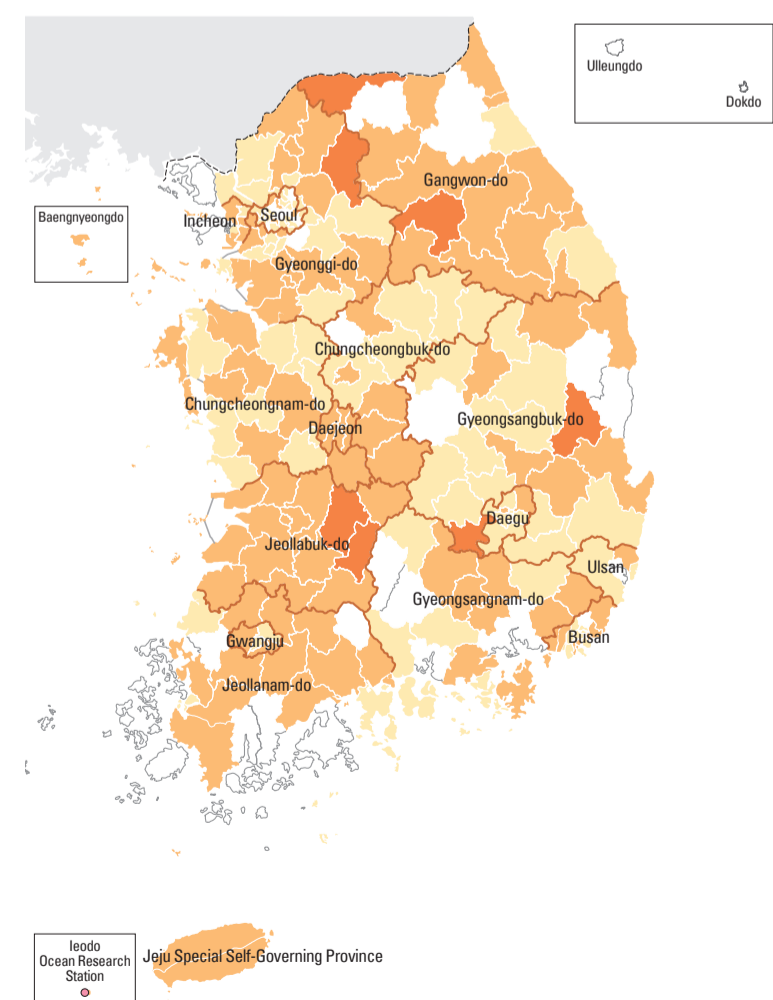
airports in their vicinities. Radon is a colorless, odorless and tasteless gas that is generated as a result of the process of uranium's radioactive decay in rocks. It is a natural radioactive process that is found everywhere on earth. Radioactivity includes crust radiation from rocks, cosmic radiation from the stars, natural radiation from air and food, and artificial radiation from radioactive power plants, X-ray and chemo-radiation therapy equipment. The patterns on the radon distribution maps clearly show that the highest concentration of radon occurs away from urban areas and away from highly populated areas in Korea. While radon can be a health hazard with prolonged exposure, it is less hazardous in rural areas where the amount of concrete surfaces is less and therefore less of this gas is trapped.

