

**Towards an Age-Friendly City :**  
A case of the renewal program at Toyoshiki-dai district in Kashiwa City.

**超高齢社会対応の「まちづくり」:**  
柏市・豊四季台地区におけるモデルまちづくりの経験から

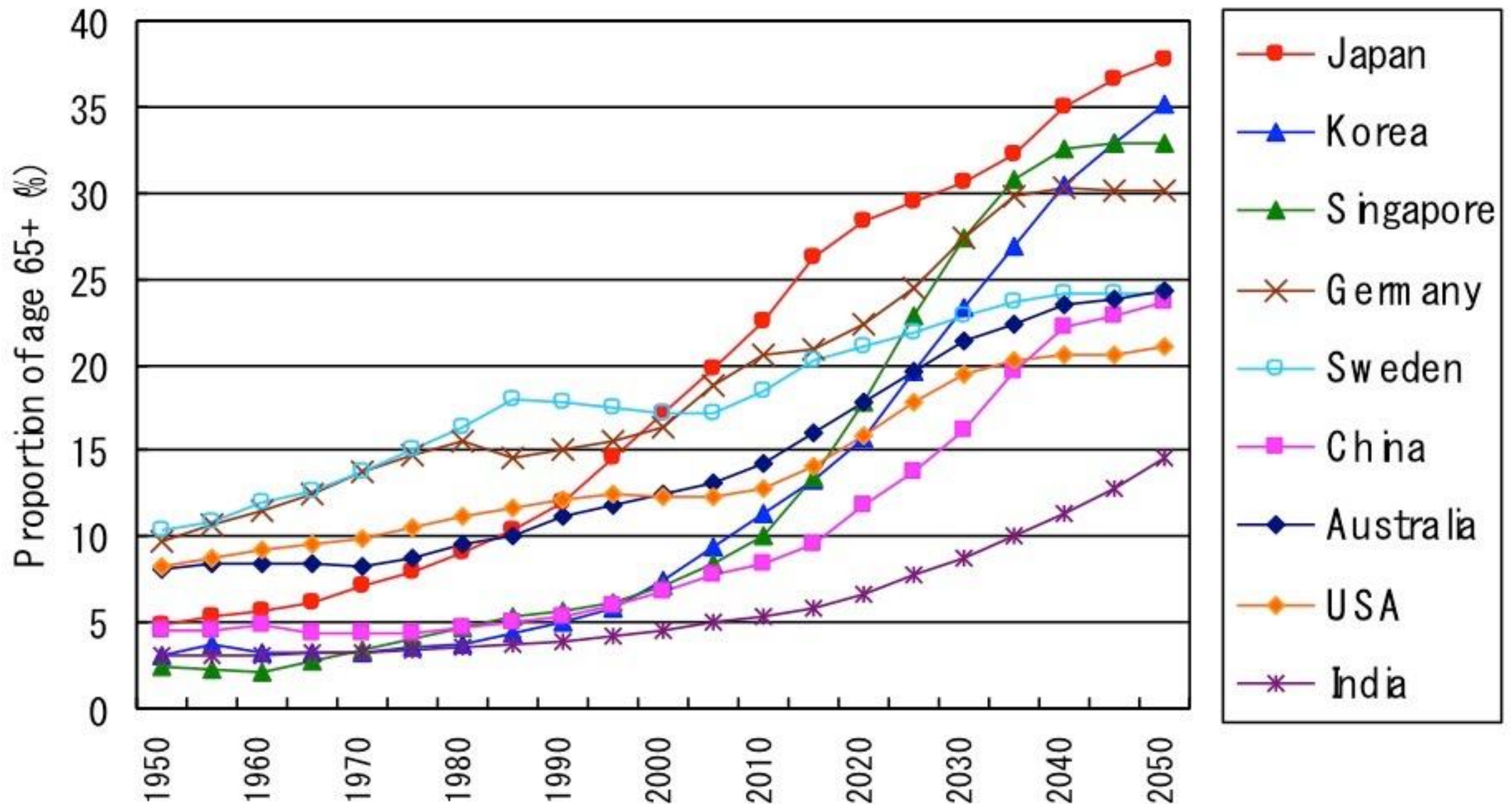
Dr. Junichiro OKATA  
Director  
Institute of Gerontology  
University of Tokyo



