Strategies for Retirement Community Development in China

By

Hua Wang

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College of the Atlantic

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Author

Department of Urban Studies and Planning
May 25, 2006

Certified by

Professor Henry Pollakowski
Principal Research Associate, Center for Real Estate
Thesis Supervisor

Accepted by

Professor Langley Keyes
Chair, MCP Committee
Department of Urban Studies and Planning
Abstract

In 2000, China’s 60-year-and-older population reached 130 million, or 10% of the total population. This event symbolizes that China has entered the aging society. In the Chinese tradition, strong family support enables older Chinese to live with their children and age at home. The One Child Policy implemented in the 1970’s will change the way families care for their older parents. This paper investigates the alternative living arrangements in China such as the institutions for the elderly, community support, and the master planned retirement communities. The strength and weakness of each living arrangement is highlighted. Suggestions of a three-tiered system are made. Care is given to living arrangements that enable inter-generational contact and support, flexibility, and affordability.

Thesis Supervisor: Henry Pollakowski
Title: Principal Research Associate, Center for Real Estate
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1. Introduction

According to the United Nations Educational, Scientific and Cultural Organization, a country or region becomes an aging society once the people of 60 years and older make up 10% of its population. In 2000 China’s 60-year-and-older population reached 130 million, or 10% of the total population. This event symbolizes that China has joined the league of the aging societies.

According to China National Aging Committee’s report, there are four characteristics of the aging trend in China. (1) A large older population. China has always been the nation that has the largest number of older people in the world. Today China has 1/5 of the world’s older population. (2) Rapid increase of older population. It took U.S. 79 years to double the 65-year-and-older population from 7% to 14% of the total population. It will take China only 27 years to complete the same growth. (3) Spatial disparity. The aging wave first reached the more developed coastal area before the less developed interior region. For example, Shanghai became an aging society in 1979, while the Ning Xia province in northwest China is projected to join the aging society in 2012. (4) Aging before modernization. When the developed world nations entered aging societies, their GDP per capita ranged from USD5,000 to USD 10,000. In 2000, China’s GDP per capita was only USD840.

Four of the six research priorities identified by the International Plan for Action on Aging 2002, material security into older age, changing family structure, and quality of life are
directly related to senior housing. Where and how the older people live has big impact on the quality of their daily activities, access to care, and social life.

Influenced by Confucian’s teaching of filial obligations, traditionally Chinese older people live with their children and age at home. Families have been the main source of support to the older people in various aspects such as daily activities, financial, and emotional help. With rapid urbanization, industrialization, and the One Child Policy, the pressure from a modern society is calling for diverse avenues to supplement family obligations to care for the older people.

This paper attempts to investigate living arrangements of the older population in urban China. The author will first review literature on aging in the developed nations, then the aging demographic in China followed by review of the family support traditions and government sponsored institutions for the elderly. Next, the author will conduct case studies of two new models that appeared in recent years and suggest possible strategies for retirement community development to real estate developers. The recommendations also include potential government policies, which would encourage private sectors to provide good housing products for the aging society.

2. Literature Review

The developed nations achieved aging societies ahead of the developing nations. Governments in the developed countries responded aging society by establishing elderly
benefit programs that were replaced by social insurance. Older people in the developed
nations become less dependent on their children for support (Peterson 2001). In the
developed countries, older people tend to accumulate significant wealth including
housing equity as a major asset. In the book Aging in the United States and Japan, Daniel
L. McFadden reported that older people in the U.S. are open to the idea of taking housing
equity to finance retirement life. On the other hand, Noriyuki Takayama revealed that
Japanese older people are reluctant to adopt such conversion schemes, so they are “home
richer but cash poorer” than the working-age people. Due to cultural differences, the
percentage of older people living with their families in the U.S. was just 17% in 1980,
while it was 70% in Japan (Noguchi et al 1995). During the industrialization period,
Japan’s percentage of older people living with children decreased from 87.3% in 1960 to
54.3% in 1997. However, living with children is still the top choice for more than half of
the older population (Kim et. al 2001).

Western countries have developed a wide selection of senior housing products in their
search to meet the older population’s demand, as show in Table 1 (Raymond 2000). These
products range from independent living to intensive care, which correlates to the
increasing need of support as older people age. The cost also increases as the level of
services and comprehensiveness increases (Barton 1997).
Table 1: Growing Old, At Home.

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors apartments/ Active Adult/</td>
<td>Independent living and no supportive services, but is generally age-restricted.</td>
</tr>
<tr>
<td>“Lifestyle” communities</td>
<td></td>
</tr>
<tr>
<td>Congregate properties and congregate</td>
<td>Residents of these facilities are offered independent living as well as shared activities, if they choose. Some properties available to offer residents assisted living services.</td>
</tr>
<tr>
<td>with assisted living</td>
<td></td>
</tr>
<tr>
<td>Assisted living</td>
<td>Typically provide 24-hour supervision, shared group meals, and assistance with tasks of daily living.</td>
</tr>
<tr>
<td>Nursing homes and nursing with</td>
<td>Provide skilled nursing care, some in combination with assisted living services.</td>
</tr>
<tr>
<td>assisted living</td>
<td></td>
</tr>
<tr>
<td>Continuing care retirement</td>
<td>Sometimes called Lifecare communities, provide a range of services including independent living, and on-site skilled care.</td>
</tr>
<tr>
<td>communities (CCRCs)</td>
<td></td>
</tr>
</tbody>
</table>

Source: National Investment Conference, 1999

Heumann et al (2001) believes that elderly people can achieve the highest quality of life and reduce the cost burden on society by being active participants in determining their level of care and to the extent possible, planning accordingly. Siekkinen (2002) points out that independent living brings benefits to many stakeholders:

“**Elderly** themselves want to live in their own homes and familiar environments as long as possible. **Public sector** benefits when institutionalization costs are lower. **Real estate and construction sector** gain new business opportunities through increasing needs in renovation. **Service providers** gain new business opportunities and are able to reduce costs through more efficient processes.”

