

## 1. Overview of Age-Friendly City Investigation

- The purpose of this age-friendliness investigation is to examine and analyze the assessments and perceptions of baby boomers and senior citizens of age 65 and older in order to create a livable urban environment in terms of the 8 major areas relevant to determining factors of the physical environment, the socio-economic environment, and health and social services of the City of Gwangju.
- This age-friendly city investigation was carried out to collect the basic resources to draw issues and an action plan for creating the age-friendly City of Gwangju in the future.
- This research selected 4 specimen groups-citizens of ages 45-54, 55-64, 65-74, and 74 or older - and carried out 3 times of focus group interviews(FGI) for multidimensional analysis of age-friendliness.
- For the analysis of the age-friendliness of the City of Gwangju, questions were selected reflecting the conditions and the characteristics of the urban environment out of considerations of the 8 major areas to examine according to the WHO International Network of Age-Friendly Cities and Communities and various literature.
- This study used a frequency analysis, cross tab, technical analysis, and MANOVA analysis method at 95% confidence level and sampling error of  $\pm 3.1\%$ .

## 2. Comprehensive Results of Age-Friendliness Investigation

### 2.1. Average Comparison by Areas

- As a result of the average comparison by the 8 areas on the middle-aged and aged citizens of 45 or older, the outdoor spaces and buildings area marked the highest score(2.89) showing citizens' favorable perception, and the social inclusion area marked the lowest score(2.58) indicating rooms for improvements.
- The level of age-friendliness by areas were higher in outdoor spaces and buildings(57.6%), communication and information(56.8%), transportation(56.6%), and community support and health(54.8) in the given order.
- Social respect and care(53.2%), housing(53.0), Volunteer activities and jobs (51.8%), social inclusion(51.6%) were below average.

### 2.2. Analysis of the Investigation of Age-Friendliness by 8 Areas

#### 2.2.1. Outdoor Spaces and Buildings

- The age-friendliness in the 'outdoor spaces and buildings' area was 57.6% with the average point of 2.88(out of 5 points).

(Table 1) Outdoor Spaces & Buildings Area - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Directions
Outdoor Spaces and Buildings	• Rest facilities and benches are short of demand on streets, parks, and walking trails, and safety facilities and responding systems at local environment are needed for slip-fall, disease, injury of the elderly.	• Expand the installation of seats in waiting and resting areas, improve walking passage obstacles, and install safety facilities in places where the elderly use a lot (safety hand rail, etc.)
	• In public buildings and facilities, there are inconveniences for the physically disabled (for walk or wheelchair access) and the elderly	• Apply universal design that is free from physical conditions in public facilities
Average Comparison by Areas	• Most favorably perceived in the age group of '45-54' • Marked above average (of all 8 areas) in all age groups • The safety from crime area (Question No. 5) marked lower scores as the ages grew older.	
Age-Friendliness Level	57.6%	Average 2.88 Point (Overall Average 2.72 Point)

### 2.2.2. Housing

- The age-friendliness in the 'housing' area is 53.0% with the average point of 2.65(out of 5 points).

〈Table 2〉 Housing Area - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Erections
Housing	• Support for the repair or renovation of the elderly's house is in short, and housing environment where facilities necessary for the aged life are not equipped	• Install equipments and facilities for safety such as safety hand rail in bathrooms, emergency call bells, fire alarms, etc.
	• Lots of houses are structured not easy for evacuation in case of firer or natural disasters like earthquakes.	• Provide safety products, and train and educate where the safety exits are and how to react to a fire or an earthquake
Average Comparison by Areas	<ul style="list-style-type: none"> <li>• All age groups, other than the 45-54 group, agree improvements are needed in the housing area</li> <li>• Marked the lowest score in the '55-65 age group'</li> <li>• In case of the house renovation support (Question No. 5) showed lower scores as the age grows older</li> </ul>	
Age-Friendliness Level	53.0%	Average 2.65 Point (Overall Average 2.72 Point)

### 2.2.3. Transportation

- The age-friendliness in the 'transportation' area is 56.6% with the average point of 2.80(out of 5 points).

