

# A Proposal for Town Development in Aged Society

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**Abstract** — According to the Aged day commemorative report issued in September of 2007 from the Ministry of Internal Affairs and Communication, the population of over sixty five years old attained the historical record high of 27.44 million or 21.5% of total population.

On the other hand, the many of shopping malls with large parking have been located in suburbs with expanding of suburban residential area and the effect of motorization. In addition, the growth of remote shopping such as internet and catalog one, helps accelerate the decline of old shopping malls. However, these malls give the only one life-line to the elder and disabled population. In this paper, we discuss on the way of maintaining this life-line for elder and disabled one from the study of questionnaire surveys for visitors of two shopping mall in Wakamatsu-ward and Tobata-ward, Kitakyushu, the gate way city to Kitakyushu in Fukuoka Prefecture. Some of methodology is proposed to facilitate revitalization of local areas as the result of this study.

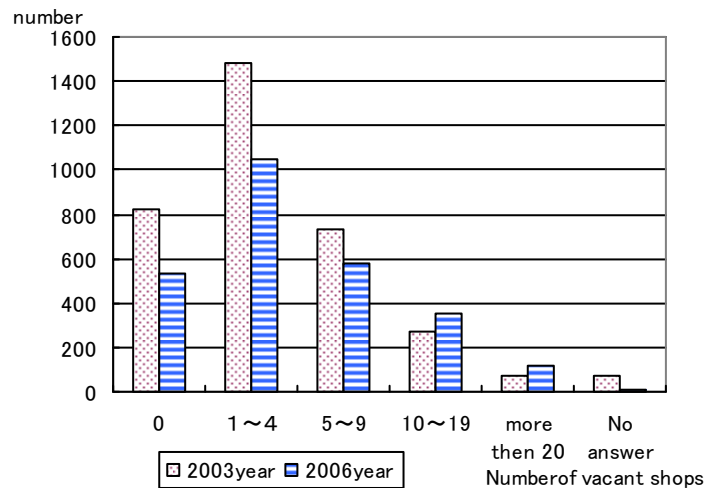


Figure1. Number of vacant shops

## 1. Introduction

In our country, the first postwar population declining society started in 2005. There is an estimation that the number of population will become less than 120 million in 2025 and further decrease to 99.38 million and 89.93 million in 2045 and 2055, suggesting that a long lasting course of population declining will start. The total population will continue to decrease, whereas the aging rate will continue to increase. It is estimated that the aging rate becomes 25.2% (one in four Japanese people) in 2013 and 33.7% (one in 3) in 2030. It is predicted that the aging rate will further increase to 40.5% in 2055; one in 2.5 people becomes 65 years old or older in 2055. Furthermore, the number of late-elderly people 75 years old and older will increase and exceed the number of early-elderly people less than 75 years old. Thus, it is forecasted that the proportion of late-elderly people in the elderly of our country will increase in future<sup>[1]</sup>.

## 2. Present status of shopping district

In our country, the environment of shopping district is facing serious situation since population decline in the center of city have progressed in addition to opening of big-scaled shop. A questionnaire survey was made in November, 2006 by National Association of Shopping Area Promotion Unions aiming to clarify the present situations of shopping district and decide measures to take in future and judge the efficacy of them<sup>[2]</sup>. A total of 8000 questionnaires were sent to various shopping districts and 2644 valid responses were obtained. When

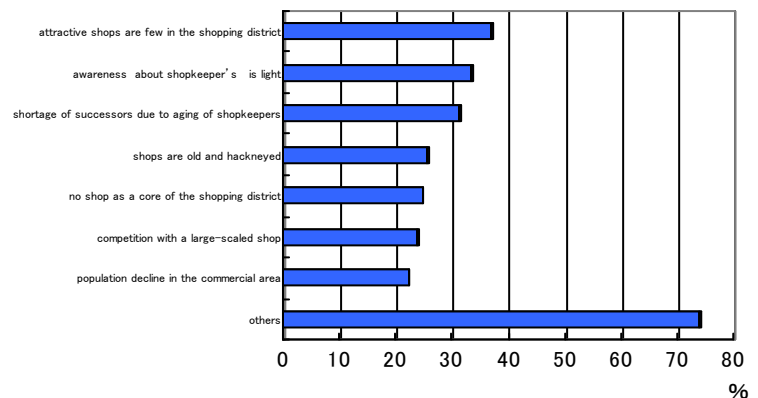


Figure2. Major problems in shopping district

compared with the results of previous survey in 2003, the number of vacant shops in 2006 was increased as shown in Figure1<sup>[2]</sup>. Although the number of shopping districts with none or less than 10 vacant shops was decreased, the number of those with 10~20 or more vacant shops was increased. The mean number of vacant shops in each shopping district was 3.90 in 2003, but it was increased to 5.33 in 2008. Regarding the