Livability is an important aspect of senior housing. Livability includes not only barrier-free homes but also barrier-free access to public transportations and other infrastructures (Heumann 2003). Social interaction is also essential to successful aging (Cannuscio et. al 2003). Social capital helps the older people to lead an active and fulfilling life and also receive emotional support from other people.
The above literature review suggests that in the industrialized world, society is taking on increasing responsibilities of supporting the older population. In Asian countries with strong filial obligations, such as Japan, the role of family has reduced but continues to play a major role. The main themes of senior housing include promoting dignity, independence and livability.

3. Demographic

3.1 Aging Population

In 2000, China’s 60-year-and-older population reached 10% of the total population. The UN projects that the percentage of China’s older population will increase to 28% by year 2040. In 2000, China had 1/5 of the older people in the world. By 2025, every one in four elderly people on the earth will be in China (UN 2005).

The population pyramid (Figure 1) from 1982 to 2000 shows that the aging waves in China will be most intensive in the next fifteen years. The rapid aging of the population is partially a result of the baby boom during the 1950s and the One Child Policy that was implemented in 1979. China’s average child birth rate was 43.8 per thousand people during early 1950s. Child birth rate dropped to 16.2 per thousand people at the end of 20th century (Li 2005). The improvement of life expectancy is another factor contributing to the rapid increase of the older population. China’s average life expectancy more than doubled from 35 years in 1949 to 72 years in 2004 (Bureau of Statistics 2004). The retirement age in China is 55 for female and 60 for male. Older people retire at an age of
60 are expected to live for an average 18 more years (United Nations 2005). This offers great opportunities for older people to enjoy life and fulfill their dreams, but also raises the question of how to care for them during the long retirement years.

Figure 1: Population Pyramid of China from 1982 to 2000.


3.2 Many Needs

Abraham Maslow summarizes five basic human needs, which include physiological needs, safety, belonging and love, esteem, and self-actualization. Physiological needs are food, water, air, clothing, etc. Clean environment and good nutrition are especially important to maintain good health for older people. Safety includes protection from threat, disease, injury, crime, etc. The aging population is more prone to diseases and injury, so they will need medical and physical support to defend against threats. Older people also tend to be more sensitive to belonging and love because loss of their spouse
and friends of lifetime tend to increase their loneliness. Esteem are affected by both self-perception and society attitudes. And retirement life offers plenty of time for older people to realize their dreams.

**Figure 2: Factors that Make Older People Happy.**

![Pie chart showing factors that make older people happy: Good health (39%), Loved by children (30%), Stable income (23%), Contribution to society (2%), Respect from society (3%), Social activities (3%)]


In China, a survey revealed that good health and love from children (Figure 2) are the top contributors to happiness for older people (Zhou et. al 2001). In Zhou’s study, when the respondents were asked what services they desire most needed, 26.3% said consulting on healthy lifestyle. When asked about what activities older people like to participate, 40.4% said cultural and physical activities, and opportunities get to know other people. The same survey also revealed how older people allocated their time in the following order: watching TV, doing housework, taking care of grandchildren, taking care of sick spouse, chatting with friends, and walking. There is a discrepancy between older people’s desires
to participate in cultural and physical activities and their actual allocation of time in watching TV and doing housework. This discrepancy could be reduced if there is good community planning to help enrich older people’s lives.

3.3 Growing Old Before Getting Wealthy

When China entered aging society in 2000, per capita GDP was USD840, 16.25% of the world average. Even after adjusting for Purchasing Power Parity (PPP), China’s GDP per capita was only USD3,976, or 53.62% of the world average (United Nations 2005). Without decent wealth accumulation, the spending power of older people is limited.

Figure 3: Major Income Source for the 60+ Population

![Pie chart showing major income sources for the 60+ population: Family Members 48%, Employment 22%, Pension 28%, Social Insurance 2%, Other 2%. Source: China Annual Statistics Book 2004. Bureau of Statistics.]

Although China has a socialist government, 48% of the 60 years and older population in the 2000 census listed family support as their major income source (Figure 3). Pension
and continuing employment are the major income sources for 26% and 22% of the older population.

Today there are 15 workers to support one retiree; by 2030 there will be only 3.3 workers to support one retiree, which will be unsustainable (Bureau of Statistics 2005). At the micro level, the One Child Policy has reduced the number of children of an older couple to only one. Without social insurance, the burden to support older parents can be overwhelming to the only child. As a result, in 1997 the Chinese government started to implement a double track social insurance system that includes the “pay-as-you-go” social security and the “funded” personal retirement account. Participating employers pay 17% of the employee’s wage to the social security account. Each employee pays 8% of their wage to their personal retirement account matched by 3% from the employer. Upon retirement, each month the worker will receive amount equivalent to 20% of the average wage level of his/her residence city, plus $\frac{1}{120}$ of the fund in their personal retirement account (Wang 2000). According to this formula, a person earning average wage after working 38 years will receive a retirement income at 41% of the average wage level of his/her residence city. In 2003, China’s the annual living expenditure per person was RMB6,511 (USD794), which was 46% of the average wage (Bureau of Statistics). Therefore, retirement income for older people is slightly lower than the expenditures to maintain an average living standard. It should also be noticed that the personal account would be depleted ten years after retirement. However, the life expectancy statistics suggest that older people in China will live an average of 18 years after retirement. In 2004, the number of employed people who join the social security and personal
The health care system in China is also under reform towards a double track insurance system instead of a “pay-as-you-go” system. It is each municipality’s responsibility to make their health insurance policies. The health insurance policy starting in 2000 in Shanghai required individuals and their employers to pay 14% of the wages into a pooled medical insurance and a personal medical savings account (Zuo et al 2001). The number of employed people who have the medical insurance coverage was only 90.4 million nationwide in 2004, or 17.2% of the entire workforce (Bureau of Statistics 2005).

Without a social security safety net, the purchasing power of the next generation of older population will decrease because there are fewer children to provide financial support to older parents. Although the participation rates in both social and medical insurances are still very low, the percentage is increasing every year as more regions start to implement the reform. If the social and medical insurances can achieve universal coverage and maintain sustainable, the Chinese older population will have a guaranteed moderate income source.