Regional Distribution of Radon

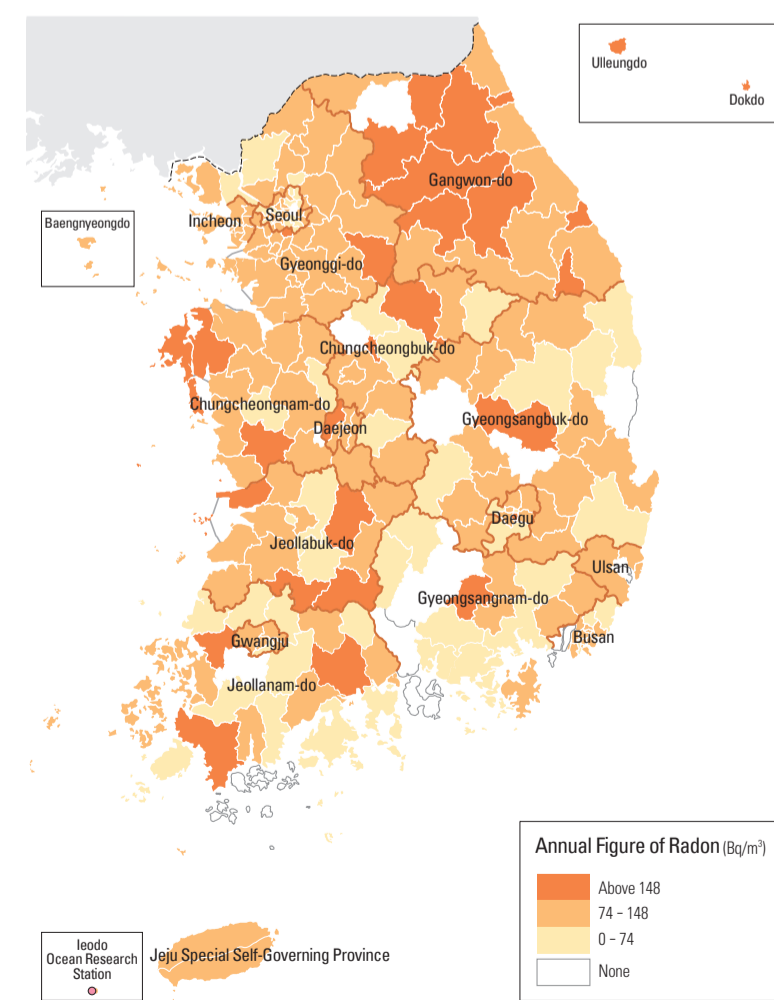
Geographical Distribution of Radon: Detached House Area