recent trend of shopping district, it was demonstrated that shopping districts having a tendency of “it is declining” or “it is stagnating but having a risk of decline” were as much as ca. 70% [2]. This suggests that the present environment surrounding a shopping district is very serious in our country.

As shown in Figure2[2], three major problems about the present shopping districts are the number of attractive shops are few (36.9%), the shopkeepers’ awareness about participation in activities of shop district are less (33.4%) and lack of successors due to aging of shopkeepers (31.4%).

### 3. Community business in aging society

Since nuclear families become more and more dominant recently, the number of family consisting of an elderly couple or the elderly living alone is increasing in our country. In December 2007, Mitsubishi Research Institute carried out a questionnaire survey with 1527 shopkeepers of shopping districts belonging in Center District Activation Council. The recovery of survey was 19.9%. Based on the results of survey, expectations of the residents to shopping districts were home delivery service of items, service patrol for the elderly living alone, food delivery service and so on, indicating that expectations by the elderly were high[3]. On the other hand, the answers obtained from the shopkeeper side showed three major activities to tackle as major problems for their shopping streets[4] were maintenance of an arcade/street lights (79%), planning of event (74%) and installation for the shopping street (65%) as shown in Figure3. This indicates that their activities were occupied only with installation/maintenance of hardware for shopping street as well as planning of transient event. Therefore, items such as child-care service (5%) and elderly support service (3%) were not included in ten effective measures chosen by the shopkeepers [4][5].

In the present survey results, the residents expected a shopkeeper to carefully support daily activities of the elderly/the weak and also assist community functions, but not to make a plan of transient event.

These evidences suggest that the ideas of shopkeepers were not always coincident with the desires of residents. Therefore, it seems that an active and attractive shopping district would not be restored through investment of new equipments and/or planning of event in disregard of those resident’s needs. It is necessary for attracting the elderly/the weak to develop and supply new items for them, and also improve toward a comfortable atmosphere of shop. Moreover, it is desirable to set up a chair in front of the register corner so that when the shop is not crowded, the customers can easily communicate with the shopkeepers/employees through talking about various topics. This suggests that such thoughtfulness is required to the shopping district. A shopkeeper should recognize that conversation on a

shopping district, by itself is a kind of shopping. If shopkeepers/employees realize interactive services and provide hospitality through communicating with customers, it will become able to increase customer’s loyalty to a shopping district.