Although the current saving rate in China is 47%, which is the highest in the world, the majority of the family saving will be allocated towards children’s education and buying homes (Ha 2005). By 2003, the saving per capita in China was RMB7,970 (USD972)
(Bureau of Statistics 2004). This average saving per person is just enough to support one year of living expense for one person.

Besides retirement income from the social security and personal retirement account, the bulk of the wealth of seniors is in their homes. In urban China, the home ownership rate was 80% in 2002 (Anonymous People’s Daily 2002). Home equity could be a potential resource to support older people’s retirement. For example, in 2005, the housing price of a 700-square-foot condominium is nine times of the annual income of a three-person household in Shanghai (Anonymous Personal Finance 2005). However, there is a concern of housing bubble if compared the price/income ratio with other countries, such as the U.S. During the 1979 and 1989 real estate bubble in the US, the ratio of housing price to median family income was around 2.95 (Anonymous Business Week 2004). Assuming China’s housing price is three times the household median income, the equity in a 700-square-foot condominium could pay for about 6 years of retirement expenses for a couple.

Currently cashing their home equity is not widely accepted by the older population in China. A survey conducted in Shanghai shows that 84% of the seniors aged 60 years and older are not open to the idea (Yang 2006). Among the reasons of rejecting cashing out on housing, 46% of the seniors were afraid that their children might abandon the parents if the children do not expect to inherit the house from the parents. 28% of the respondents did not think it was necessary to sell the house. 14% were afraid of peer pressure and 12% were concerned about the depreciation of housing value. However, the idea of
tapping into home equity is better welcomed by people under 55 years old. 45% of the younger generation said they agree with the idea of financing their retirement through home equity.

Another issue of financing retirement through housing is the legal gray area (Anonymous China News Week 2006). The Chinese homeownership refers to the ownership of the improvements on the land. Homeowners do not have ownership of the land because land is publicly owned. The convention of land lease for residential developments is 70 years and all the lease payments are paid up front to the government by the developer. China only started the property ownership reform and trading of land lease in the 1990s, so it is not sure what would happen in 2060 when the first residential land lease expires. According to the current real estate law, after expiration of the land lease, the government will only renew the land lease after collecting new land lease payment at the market value. If the homeowners fail to pay the fee, the government will take back the land and the improvements on the land without any compensation to the previous owners of the homes. If the law remains the same, the value of homes that are closer to expiration of the land lease will have to be discounted due to the upcoming payment of renewing the land lease and the risk of government taking.

From the above analysis, the Chinese aging population will have guaranteed moderate income after retirement if the social and medical insurance reform can achieve sustainability and universal coverage. In addition, clarifying land ownership issues can
smooth the way for the older people to utilize real estate as an asset to support their retirement expenses.

4. Family Support

The tradition of family support to care for the older population is based on the strong generational interdependence in the Chinese culture (Fei 1983). In the western society, children do not have obligation to support their parents. Fei described the western family relations as a relay model (Figure 4). In the Chinese tradition, grown children take the responsibility to support older parents, which is a feedback model.

Figure 4: Relations in Western and Chinese Families.

| Western: F1 → F2 → F3 ... → Fn |
| Chinese: F1 ↔ F2 ↔ F3 ... ↔ Fn. |

(F represents generation, → raise, ↔ support).

Because of this family complexity, the Chinese elderly for generations age within the family units. This also refers to children as older people’s insurance. The family support system was reinforced by in the Chinese Constitution, which states that it is children’s obligation to support their elderly parents. Children who abandon their parents face the risk of civil action.

Traditionally, the family living arrangement is “Si Shi Tong Tang” or four generations under the same roof. Today, living with grown children is still the preferred living arrangement as seen in the figure below. In 2000, 60% of the male and 69.9% of the female 65-and-older population live with their children (Figure 5, Appendix A).
Figure 5: Percentage of Living Arrangements for Population 65+

A study conducted in nine major cities in China on urban dwelling arrangements of couples aged 60 and older revealed that the top five reasons for parents to live with grown children are: to get care from children, to get economic support from children, children don’t have their own house, to provide household help to children, to enjoy family living together (Logan et al. 1999). The census statistics and the survey results suggest a strong interdependence between the family members and senior’s preference of a family environment.

However, the urban landscape transformation is making the tradition of “four generation under one roof” less and less common. Figure 5 shows a slightly decline of proportion of older people live with children from 1990 to 2000, and increasing proportion of older people living with their spouse (not with children). Inkel (2004) pointed out that the low-rise courtyard buildings traditionally house three generations are being replaced by high rises flats for smaller families. Such urban landscape transformation contributes to the decrease of percentage of older people living with married children.

The family structure also has gone under transformation due to the One Child Policy implemented in 1979. Before the One Child Policy, there were more working couples than older parents. Now, the first generation of children born after the One Child Policy has reached the marriage age. In a hypothetical situation, if all the older parents of the One Child Policy live with their married children, a typical family will have four older people, two working age parents, and a child (Figure 6). This is an addition of two older
people per family unit and widening the demand placed on the grown children. As a result, some older parents will probably consider not live with their grown children.

Figure 6: Change of Family Structures.

![Figure 6: Change of Family Structures.](image)

The National Population and Family Planning Commission conducted an opinion poll in October 2005. The poll interviewed 2,225 seniors at age 60 years or above in seven major cities in China on their opinion of third party assistance. 35% of the seniors were in favor of third party assistance. One third of the respondents would accept third party assistance if all other means fail. 17% of respondents thought third party assistance was inappropriate. Only 9% considered using third party help is unethical. This survey reflects the view of the older population before the One Child Policy. The parents of the One Child Policy generation are likely to become more open to third party assistance for two major reasons. One is that the 4:2:1 (four older people, 2 working age parents, 1 child) family structure will demand more outside help. The other is the recent social insurance reform. The increasing participation in the social insurance will give economic independence to more and more older people so that they can choose to purchase third party assistance.
In summary, the filial obligation tradition makes living with children the top choice of many Chinese older people. However, this living arrangement is becoming problematic due to urban landscape transformation and the One Child Policy. The following investigation of other living arrangements will show what strategies can help to address the diverging forces of strong family interdependence and changing urban landscape and family structure.