Geographical Distribution of Radon: Apartment Area

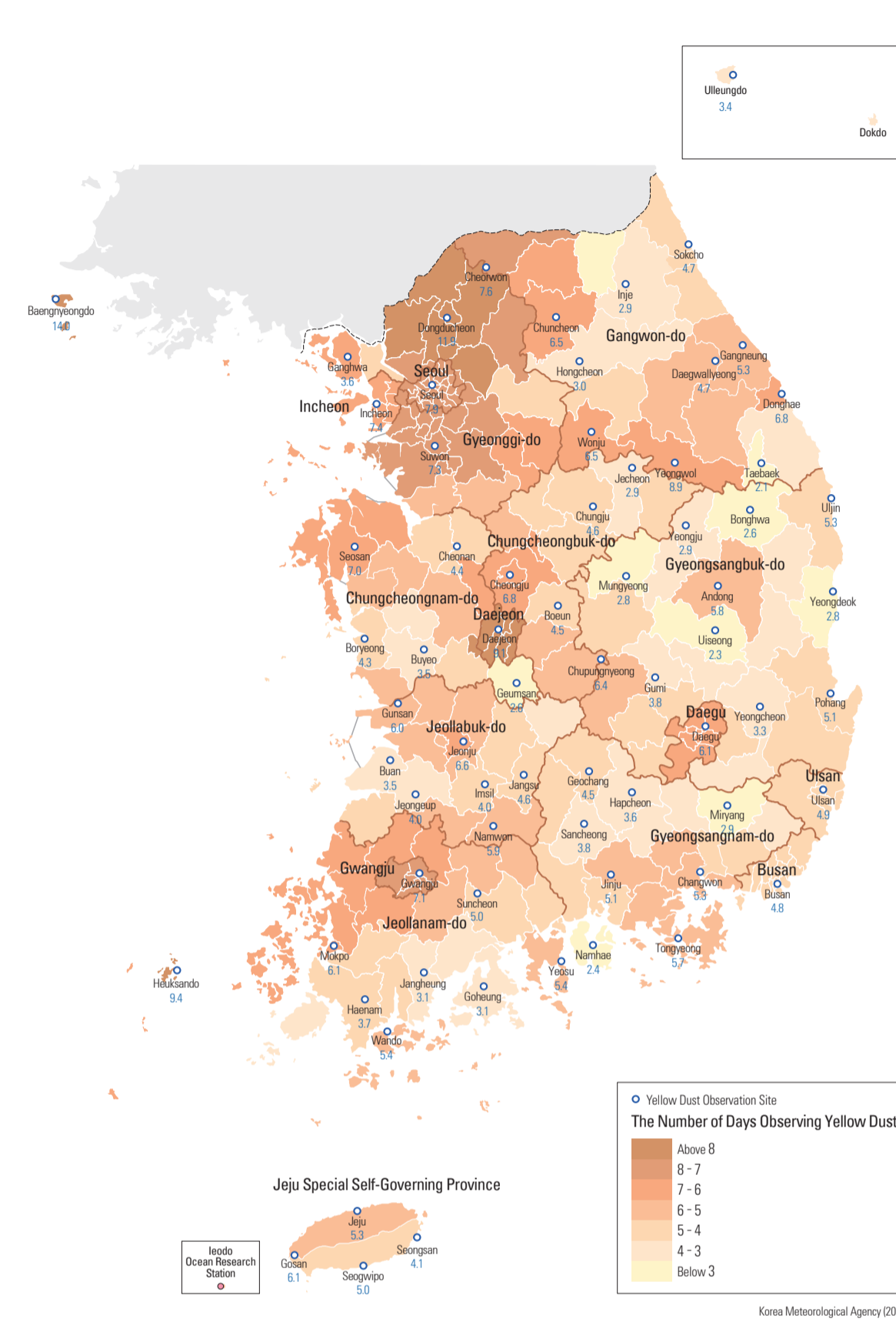


Geographical Distribution of Radon: Multiplex House Area

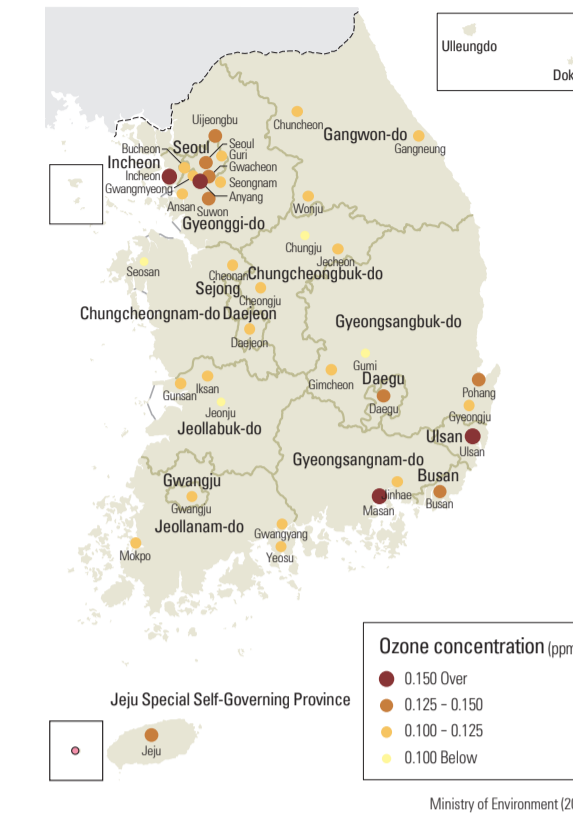


Environmental Protection

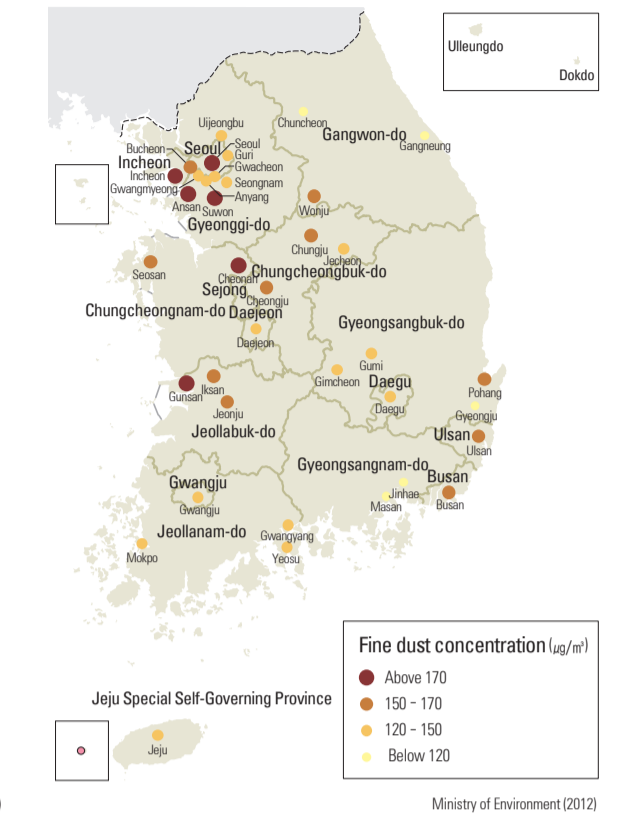
Yellow Dust Observation Site and the Number of Observation Days