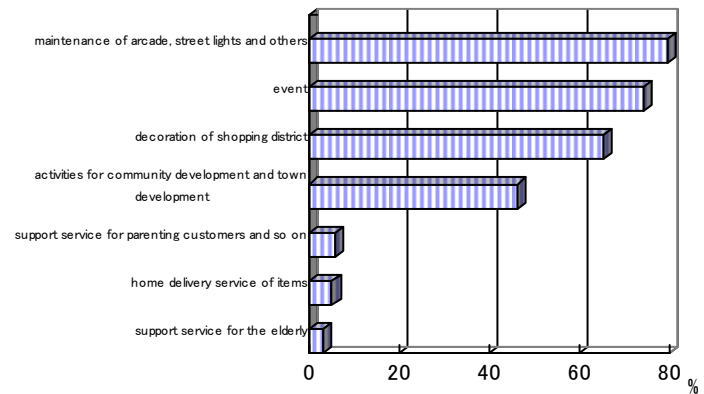


Figure3. Activities as a shopping district organization

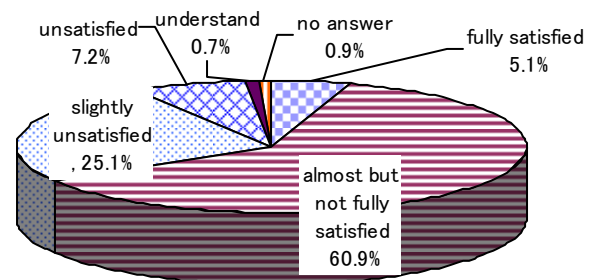


Figure4. Life satisfaction of the Kitakyusyu citizen

### 4. Survey on civil consciousness in Kitakyusyu city

A survey on civil consciousness was made by Kitakyusyu city in 2007 to clarify the problems in town development through widely consulting with citizens and make good use of them in the management of city government. The theme of survey was made on the future of town development[6]. Three thousands men/women aged 20 or older living in the Kitakyusyu city (including 30 foreigners living in the city) were used as the subjects. The survey was carried out by a mail survey method. The shipping date of questionnaire was September 21, 2007. The number of valid responses was 1,747. Their answers about life satisfaction were shown in Figure4.

The percentage of answer in the previous survey (1992) was 4.9% for “fully satisfied” and 61.8% for “almost but not fully satisfied”. Thus, 66.7% of subjects were classified into “life satisfaction group”. Whereas those obtained by the present survey were 5.1% for “fully satisfied” and 60.9% for “almost but not fully satisfied”. Therefore, the life satisfaction group was 66.0% of the subjects, indicating that the degree of life satisfaction was decreased by 0.7% compared with the results of previous survey. Although “unsatisfied group” including “quite unsatisfied group” (4.5%) and “slightly unsatisfied group” (24.9%) was 29.4% in the previous survey, it was 32.3% in the present survey (7.2% for “quite unsatisfied” and 25.1% for “slightly unsatisfied”), indicating an increase of unsatisfied people by 3.2%. As shown in Figure5, the future image of Kitakyusyu City was a safety town to live peacefully (79.5%) and followed by a town friendly for the elderly and handicapped persons to live lively (60.0%), a town aiming at good environment for parenting and education of children (47.9%) and a friendly town to live in and a town with good transport links convenient to go shopping (27.2%).

### 5. Actual status of shopping districts in Kitakyusyu city

Kitakyusyu City is located at the northeast end of Fukuoka Prefecture and the gateway to Kyusyu area. In 1963, five neighboring cities were merged into the city as the first ordinance designated city in Kyusyu and the city has developed mainly in the fields of steel industry, chemical industry and ceramic industry. Recently, the city is called as a silicon island because various semiconductor industries are accumulating in it. Its area has been called as Kitakyusyu industrial district since a long time ago. At present, the main product of the city is a car. Since the city is positioned rather near to the Asian Continent, car production system has been strengthened by the respective production plants of Nissan, Toyota and Daihatsu at the foothold of factories, resulting that the number of car production in 2006 reached over 1 million cars per year. The population of Kitakyusyu city was the peak (1068 thousands) in 1979. Thereafter, it decreased to 992 thousands in 2008. On the other hand, the number of families was ca. 338 thousands in 1979, and increased up to ca. 455 thousands in 2008. The time-course changes in the population and progressing to an aging society in Kitakyusyu city and Japan were shown in Figure6. The rate of aging for the city was higher than the national average since 1985. Since it is dangerous for the elderly to drive a car or ride a bicycle, they are compelled to use public means of transportation or walk. Under these circumstances of Kitakyusyu City, a questionnaire survey was made to clarify what is needed for the elderly and the weak to live peacefully in safe and also what is needed to construct a friendly, attractive and lively shopping district. Visitors of shopping districts in Wakamatsu ward and Tobata ward positioned near at the center of Kitakyusyu City were used as the subjects.

