

# **Factors affecting mobility of elderly in urban public spaces and transportation facilities in Bangkok in relation to climate change mitigation strategies**



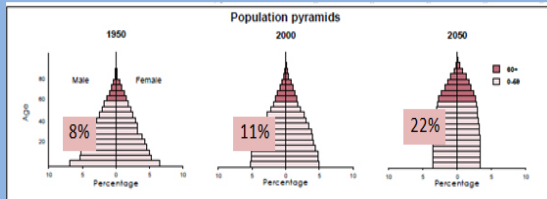
**Department of Public Works  
and Town & Country Planning**

# 1

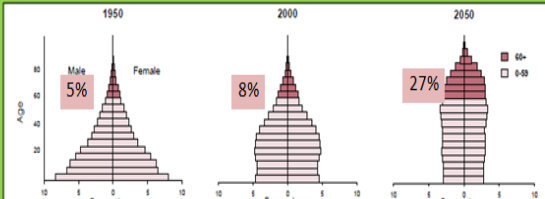
## Starting point

- **Thailand** is facing an **ageing society** and **rapid urbanization** at the same time. **Bangkok** is the biggest city and the population is aging faster than in other provinces in Thailand.

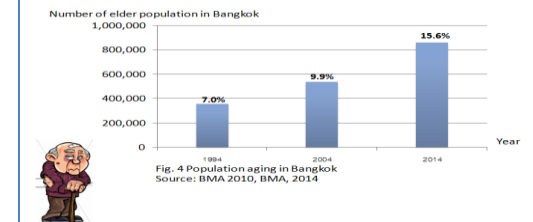
Population Ageing Around The World



Population Ageing in Thailand



Population Ageing in Bangkok



- Rapid urbanization in Bangkok led to a shortage of basic services, inadequate transportation and deficient urban design.

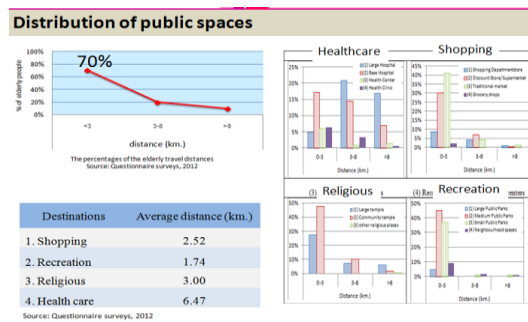
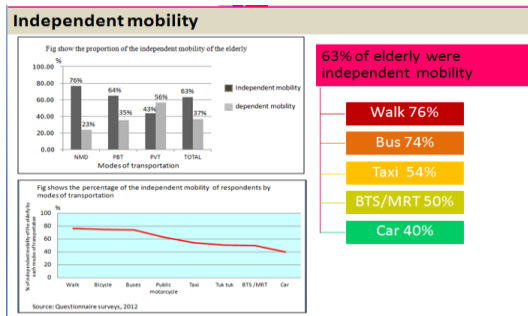


- The elderly need a supportive environment including transportation and public spaces.

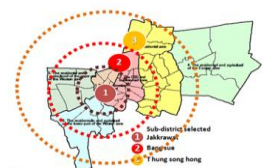
## 2

## Institutional setting

**The frame condition** is to cover all factors that have a significant impact on the elderly's mobility. The frame conditions are:



### Urban spatial system



**3 Outer zone:**  
The elderly tend to use taxi and car to access public spaces of the higher order.

**1 Inner zone:**  
The high-density areas were associated with a smaller number of private cars and more people walking.



**2 Intermediate zone:**  
The elderly most likely to use public transport like buses.



➤ **New design and legal regulation** from urban designers and transportation planners to support independent mobility of the elderly.

➤ **New policy** of the city and decision-makers to facilitate the elderly's mobility.

➤ **Social support** from community to enable the mobility of the elderly

### 3 Approach

- **The improvement of transportation planning** to cope with the design of infrastructure and facility including service system to support the mobility of the elderly.
- **Urban Planning and design** should promote mixed land use, create communities planning inclusively universal design of built environment. Allocate the proper public spaces according to its hierarchy that meet the need of elderly in neighborhood areas.
- **Urban spatial system development strategy.** In different urban development patterns, the city should consider the differences of responding to the elderly needs in each urban development zone.



- ✓ **Enhancement of transport infrastructure and service** that supports mobility of elderly and attract more people to use public transport and non-motorized transport modes. That reduces car use and the energy consumption per person per km leading to improved traffic conditions and less air pollution.
- ✓ **Mixed land use** can reduce travel distances and enhance the accessibility to public spaces by foot and bike. Mix of use with appropriate urban design attract people to shop, meet friends and live in urban neighborhoods leading to strengthened socioeconomic and livable communities.



- ❖ **Thailand** is one of the countries that respond to aging society rapidly but **lack of the aim at broader issues** such as the improvement of the **urban living environment to support the elderly**.
- ❖ The consideration of **urban management** **focus less on activities of people** that leads to a lack of adequate planning, infrastructure, facility and design in terms of transportation system and urban and community planning.
- ❖ **Lack of integrator** for the whole system which may create **one project but achieve many goals** (e.g. Walkways project can deal with many issues such as transportation network, climate change, aging society, health, liveable city, etc.)

➤ **The preconditions to transfer:**

A developing city that is facing aging society and urbanization can use this results to promote sustainable urban development.

➤ **The first steps:**

Development of guidelines on how to promote the mobility of the elderly including the improvement of urban planning and system which is related to sustainable urban mobility such as physical adjustment in urban public space and transportation needs. These development guidelines will promote social inclusiveness in urban areas.