5. Institutions for the Elderly

One of the existing forms of third party help is the institution for the elderly, which appeared as early as 1950s. The earlier institutions for the elderly were sponsored by the government to care for older people who lost children during the war. The government institutions were free of charge. These dormitory style institutions provide food services, as well as assistant-living services such as help for seniors with bathing, eating, clothing, etc. Later, institutions for the elderly opened doors to all seniors including those with children for a fee. In 1999, the government started to offer tax incentives to encourage private sectors to develop institutions for the elderly (Anonymous Bureau of Tax 2000). There has been a spur of development by the private sector. For example, Shanghai’s 27% of the institutions for the elderly are developed and operated by the private sector (Ministry of Civil Affairs 2004). By 2004, there were 380,000 institutions for the elderly in China capable of serving 11.3 million seniors, or 0.84% of the 60 years and older population (State Council 2004). Overall, institutions for the elderly do not appeal to seniors because the poor infrastructure, service quality, and unaffordable price.
First, the infrastructure in many institutions for the elderly does not fit for older people’s health and safety. Zhou’s (2003) study revealed that the design lacks consideration for seniors’ physical needs. For example, only 47% of the institutions have handrails in part of the buildings, 31% of the institutions do not build ramps for steep areas. 20% of the facilities use floor materials that are slippery. Only 26% of the institutions have a buzzer system. Other design deficiency includes dormitory style living arrangement that lacks of privacy and storage space for the older residents.

Second, due to poor of training and irresponsible hiring, the services at institutions for the elderly are often substandard. In 2003 Shi and Peng investigated the 1,471 of the workers at institutions for the elderly in Beijing. Only 13% of the workers have certificates required to work at an institutions for the elderly. The survey found just 20% of the employees who received job training before working. Those who attended job training were limited to very basic training such as how to assist with clothing, bathing, and cleaning rooms. There is no training on how to communicate with the elderly effectively or how to provide healthy lifestyle suggestions.

Third, the pricing of the senior intuition is unattractive either. For example, in Shanghai, the average monthly fee for an independent living senior is RMB750, for seniors needing some assistance is RMB 850, and for full-assistance is between RMB950-and RMB1100 (Shanghai Bureau of Civil Affairs 2004). The average senior monthly income in
Shanghai is 936 RMB (Bureau of Statistics 2004). Even the basic independent living in the institutions for the elderly costs more than 80% of the seniors’ average income.

Even with the high prices, the institutions for the elderly are often unprofitable. According to Shanghai Bureau of Civil Affairs, the total supply of institutions for the elderly in Shanghai can serve 31,100 people. The actual older population of 60 years and older are 2,410,000. The ratio of 60-years-and-older population to the number of beds in the institutions for the elderly is 77.5 to 1. However, the average occupancy rate is 64.4%. Among the 53 private institutions for the elderly in Shanghai, 41.5% can make ends meet, 15.1% have some profit, 43.4% are losing money.

Although China’s population is becoming more open to the third party help idea, institutions for the elderly do not seem to be the ideal places that foster healthy aging and promote dignity. The following case studies of community support and master planned retirement communities show that there are more desirable ways to provide elderly support.

6. Community Support

Community support could become the next immediate assistance available for older people beyond family support. Community means shared and common. In a community, the group of people has similar experiences and concerns. Because of the similarity, when there is an issue in the community, everyone feels the obligation to solve it together (Fei 2002). There are three major community types in China: (1) Traditional street
blocks. These old neighborhoods are mix of residential and commercial uses. People work and live in close distance and the connection among neighbors are strong. (2) Worker housing. These residential communities are developed by employers to house their employees. Residents know each other through work and often form a tight community. (3) Residential community by real estate developer. These are master planned real estate development. The common space varies in these communities. Residents’ interaction is often weak. The homeowner association or property management committee is where the residents come together. As of 2000, 30% of the housing stock in urban China was worker housing and 16% of the housing stock was developed by real estate developers (Table 2). The traditional and worker housing communities are reducing in size and the third type of residential community is increasing (Zhang 2002).

Table 2: Housing Tenure in Urban China.

<table>
<thead>
<tr>
<th>Owner Occupied</th>
<th>Renter Occupied</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-built</td>
<td>Worker Housing</td>
<td>Residential Real Estate Development</td>
<td></td>
</tr>
<tr>
<td>27%</td>
<td>30%</td>
<td>16%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: based on one-per-thousand sample of 2000 census data.

Accompanying the change of residential community type is the increasing residential mobility. For example, Li et al. (2001) revealed that the annual mobility rate of residents in the city of Guang Zhou was 9.5% in 1998, while the annual mobility rate was only 1% in 1980 (Figure 7). The same study suggested that marriage status is the utmost important factor in predicting mobility rate. Owners relocate less frequent than renters. In addition, much of the mobility is forced as a result of the inner-city core redevelopment. The
increasing residential mobility presents further challenge to build communities with strong ties.

Figure 7: Residential Mobility in Guang Zhou, China.


The following case is about the Chang Bai Community, a worker housing community in Shanghai. The information was collected through phone interview with the director of the neighborhood association – Ms. Xu Hongdi. This case study demonstrates that community support could be a way to supplement family support, so that the seniors can age at home and in their familiar environment. The author will also discuss how some of the strategies of this particular worker housing community could be implemented in non-worker housing communities.
6.1 Case of the Chang Bai Community in Shanghai

Chang Bai neighborhood is a worker housing development for textile workers in Yang Pu District in Shanghai. The neighborhood has total of 1,423 families. In late 1980s, the number of 60-years-and-older residents consisted of 21% of the neighborhood population. Among them were many elderly who were over 80 years old and without children living near by. The neighborhood association believed that these retirees who devoted their life in the textile factory deserved a better retirement life. As a result, the neighborhood association decided to start a care center for the older residents.

Having no funding from the government, the neighborhood association started a two-year fund raising process and total collected donation of RMB 60,000 from textile factories and neighborhood residents. With this seed money the neighborhood association converted three of their office rooms, total 1200 square feet, into a care center for older residents. The care center named “Chun Feng” (meaning spring breeze) opened on April 23, 1992. The care center had two bedrooms, a kitchen, a bathroom, and a living room. They received 22 older residents, 15 of them are in the day care program and 7 of them received assisted-living service. The average age of the seniors in the program was 80 years.