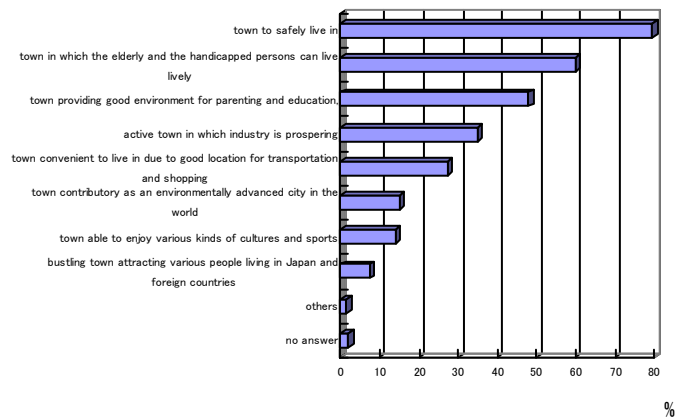


Figure5. Goal images of Kitakyusyu city (three choices at most)

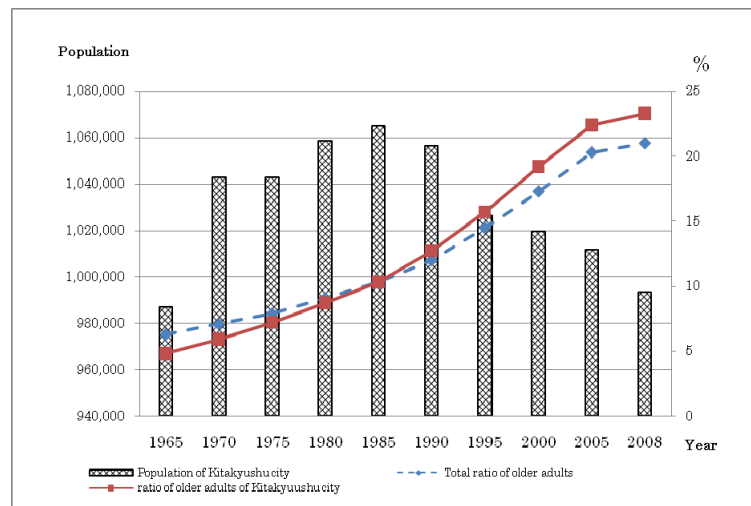


Figure6. Developmental situation of Japanese and Kitakyusyu city aging society

## 6. Survey about actual status of utilization of shopping districts in Kitakyusyu City

### 6.1 Wakamatsu ward and Tobata ward in Kitakyusyu city

Previously, Wakamatsu ward was much prosperous as the largest harbor for shipping coal and its shopping district was near the harbor. At present, a large commercial facility named as “Sanlive Wakamatsu” having a large parking lot accommodating ca. 500 cars is facing to the shopping district across a road. Tobata Ward is positioned on the opposite shore across the sea called as “dead sea” in the nineteen sixties. In Tobata ward, a festival called as “Tobata-Gion Oh-yamagasa”, one of big three of summer festivals in Fukuoka is yearly held as national intangible traditional cultural properties. The yamagasa is 2.5 t in weight and ca. 10 m in height. It is equipped with 309 paper-lanterns having lighting candles arranged in 12 steps. The yamagasa, a kind of portable shrine is carried by about 80 gallant men in Tobata. The yamagasa is, so to speak, “a pyramid of

light” since its lanterns decorates night sky. However, the environmental conditions of the shopping district facing to the north exit of Tobata Station are serious at present because the shopping district has been losing the customers after “Tobata Saty”(a big commercial facility) having a big parking lot accommodating 2000 cars was opened in the spring of 1999.

### 6.2 Survey methods

The persons in responsible for Wakamatsu and Tobata Wards pointed out that the survey should be done in the morning on a heavy traffic day of week. For both shopping districts, Saturday was chosen as the day of survey and Sunday was excluded because Sunday is a light-traffic day. In Wakamatsu shopping district, Friday was chosen as another one day of survey and the survey was performed on July 11 (Fri.) and July 12 (Sat.), 2008. Whereas for Tobata shopping district, the survey was performed for the duration of a.m.10 ~ p.m. 2 on August 9 (Sat.) and August 12 (Tues.) since Tuesday was chosen as another day of survey by the side of shopping district. In addition, an interview survey was performed by 4 persons. The questionnaire used for the interview was shown in Appendix 1.