〈Table 3〉 Transportation Area - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Erections
Transportation	• Lack of stickers or signs to show self-driving senior citizens	• Actively promote preventive activities for the elderly traffic accidents such as distributing stickers to notice self-driving elderly to place at the rear part of the vehicle (Reduce the accident rate of elderly drivers)
	• No priority parking spaces for the elderly drivers	• Systematic management of the elderly priority parking space -It is regulated by an ordinance, not by a law, and effective management is not easy because of different age regulations for the aged by regions.
Average Comparison by Areas	<ul style="list-style-type: none"> <li>• The 'transportation' area marks high scores in general</li> <li>• Most favorably answered in the age group of '75 or older' .</li> <li>• Least favorably answered in the '55-64' age group.</li> </ul>	
Age-Friendliness Level	56.6%	Average 2.80 Point (Overall Average 2.72 Point)

### 2.2.4. Social Inclusion

- The age-friendliness in the 'social inclusion' area is 51.6% with the average point of 2.58 (out of 5 points).

〈Table 4〉 Social Inclusion Area - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Erections
Social Inclusion	• Lack of spaces for inter-generational harmony	• Hold events and provide spaces to enhance concerns for the elderly issues and inter-generational harmony and communication.
	• Lack of events for the harmony between the younger generation and the aged generation in local community	• Improve accessibility to cross-generation events and social activities and develop various publicizing methods
	• Information on local events, social inclusion activities and education is not provided systematically	• Promote participation from various generations by selecting age-customized publicizing methods and places
Average Comparison by Areas	<ul style="list-style-type: none"> <li>• Marked a lower score overall in comparison with other areas</li> <li>• Least favorably answered in the '55-64' age group</li> </ul>	
Age-Friendliness Level	51.6%	Average 2.58 Point (Overall Average 2.72 Point)

### 2.2.5. Voluntary Services and Jobs

- The age-friendliness in the 'voluntary services and jobs' area is 51.8% with the average point of 2.59 (out of 5 points).

〈Table 5〉 Voluntary Services and Jobs Area - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Erections
Voluntary Services and Jobs	• Difficult to obtain information on jobs and starting business to utilize career after retirement	• Systematic improvements such as the active operation, professional personnel employment, and budget support for centers to support employment of the elderly, reemployment arrangement and counseling, follow-up management, etc.
	• There was discrimination against the elderly in job opportunities, retaining employment, and promotion.	• Creating an environment free of discrimination against the elderly in recruitment, retaining employment, and promotion.
	• Lack of job information providing services	• Institutional attention is needed to continuously re-educate, to increase work motivation, and to retain elderly jobs.
Average Comparison by Areas	<ul style="list-style-type: none"> <li>• Marked a lower score than other areas in general</li> <li>• Least favorably answered in the '55-64' age group</li> </ul>	
Age-Friendliness Level	51.8%	Average 2.59 Point (Overall Average 2.72 Point)

### 2.2.6. Social Respect and Care

- The age-friendliness in the 'social respect and care' area is 53.2% with the average point of 2.66 (out of 5 points).

〈Table 6〉 Social Respect and Care Area - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Erections
Social Respect and Care	<ul style="list-style-type: none"> <li>• Lack of school education on ageing and the aged people and the elderly' s opportunities to participate in school events</li> <li>• Opportunities for the elderly to hand in knowledge and experiences as the advisors to the younger generation.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide an opportunity for a positive shift in perceptions from that the elderly are to be protected to that they can transmit their knowledge as advisors</li> </ul>
	<ul style="list-style-type: none"> <li>• Difficulty in obtaining goods for the elderly</li> </ul>	<ul style="list-style-type: none"> <li>• Improve to help the elderly easily purchase and be supported with goods for the elderly for their safety and convenience in preparation for a constantly increasing the elderly population</li> </ul>
	<b>Average Comparison by Areas</b> <ul style="list-style-type: none"> <li>• Marked a lower score than other areas in general</li> <li>• Least favorably answered by the '55-64' age group</li> </ul>	
Age-Friendliness Level	53.2%	Average 2.66 Point (Overall Average 2.72 Point)

### 2.2.7. Communication and Information

- The age-friendliness in the 'communication and information' area is 56.8% with the average point of 2.84(out of 5 points).