The care center was very crowded when it started, however, with the donation of surplus space from a neighborhood kindergarten next-door and plowing back of operation profit, the care center expanded over the years to 4,500 square feet, with poker room, TV room, and a cafeteria. The services of the care center also increased over time. The cafeteria
serves the older people in the day care program but is also open to the community. It has become a social place for the elderly and the rest of the community residents. The care center offers door-to-door assistance, such as delivering prescriptions, house cleaning, laundry, assisted bathing, and chatting. Every year, they offer door-to-door service more than 3,000 times. In addition, the neighborhood association partners with the local hospital, so when there is an emergency or need of professional medical help, the hospital will send doctors over to the care center.

One innovation of the neighborhood association is to organize the older residents in the community to help each other. The care center recruits retiree volunteers to work at the care center or match them with the older residents who needs daily activity assistance. These volunteers are happy to give their help to prove that they are still useful to the society. This matching program also lowers the service cost. As the independent retirees get old, the newly retired residents join the team of volunteers.

The community support model created by Chang Bai neighborhood offers many benefits. First, the older residents can stay in their familiar environment. There is an existing trust base for good communication between the older residents and the people who provide services to them. The familiar environment preserves the older residents’ social network and sense of belonging. In the Chang Bai community, the older residents are not only seeing older people but also keep in touch with the younger population in the community, so they do not feel being isolated in an elderly only environment.
Second, there is very efficient use of resources. Because the majority of the old residents live at their own home, there is no need to build great amount of rooms to house them. Since the care center cafeteria and laundry services are open to the community, both the older residents and other members of the community can benefit from such facilities. Younger residents in the community also know that they can benefit from the care center when they become old, so these care center receive wide support from the community members. The efficiency is also a result of flexibilities. Older people can choose and pay the services that they need. Some older people who live with children choose to use the day care program when their children are at work, or get help from the center when their children are unavailable.

Third, as a result of efficient use of resources, the care center is affordable. The older residents save money by staying at home instead of paying rents to live in an institution for the elderly. In addition, a lot of the delivery services and average daily help provided by the care center are done through volunteers. Even for those older residents who move to the care center to receive assisted-living service, they pay only RMB 650 a month, much lower than RMB 950 to 1000 per month to live into an institution for the elderly. More valuable than affordability is the opportunity for independent and able older people to continue to realize their value to the society by helping the more senior and less able residents in the community.

Today there are 6,000 residential communities in Shanghai, only 26 provide care services to older residents (Xie 2000). The reasons that the care center started and succeeded in
the Chang Bai community are the following: (1) The Chang Bai community is a worker housing development and the population share common experience of working at textile factories, so they have a strong sense of belonging; (2) the association has received large community support through monetary, time, and material donation; (3) the neighborhood association leaders’ strong sense of responsibility and persistence. These characteristics play a very important role at building the day care center infrastructure at the very beginning.

The Chang Bai model could be implemented in the residential development communities built by developers. Although the residents in the new residential development do not share common experiences as their peers do in worker housing communities, a thoughtful master plan can help to clear the infrastructure hurdle. If there is already a community kitchen and social space in the residential development, the neighborhood associations do not have to go through the struggle as the Chang Bai community to build the infrastructure. Instead, the association can focus on planning activities and services for the older residents. Property management companies can also consider room service, delivery, and other assistance to seniors in the community to make it possible for seniors to age at their own homes.

In the Chang Bai community, the cost of building care center came from donations. In a new residential development, the willingness to pay for the care center development cost depends on the type of residents. Residents who plan to stay for a long term are probably more willing to share the cost than the short-term residents. Anticipating the rising
residential mobility, the most effective way for the developer might be to focus on the
door-to-door services, which will require less capital investment.

The Chang Bai community case also shows that the common space required for a care
center is rather small. Dividing the 4,500 square feet of the care center by the number of
families in the Chang Bai community, each family on averaged shared a cost of building
3.2 square feet. In a new real estate development, the care center cost could be possibly
passed on to the buyers with only slightly increase in price. On the other hand, if the
government can offer tax credits to cover some of cost of building care centers, it will
also encourage more conventional residential real estate development to include a care
center for the older people.

7. Master Planned Retirement Community

China’s real estate reform during the 1990s created a private real estate development
industry. China’s senior housing development has just raised the interests from the real
estate developers. There is no national statistics of how many senior apartments projects
are in China. A survey conducted by Shanghai Commerce News shows that in Shanghai
there are 14 developments named after senior apartment, but only one qualifies the name,
the rest are really institutions for the elderly. Large older people retirement communities
are even fewer. The largest and biggest master planned age-restricted retirement
community development is located in Beijing, called Beijing Sun City. The CEO of
Beijing Sun City Development Co., Zhu Fengbo, visited the Sun City in the U.S. and
borrowed many concepts to the Sun City in Beijing. Beijing Sun City started construction
in August 2000 and has completed phases I and II, both of which are open for occupancy. The last and third phase is expected to complete in May 2007. The information of the case was collected from Beijing Sun City website, academic journal and newspaper articles.

7.1 Location

Beijing Sun City is located in Xiao Tang Shan village, about 30 km from the center of Beijing. By 2004, Beijing’s population reached 11.6 million. According to the census, Beijing’s 60-years-and-older population was 1.1 million in 1990, and grew to 1.7 million in 2000. The annual growth rate of senior population was 4.4% while the city population was growing at 2.4% annually. It is projected that the 60-and-above-older population will reach 20% of the city population in 2017 and 30% in 2025 (City of Beijing 2005).

Figure 8: Location of Beijing Sun City.
7.2 Friendly Design and Services

Beijing Sun City occupies 96 acre of land with 60% green space and FAR (floor area ratio) of 0.64. Beijing Sun City provides three types of housing: mid-rise senior rental apartments, low-rise condominiums, townhouse and single families (Figure 9). There are six service centers in the development: rehabilitation center, fitness and entertainment center, senior university, shopping center, international exchange center, and the home service center. Beijing Sun City also partners with a hospital to build an emergency clinic on site. The retirement community incorporates barrier-free design throughout the development. For example, surfaces are made of non-slipper materials. All buildings installed elevators that can fit stretchers. All units and common space were equipped with buzzers in case of emergency (Yu 2001).