### 6.3 Results of survey

For the survey made in Wakamatsu ward, the sample size was 70 on July 11 and 67 on July 12, and the male/female ratio was 19:81. On the other hand, for the survey made in Tobata ward, the sample size was 74 and 79 on August 9 and August 12, respectively. The ratio of male/female was 21.6:78.4. Regarding the visitor’s age, about 77% and 73% of them for Wakamatsu shopping district and Tobata one were 60 years old or older respectively. Furthermore,

91.2% and 71.2% of visitors for the former and latter were living in the respective own districts. The percentage of walking as the means of transportation was 54.7% and 57.5% of Wakamatsu shopping district and Tobata shopping district, indicating that walking was the major means of transportation for visitors of both districts. As shown in Figure7, the most important purpose of visitors was shopping (for 50% or more visitors) in both districts and their shopping items were mainly perishable foods such as vegetables, fruits and fishes. And their second purpose was something to do in a financial institution like a bank, a hospital and a public office. There were not a few answers that they have a walk with no clear purpose since the shopping street is cool because of shading by an arcade. The frequency of visit was every day or 2~3 times a week in 75.2% of respondents. For Tobata shopping district, the percentage was 65.3%. These results suggest that the customers usually visit the respective shopping districts.

When visitors were asked about items to request for each shopping district, most of them answered that they have no idea because they were asked suddenly, but the number of persons who requested some items were as follows: for Wakamatsu district, 6 for resting place/bench and café, 4 for restaurant, 3 for book shop, clothing store, and to increase the number of shops and 2 for convenience store, vegetable/fruit shop, food store, handcraft materials shop and toy shop. Whereas for Tobata district, the numbers were 4 for resting place/bench and to increase the number of shops, and 2 for book store, pharmacy and prepared-food shop. Thus, it was suggested that the visitors want to have a sitting place to relax and have a rest on the street.

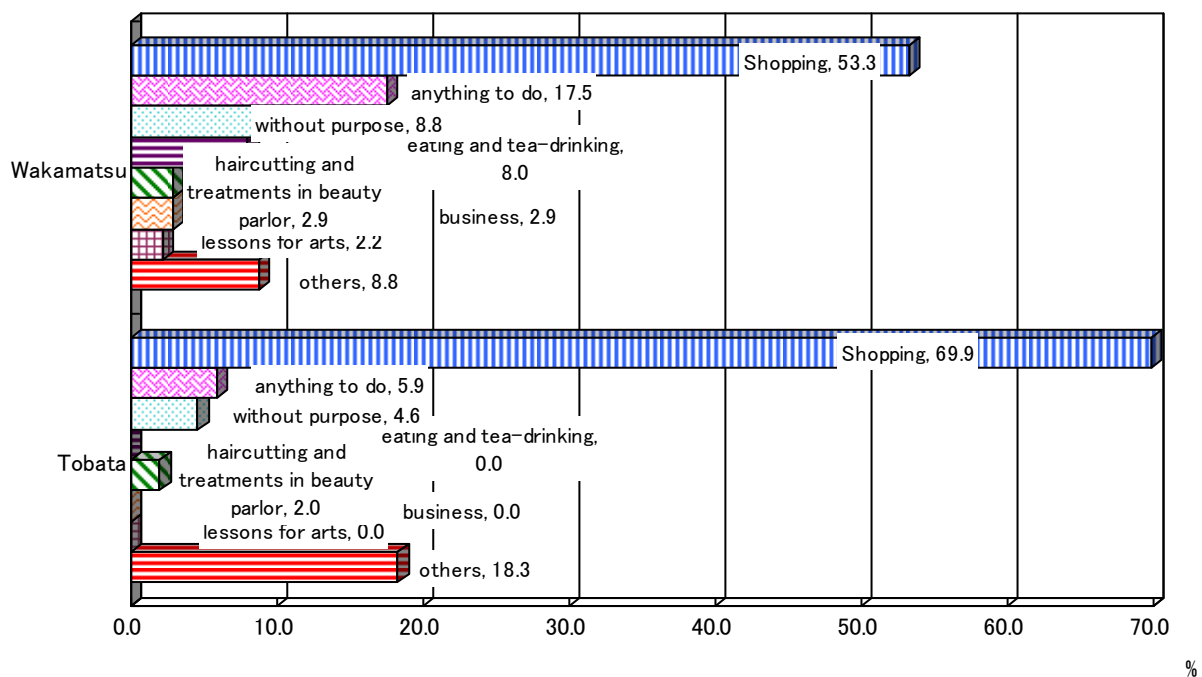


Figure7. Purposes of visitors

## 7. Proposal of a compact city concept effective for shopping of the weak

The starting points of on-foot visitors to Wakamatsu and Tobata shopping districts were shown in Figure8. Table 1 shows the distance and the time required from 6 starting points to the respective shopping districts were obtained by the searching procedure. Table 1 shows that the distance able to go on foot from each starting point to a shopping district was about 800 meters at most and the time required was ca. 10 minutes, though the distance and the time might be influenced by various factors such as the features of landform (uneven or not) and the presence or absence of sidewalk, stairs, handrail and equipments for pedestrian crossing. Based on these findings, we proposed the following measures for restoration of a lively shopping district.