〈Table 7〉 Communication and Information - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Erections
Communication and Information	<ul style="list-style-type: none"> <li>• Lack of opportunities and places to learn computer for the elderly</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare opportunities for the elderly to learn about computer and other devices and dispatch personnel to help them retrieve information in public facilities</li> </ul>
	<ul style="list-style-type: none"> <li>• Difficult to be aided by guides for guidance and information retrieval by using the Internet</li> </ul>	<ul style="list-style-type: none"> <li>-The number of the elderly experiencing difficulty increase as they publicize local events and news online including the use of kiosks (unmanned comprehensive information guidance system) recently.</li> </ul>
<b>Average Comparison by Areas</b> <ul style="list-style-type: none"> <li>• Marked a higher score than other areas</li> <li>• Most favorably answered by the age group of '75 and older'</li> <li>-Favorably answered in the order of the age groups of '65-74' , '45-54' , and of '55-64'</li> </ul>		
Age-Friendliness Level	56.8%	Average 2.84 Point (Overall Average 2.72 Point)

### 2.2.8. Local Community Support and Health

- The age-friendliness in the 'local community support and health' area is 54.8% with the average point of 2.74 (out of 5 points).

〈Table 8〉 Local Community Support and Health Area - Analysis Results and Improvement Directions

Area	Analysis Results	Improvement Erections
Local Community Support and Health	<ul style="list-style-type: none"> <li>• Lack of emergency measures for the elderly in case of natural disasters like severe cold or heat, and heavy rain</li> </ul>	<ul style="list-style-type: none"> <li>• Educate the elderly who are less capable of coping with natural disasters on evacuation drills and countermeasures</li> </ul>
	<ul style="list-style-type: none"> <li>• Lack of facilities where the elderly can receive free rehabilitation care (physiotherapy, occupational therapy)</li> </ul>	<ul style="list-style-type: none"> <li>• Support the active support for the medical and public health program and projects for the elderly</li> <li>-It influences on various aspects including the support for the elderly, resolving family conflicts, and social activities of the elderly.</li> </ul>
<b>Average Comparison by Areas</b> <ul style="list-style-type: none"> <li>• Favorably answered in the age groups of '45-54' and '75 and older'</li> <li>• Unfavorably answered in the age groups of '55-64' and '65-74'</li> </ul>		
Age-Friendliness Level	54.8%	Average 2.74 Point 2.74점 (Overall Average 2.72 Point)

### 2.3. Age-Friendliness by Autonomous Districts

- The age-friendliness level by the autonomous districts of the City is highest Buk-gu with 58.4% (2.92 Point) and is followed by Nam-gu with 57.8% (2.89 Point), Gwangsan-gu with 54.3% (2.71 Point), Dong-gu with 50.7% (2.54 Point), and Seo-gu with 47.1% (2.35).
- Dong-gu shows relatively higher level of age-friendliness in the communication and information area (59.0%) and the local community support and health area (56.0%), but the lowest level in the housing area (45.2%).
- Seo-gu comparatively shows lower level of age-friendliness in all areas in general with the social inclusion area (43.0%) marking the lowest.
- Nam-gu shows relatively higher level of age-friendliness in all areas in general with the local community support and health (59.4%) marking the highest.
- Buk-gu shows relatively higher level of age-friendliness in all areas in general with the outdoor spaces and buildings (62.4%) marking the highest.
- Gwangsan-gu shows high level of age-friendliness in the areas outdoor spaces and buildings (57.0%), transportation (57.0%), communication and information (57.4%), and local community support and health (55.0%), but the social inclusion area (51.0%) shows the lowest.
- In average, housing (51.8%), social inclusion (51.1%), voluntary services and jobs (51.0%), social respect and care (52.4%) areas show relatively low age-friendliness.
- Improvements in the housing, social inclusion, voluntary services and jobs, and social respect and care areas are needed through the promotions of FGIs, development of guidelines, action plans, etc.