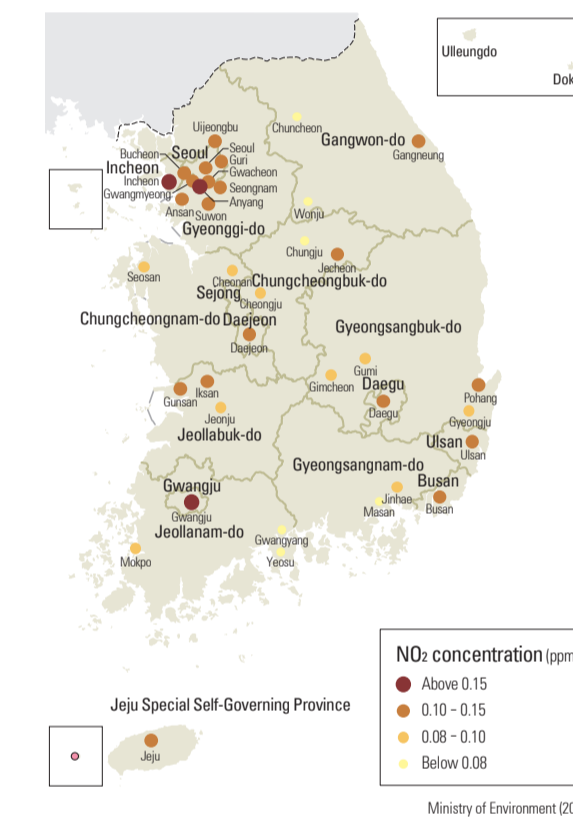
Ozone in Major Cities



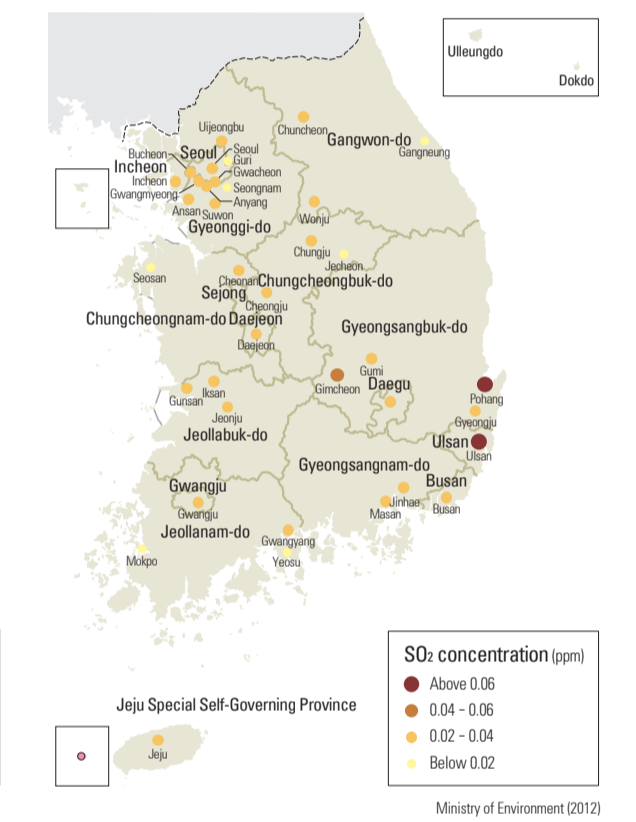
Fine Dust in Major Cities



NO₂ in Major Cities

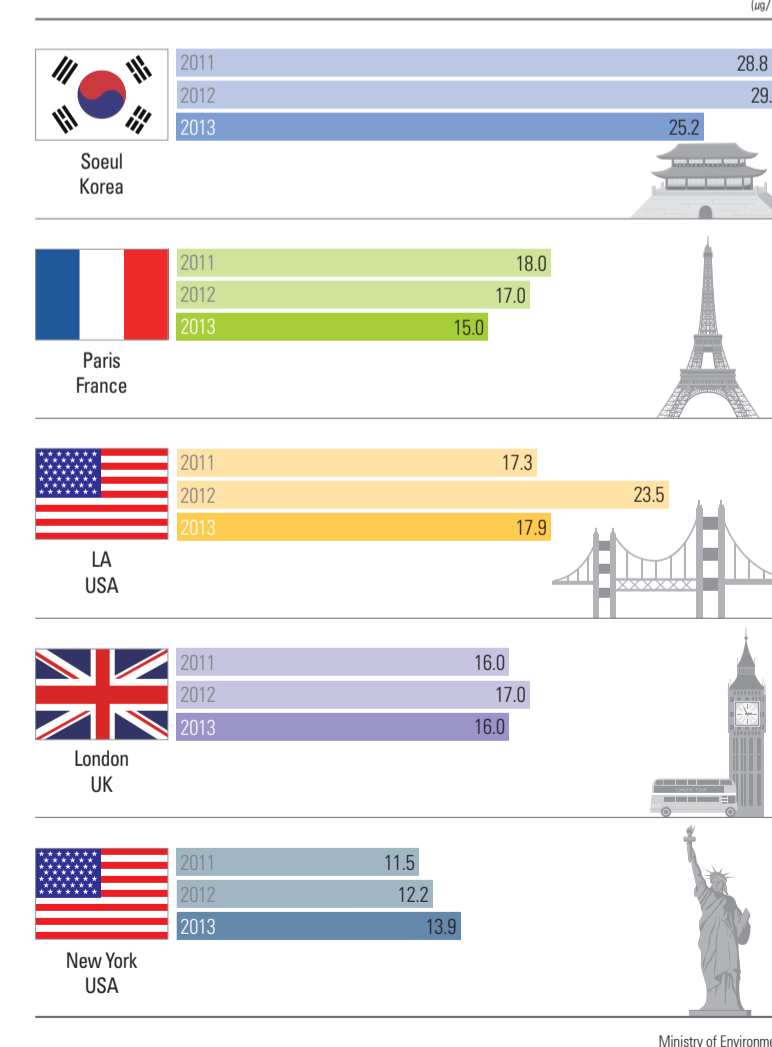


SO₂ in Major Cities



Yellow dust, fine dust, and ozone can become indiscriminately fatal to human beings when it is present in large quantities. Unlike other environmental pollutants, yellow dust, fine dust, and ozone can migrate with the weather. To mitigate such movement of pollutants will require international cooperation on the fundamental removal of the pollutant at their sources along with their continuous management. Too much exposure to these pollutants can be harmful or even fatal. PM2.5 refers to the extra fine dust with a particle size smaller than 2.5 micro-millimeters. Seoul took action to reduce fine dust in 2013, but has subsequently determined that the government must make continuous efforts for further reduction because other world cities still show much lower level of fine dust. Sulfur dioxide (SO₂) is produced as a result of metal refining and chemical material production with fossil fuels. When people are exposed to high levels of SO₂, they may suffer from irritation of the body's mucosa which can then provoke dyspnea. SO₂ is also a major component of PM10, which is a particle size smaller than 10 micro-millimeters. Nitrogen dioxide (NO₂) is generated by chemical product manufacturing and the high temperature combustion process of car and power plants. When people are exposed to high amounts of NO₂, they may suffer harm to their respiratory organs. The quality of coastal water is also very important to the country's health because it directly relates to the health and sustainability of the coastal fishing industry.

Annual Concentration of PM 2.5 in World Major Cities



Coastal Water Quality