Figure 9: Site Plan of Beijing Sun City

Source: www.bj-suncity.com
Table 3: Summary Statistics of Beijing Sun City

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Site Area</strong></td>
<td>96 acre</td>
<td></td>
</tr>
<tr>
<td><strong>Service Facility Area</strong></td>
<td>461,180 sf</td>
<td>17.2%</td>
</tr>
<tr>
<td><strong>Residential Area</strong></td>
<td>2,215,940 sf</td>
<td>82.7%</td>
</tr>
<tr>
<td><strong>Gross Floor Area</strong></td>
<td>2,677,120 sf</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Green Space</strong></td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td><strong>FAR</strong></td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td><strong>Unit Size</strong></td>
<td>500 to 1,800 sf</td>
<td></td>
</tr>
<tr>
<td><strong>Architect</strong></td>
<td>Sasaki</td>
<td></td>
</tr>
<tr>
<td><strong>Total Development Cost</strong></td>
<td>USD 104 million</td>
<td></td>
</tr>
</tbody>
</table>

The design of the community takes into consideration of older peoples’ physical characteristics and the programming provides lots of activities to enrich older people’s retirement life. Beijing Sun City offers 33 free services, which include transportation to the city four times a day, delivery, finding housekeeping maids, annual medical check up, fitness training, lectures, and so on (Appendix B). Assisted living and nursing service are also available in the community.

**7.3 Low Affordability**

The superior facilities and services do not come cheap. For the senior apartments, there are a range of membership fee schedules (Appendix C). For example, the ordinary member fee is RMB10,000 (USD1,200) plus monthly rent of RMB 1500 per person in a double occupancy room. These fees and rents do not include food charge or assisted-living service.
<table>
<thead>
<tr>
<th>Table 4: Affordability of Senior Apartments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RMB</strong></td>
</tr>
<tr>
<td>Average saving of an older person</td>
</tr>
<tr>
<td>Beijing Sun City ordinary membership fee</td>
</tr>
<tr>
<td>Retirement income (excluding rental income) of an older person</td>
</tr>
<tr>
<td>Income from renting out original home</td>
</tr>
<tr>
<td><strong>Total retirement income</strong></td>
</tr>
<tr>
<td>Rent of a bed in a double occupancy room in Beijing Sun City</td>
</tr>
</tbody>
</table>

(Note: In 2004, the average wage of working-age people in Beijing was RMB 2,109 per month (Bureau of Statistics 2004). Applying the new pension formula, the working-age’s income, an average senior’s retirement income would be only RMB 865 per month. And the average savings account of the respondents is only RMB 16,237 (Chen 2005). Early this year, the Beijing Planning Office of Philosophy and Social Science surveyed 600 seniors in Beijing and revealed that 4.2% of them rent out their homes and the average rental income is RMB 758 per month.)

These membership and rents are well beyond the reach of average older people’s income from social insurance and personal saving’s account (Table 4). To increase the affordability, Beijing Sun City offers a service to help the older residents to rent out their original homes and use the rental income to pay for their stay at Beijing Sun City. The income from renting out their original homes help to boost the total retirement income, however, to secure a bed in a double occupancy room (food and other expenses not included), an average older person in Beijing has to contribute 61.5% of their savings, and 92.9% of the income from retirement accounts and renting out their home. It is obvious that Beijing Sun City is only affordable to a very few seniors with high retirement income or with wealthy children.

In terms of the for-sale units, the broker’s website reported historic sales price (since 2003) in Beijing Sun City (newhouse.soufun.com) is RMB 5,800 per square meter. On the other hand, the average housing price in Beijing is RMB 4,737 per square meter (Bureau of Statistics 2004). Although the Sun City marketing team offers creative options for the buyers to exchange their original home for a unit in Sun City and difference paid by cash,
the team failed to attract average older people in Beijing. At the interview with the *Contemporary Entrepreneur* magazine, the CEO of Beijing Sun City admitted that the company had to shift their marketing direction from average older people to wealthy elderly (Anonymous *the Contemporary Entrepreneur* 2004).

By 2003, all the for-sale units in the first Phase development were sold. The occupancy rate of senior apartments was 70% in 2003 (Sun City 2003). This is an indication of the popularity of the development. However, Sun City is not a product affordable to the average older people in China.

### 7.4 Difficult Development Process

The development of Beijing Sun City highlights the changing times in China and also shows the many challenges that come with change. For example, the local government had never encountered Sun City type of elderly retirement community development. The local government had a problem determining whether Sun City belonged to a welfare project or a real estate development project. The permitting took three years and finally the project was permitted as a real estate project and thus was not qualified for tax exempt treatment which was only available for welfare project such as institutions for the elderly. In terms of building standards, *Senior Housing Design Standard* (2003), *Urban and Rural Senior Facility Planning Standard* (2003), and the *Building Standard for Senior Apartments* (2003) were in the process of making, these regulations were not in place during the permitting process of Beijing Sun City. Without these measuring standards, it took longer time for regulatory agencies to grant permits to the developer.
The Sun City project also encountered financing issues. The project development budget is RMB 850 million, but banks were only willing to offer a loan of RMB 8 million. The reason is that the bank considers senior housing as a welfare project and little profit is expected. So the developer had to invest RMB 600 million of its own money and the rest of the money is raised through presale. During the most difficult period, the project ran out of cash to pay the general contractor (Anonymous *the Contemporary Entrepreneur* 2004).

In terms of profitability, the CEO of the development company estimated a profit margin of 26% due to increasing construction cost of barrier-free design and high proportion of common facilities such as the emergency clinic and the senior university. However, the project did not pass on all these extra cost to the buyers, so the profit margin was reduced. Although 26% seems to be a very good profit margin, it is lower than average profit margin of 50% in real estate development industry in China (Wang 2005), especially after factoring all the risks the developer is taking by developing the largest retirement community in China.