- (1) Sales promotion targeting elderly women  
About 80% of visitors were women in both shopping districts and more than 75% of them were 60 years old or older. Therefore, it was thought necessary to supply recommendable items such as fresh vegetables/fruits, prepared foods and seasonal traditional cookies as well as other small articles like a bag.
- (2) Advertisements for sale promotion should be made mainly in the area within ca. 800 m or ten minutes walking from the center of shopping district. The duration of sales promotion should be set from Monday to Friday when hospital and public office are open.
- (3) Efforts of independent sales promotion by shop staffs  
To cover the advertizing costs for sales promotion described in (2), shop staffs who selected recommended items of the day should make efforts to promote sales by friendly speaking to a visitor smiling in front of a shop. However, nobody carried out such a sales campaign the period of survey. In a consumer survey performed aiming to clarify the future course of activation for the shopping district around Tobata station and its purpose, a new idea was proposed; “to provide background-music on the street using a speaker”<sup>[7]</sup>. But it was thought that such music is not always necessary because the shopping district might become bustling if sales campaign is put in practice by shop staffs.
- (4) Since most visitors of shopping district are elderly women, it is desirable to start a free delivery service for purchased items within a day and order taking service over the region<sup>[7]</sup>.
- (5) If the measures described in (1) and (4) are performed by collaboration of the two shopping districts, watching-over of the elderly living alone, families of an elderly couple alone, handicapped persons and the weak difficult to enjoy shopping would be strengthened.

Positioning of public facilities and a shopping district necessary for residents’ daily activities in aging society is an important problem for future compact city. The conceptual scheme drawn as a compact city was shown in Figure9. A shopping district in which people can buy

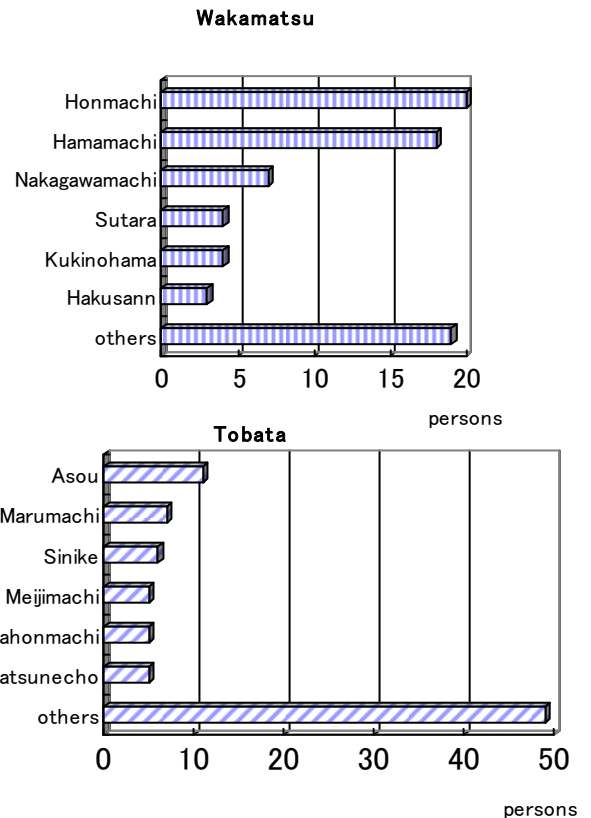


Figure8. Departure area of guests to local shopping arcade by the foot

daily necessities like perishable foods is positioned at the center of compact city. In addition, a public office, hospital, financial institute and police station as well as terminals of public means of transportation are positioned around the shopping district. And schools, welfare facilities and playgrounds are arranged in its surrounding region. A half-diameter of 800 meter seems suitable for the size of compact city. Such a compact city would be convenient to do anything in daily life on foot or by bicycle. As the results, a shopping district of community welfare type would play important roles as a nucleus of community and survive in a compact city.