# I. Background



# Rapid Population Aging in Asia (1950—2050)



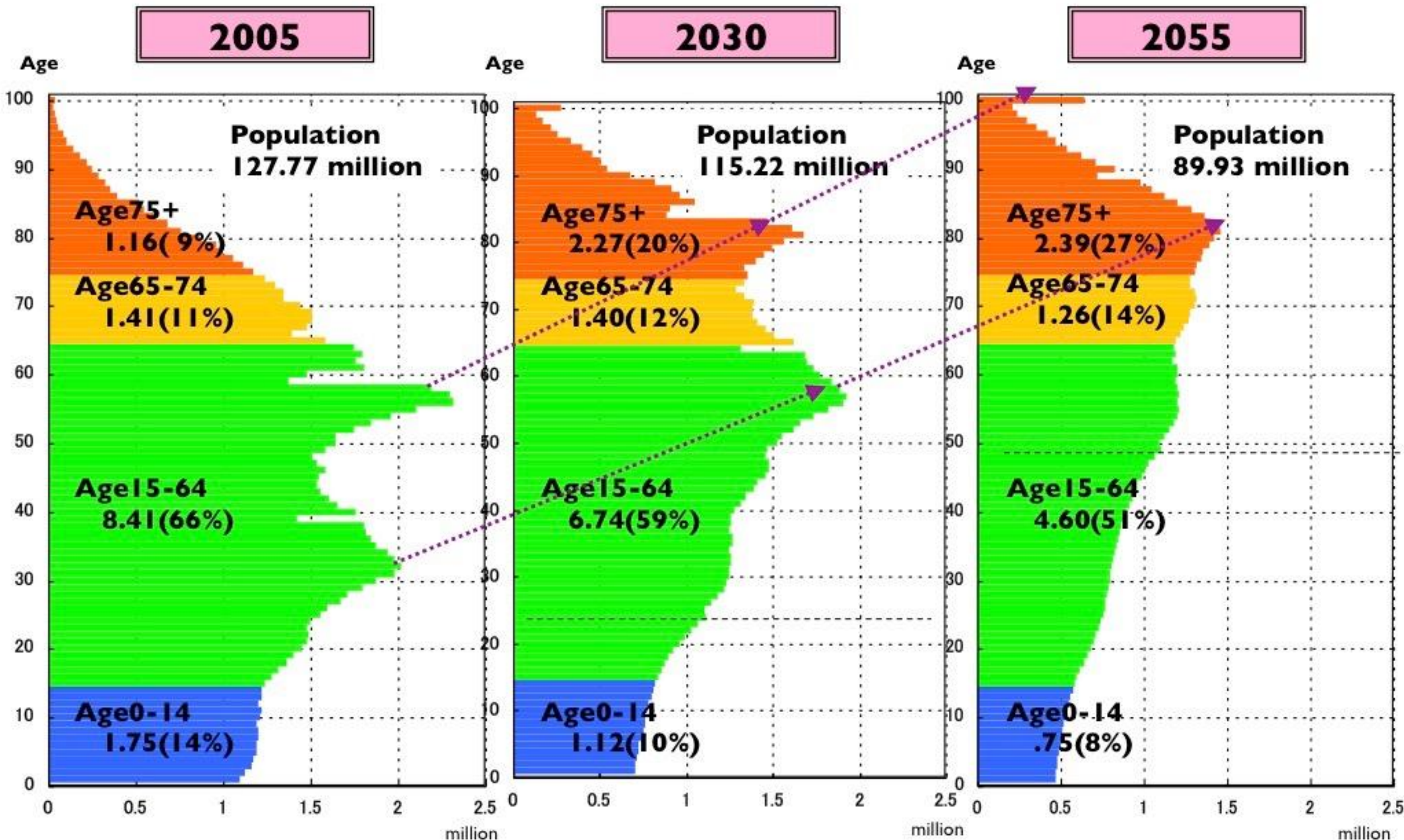
This graph shows the population aging in different countries from 1950 to 2050.

Many countries in Asia are rapidly aging. And, the issue is not only the speed of aging, but also that the major part of aging generations in Asian countries are immigrants from rural communities to urban communities.

In metropolitan or sub-urban communities developed after 1960s, there is no support for aging generations by their family members, relatives or neighbors as in rural community.



# Age Composition of Japanese Population



The composition of Japanese population drastically changed during the past 50 years. A German economist describes this change of composition of as "from Spindle to Coffin". The current average life expectancy of women is almost 86 years and expected to become 90 years not far in the future. A substantial portion of the population is in late 80s, 90s and 100s. And this segment of population is expected to double in the next 20 years.