Beijing Sun City has yet to complete its third phase in 2007. From the existing development process and operation, the lessons learned are as follows:

First, the idea of retirement community is worth trying in China. The institutions for the elderly are known for poor infrastructures and services. The Sun City development demonstrates a high level of senior friendly design and social activity programming. The
superior infrastructure improves safety and empowers the older residents to manage their daily life as much as they can by themselves. The health consulting lectures are great resources for the older people to learn how to lead and maintain a healthy life. And the university on site provides opportunities for the older people to enrich their life that they had less time for before retirement.

Second, with the low-income level of the Chinese older population, how to increase the affordability is a key issue. Beijing Sun City could have lowered cost if the project received tax incentives and more bank financing. The idea of using home equity or rental income from original homes to finance living in a retirement home did not work in Beijing Sun City. Nevertheless, it could be a potential resource to increaseolder people’s purchasing power. The affordability issue is also an equality issue. If it was as Beijing Sun City claimed that the developer did not pass on the cost of extensive common space and barrier-free design to the buyers, the developer is put at disadvantage. However, if the cost is passed on to the older buyers, then the rest of the society is not sharing the responsibility of making retirement housing more affordable for the older people.

Third, the government could have given more support for developers who innovate new senior housing projects. For example, if the government can offer tax incentives, it would lower the development cost and distribute the cost burden more evenly to the entire population. On the same note, there should be incentive policies to encourage banks to lend to responsible senior housing development.

Fourth, the remote location of the community makes it isolated from a normal city life. Since the work age people have to live in the city to be near the jobs, Beijing Sun City’s
location increases the cost for the older people and their children to keep frequent interaction. The low-density development of Beijing Sun City could be problematic as well because it takes too much land. If the entire Chinese elderly decide to live in the Sun City type of development, it will take enormous amount of land resources.

8. Proposed Model

8.1 Highlights of the Chang Bai Community and Beijing Sun City

Table 5: Comparisons of the Chang Bai Community and Beijing Sun City.

<table>
<thead>
<tr>
<th></th>
<th>Chang Bai Community</th>
<th>Beijing Sun City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological Needs</td>
<td>May not be adequate for some of the elderly population</td>
<td>Rural location offers fresh air and more open space</td>
</tr>
<tr>
<td>Safety</td>
<td>Moderate infrastructure</td>
<td>Superior infrastructure</td>
</tr>
<tr>
<td></td>
<td>Partnership with local hospital</td>
<td>Barrier-free design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Buzzer system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On-site clinic</td>
</tr>
<tr>
<td>Belonging and Love</td>
<td>Familiar environment</td>
<td>New environment</td>
</tr>
<tr>
<td>Esteem</td>
<td>Integrated community</td>
<td>Age-restricted</td>
</tr>
<tr>
<td>Self-actualization</td>
<td>Senior help senior program</td>
<td>On-site university</td>
</tr>
<tr>
<td>Use of Resource</td>
<td>Existing resources in the community</td>
<td>Ground-up development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low density</td>
</tr>
<tr>
<td>Cost Distribution</td>
<td>Community members</td>
<td>Developer</td>
</tr>
<tr>
<td></td>
<td>Older people</td>
<td>Older people</td>
</tr>
<tr>
<td>Affordability</td>
<td>Very affordable</td>
<td>Less affordable</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Day care</td>
<td>From independent living to assisted living</td>
</tr>
<tr>
<td></td>
<td>Assisted living</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Door-to-door service</td>
<td></td>
</tr>
<tr>
<td>Development process</td>
<td>Difficult</td>
<td>Difficult</td>
</tr>
<tr>
<td>Family Connection</td>
<td>Depends on if the older people live with children in the same community</td>
<td>Far from children</td>
</tr>
</tbody>
</table>

The Chang Bai community and Beijing Sun City showed quite different ways of providing improved quality of life to the older people (Table 5). The Chang Bai community’s strength is its familiar and integrated living environment, efficient use of
resources, and affordability. Sun City’s highlights are superior infrastructure and services. Chang Bai community’s urban location enables older people and children to live together or near each other. Beijing Sun City’s remote location makes it more difficult for the children to visit with the older people. Both projects took the initiators’ great effort and persistence to realize.

Taking the lessons learned from the Chang Bai community and Beijing Sun City, a new model is devised to alleviate the burden from family support but preserve family interactions, empower and integrate older people within the society, and maintain affordability. The new model stresses family support as the core, community to provide supplementary service and social connection, and society to improve infrastructure (Figure 10).

**Figure 10: Conceptual Model for Retirement Community Development.**

![Conceptual Model for Retirement Community Development](image)

### 8.2 Family as Core

Family support has played a major role in supporting older people in China. Living with their grown children is the most direct way for older people to receive help. As a result of family structure change brought by the One Child Policy, it is likely that four older people sharing a home with two young people and a child may be more difficult to
peacefully manage. However, flexibility in architectural design could provide a compromise for families to live apart but near each other, hence, to provide convenience for frequent inter-generational contact and support. For example, the building floor plans can be designed so that adjacent units could be merged into one at very low cost. So there is an option for families to either live together in a large unit or two small separate units. Home exchange program can facilitate older people to relocate near where their children live.

8.3 Community as Supplement

The community can come to play an important role in older people’s life as seen in the Chang Bai community. A care center in the community could supplement family support. A care center can exist as physical places, where older people socialize, dine, receive health advice, day care, etc. A care center can also exist in the form of a network of resources, such as door-to-door service, matching older people to help each other, partnerships with local hospitals, etc. Some of the support facilities and services, such as dining, delivery, and health advice, are useful services to the rest of the communities as well. Since every one will age, the community care center can be a resource for all.