Recently, young people in the twenties is called as “hibernating twenties” preferring a minimum life and it is said that less-consuming people have been increasing in the young. They have a tendency to buy necessities through net shopping or catalog shopping and refrain from going out. On the other hand, a child in aging society of fewer children is said to have 7 pockets and called as the multi-pocket age. Consumption of such a child is supported by about 7 pockets of married/unmarried uncle/aunt in addition to parents and grandparents. Although consumption depends on the properties of generation and economic conditions, we cannot say sweepingly that the present tendency of consumption is shrinking. However, the ability to

Table1. Distance and time from each area by the foot to the

Wakamatsu ward shopping arcade			Tobata ward shopping arcade		
Town	Distance(m)	Time(minutes)	Town	Distance(m)	Time(minutes)
Honmachi	405	5	Asou	800	10
Hamamachi	828	10	Marumachi	1500	18
Nakagawamachi	526	7	Sinike	839	11
Sutara	1900	24	Meijimachi	491	6
Kukinohama	888	11	Nakahonmachi	175	3
Hakusan	573	7	Hatsunecho	412	5
Average	853.3	10.7	Average	703.2	8.8

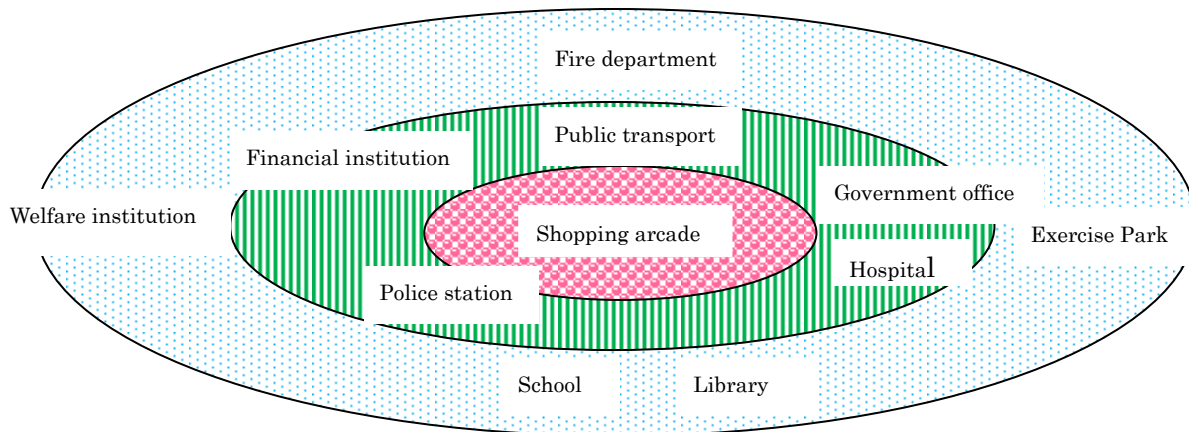


Figure9. Concept of the compact city

attract consumers to a shopping district would decrease more and more in future since their concerns to the district would not increase unless an effective strategy is taken to deal with diversified consumption above described.

## 8. Conclusions

It is essential to improve a compact city from an aspect of hardware and introduce a shop universal design. Since this world is full of products and information at present, visitors of shopping district want to buy not only a product, itself but also anything else. Moreover, visitors have a desire that shop staffs take a flexible attitude from customer's viewpoint as software of hospitality. On the other hand, hospitality is to provide impartial information and service from all customers viewpoints regardless of the age, sex, nation and handicapped or not. Services such as consideration, notice and thoughtfulness are termed as universal service. Visitors of shopping district are much varied. It is necessary to support the weak for shopping including the elderly, handicapped persons and persons in the parenting generation in special so that they can also enjoy shopping in safety. In addition, an attempt to construct a comfortable shop even for the weak will lead to repeated visiting. When such attempts are taken by not only one shop but also the whole shopping district,

the shopping district will obtain more satisfactory success and we can expect future development of shopping district.

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