Instead of building a large scale Sun City, the addition of a care center in a conventional real estate development could make a big difference. When developing residential communities, developers can layout common areas for a care center as an amenity. Homeowner associations or management firms can find organizations to provide services or organize volunteers to provide help to older residents. Since these conventional real
estate communities are often located in urban areas, there are existing hospitals, shopping centers and other resources the community can tap into. The cost of care center will be limited. The high density and large scale of residential development project in China will also help to spread the development costs among individuals. In practice, some people may be willing to pay a premium for such supportive system in the development because they can age in a familiar environment or because the system take some of the burden off the family in caring for the older people. In terms of individual unit, developers can offer optional renovation packages to install barrier free design for older people. As a result, older people are only paying for the remodeling of their individual homes, while the cost to build community care center and to make common area accessible is shared by all residents in the community.

8.4 Society Provides Infrastructure

Aging is a social issue. Without appropriate government policy and intervention family and community support will be less feasible. For instance, a clarification of land ownership rights will reduce the uncertainty in home valuation. Accurate valuation facilitates home exchange and taking out home equity. In addition, the social insurance reform would help to build a social security safety net for the older people. A guaranteed retirement income source from the social security safety net allows the older population more purchasing power to buy services from community care centers or remodeling their homes.
To expand older people’s social activity options beyond their own community, one suggestion is to integrate accessibility into the design of retail, theater, public transportation, and common areas of residential development. By implementing universal standards, the cost is distributed among the citizens instead of only to the older people. In addition to the benefits coming from enjoying a high quality of life at a reasonable cost, there are also many soft-dollar benefits reaped by society when the aging population does well. Other benefits of universal standards is that it levels the competition for real estate developers, so that no one will be take a profit hit by providing elderly-friendly building.

Other steps the government can take to stimulate good senior housing developments is to offer tax incentives to companies who build community care centers, remodel older peoples home or organizations who operate community care centers. The cost of improving and utilizing existing buildings are more sustainable than ground-up development as Beijing Sun City.

9. Conclusion

Housing is an important element on quality of life for the older population. The retirement community development in China needs to consider the special characteristics of the Chinese culture and economic conditions. In response to the strong family support tradition, retirement community design needs to enhance the family connections by building mixed age community where the family and the older people have the option to live together, or live apart but near. Including care centers in residential developments is a cost effective way to provide affordable support to older people. The government
should expand its support from just institutions for the elderly to include the community centers and elderly friendly development projects. The implementation of social security safety net is another good policy that will strengthen older population’s purchasing power. By incorporating these ideas, the aging society of China can build upon their age-old tradition of “Si Shi Tong Tang” and achieve a healthy, happy and affordable old age.
### Appendix A: Living Arrangements of the Older Chinese.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Rural</th>
<th>Urban</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live alone</td>
<td>10.7</td>
<td>8.3</td>
<td>8.4</td>
<td>8.7</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>With spouse (not with children)</td>
<td>17.7</td>
<td>21.2</td>
<td>29.5</td>
<td>27.0</td>
<td>24.5</td>
<td></td>
</tr>
<tr>
<td>With children</td>
<td>67.9</td>
<td>67.6</td>
<td>60.0</td>
<td>62.1</td>
<td>55.8</td>
<td></td>
</tr>
<tr>
<td>With other people</td>
<td>2.2</td>
<td>1.8</td>
<td>1.7</td>
<td>1.9</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Institutions for the elderly</td>
<td>1.5</td>
<td>1.1</td>
<td>0.4</td>
<td>0.3</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Appendix B: Services in Beijing Sun City.
Thirty-three Free Services for any senior rent or buy homes in the Sun City:

1. Shopping Service: Sun City Shopping Center sells grocery, older people products, and electronics.
   (1) Shopping guide
   (2) Delivery

2. Home Service:
   (3) Recommending maids, tutors, and temp workers
   (4) Dating service

3. Transportation
   (5) Safe ride within community
   (6) Bus to downtown four times a day

4. Education and Entertainment
   (7) Library and lectures
   (8) Exchange and partnership with writer’s association, sports club, art association
   (9) Some of the following facilities offer free sessions on certain dates of the year
   (10) Bowling
   (11) Tennis
   (12) Croket
   (13) Table tennis, badminton, and pool table
   (14) Poker room
   (15) Swimming pool
   (16) SPA
   (17) Fitness room
   (18) Ball room
5. Community Activities
   (19) Exhibitions of community member’s arts, craft, research, and other talents
   (20) Interpretation for overseas visitors
   (21) Physical or entertainment social event

6. Medical Service
   (22) Annual medical check up and health record keeping
   (23) Deliver prescription, clinic visit or transportation to hospitals
   (24) Emergency buzz system and transportation during emergency.
   (25) Health consulting and lectures

7. Exchange
   (26) Exchange stay at franchised retirement community in other cities
   (27) Exchange stay at Sun City’s partner retirement communities overseas
   (28) Train and air ticket booking and delivery.

8. Leisure
   (29) Fishing (fee charged according to amount caught)
   (30) Harvesting (fee charged according to amount harvested)

9. Food
   (31) Delivery
   (32) Cooking and nutrition class
   (33) Tea house free of charge on certain days of the year
Appendix C: Rental Price at Beijing Sun City.

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Membership fee (RMB)</th>
<th>Fee / Month (RMB)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Double person room</td>
<td>Single person room</td>
</tr>
<tr>
<td>1  Diamond special</td>
<td>500,000</td>
<td>No Fee</td>
<td></td>
</tr>
<tr>
<td>2  Diamond single</td>
<td>260,000</td>
<td>No Fee</td>
<td></td>
</tr>
<tr>
<td>3  Diamond double</td>
<td>300,000</td>
<td>No Fee</td>
<td></td>
</tr>
<tr>
<td>4  Jade double</td>
<td>200,000</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>5  Gold</td>
<td>150,000 /person</td>
<td>300 /person</td>
<td>800 /person</td>
</tr>
<tr>
<td>6  Silver</td>
<td>60,000 /person</td>
<td>800 /person</td>
<td>1600 /person</td>
</tr>
<tr>
<td>7  VIP</td>
<td>30,000 /person</td>
<td>1200 /person</td>
<td>2400 /person</td>
</tr>
<tr>
<td>8  Normal</td>
<td>10,000 /person</td>
<td>1500 /person</td>
<td>2800 /person</td>
</tr>
</tbody>
</table>

Source: http://www.bj-suncity.com
Bibliography


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