# Demographic Shifts and New Needs

## Increase of Elderly Persons (age 65+) with Dementia

	2002	2015	2025
Number of the elderly with Dementia (million)	1.49	2.50	3.23
Proportion among the elderly (%)	6.3	7.6	9.3

## Households of the Elderly

(million households)

		2005	2015	2025
All households		49.04	50.48	49.64
	Household head age 65+	13.38	17.62	18.43
	Single household	3.86 28.9 %	5.66 32.2%	6.80 36.9%
	Married couple only	4.7 35.1%	6.14 34.8%	6.09 33.1%

More specifically, about 9% of Japanese age 65 and older are predicted to have dementia, and 37% live alone in 2025. A large portion of these people are very old, in their 80s and 90s.

# Our Goal: Realizing 'Aging in Place' Community

- 目標: 'Aging in Place' というコンセプトの実現:
  - 要介護高齢者を施設に収容するのではなく、住み慣れた地域で、最後まで、多少の支援を受けながら、できるだけ自立的に暮らせる社会を作ること。
- そのために:
  - 健康自立期間を最大化し、要介護期間を最小化すること
  - 心身が多少弱って来ても地域の中で暮らせる、在宅医療・介護のシステムと、地域住民等による「見まもり」等のコミュニティのサポートを確立すること

# **Case1:**

## **Toyo-Shiki-Dai Housing Complex Renewal Project**

A Renewal Project of A Large Social Housing Complex in the sub-urban area of Tokyo Metropolitan Region.



# City of Kashiwa and Toyoshiki-dai Community



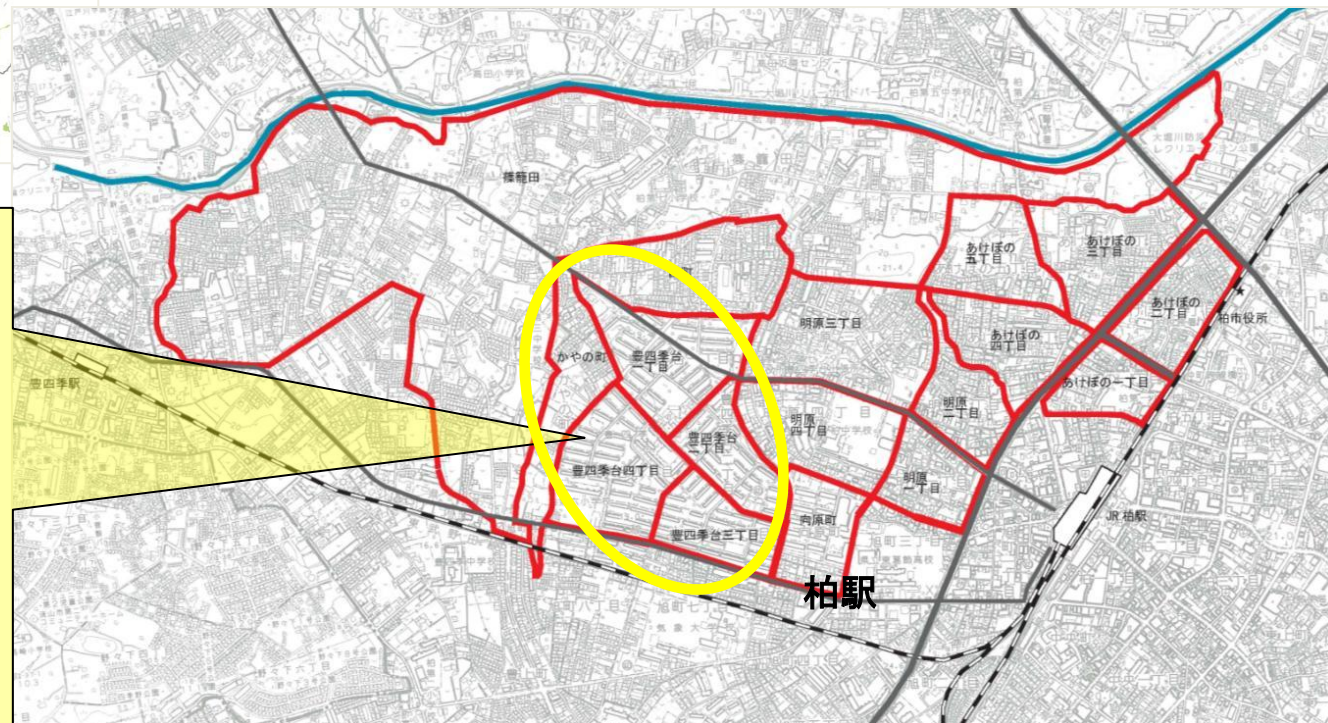
## Kashiwa City

- From JR Kashiwa Station  
About 29 minutes to Ueno Station  
About 40 minutes to Tokyo Station

← Location of Kashiwa City

## Toyoshiki-dai Housing Complex

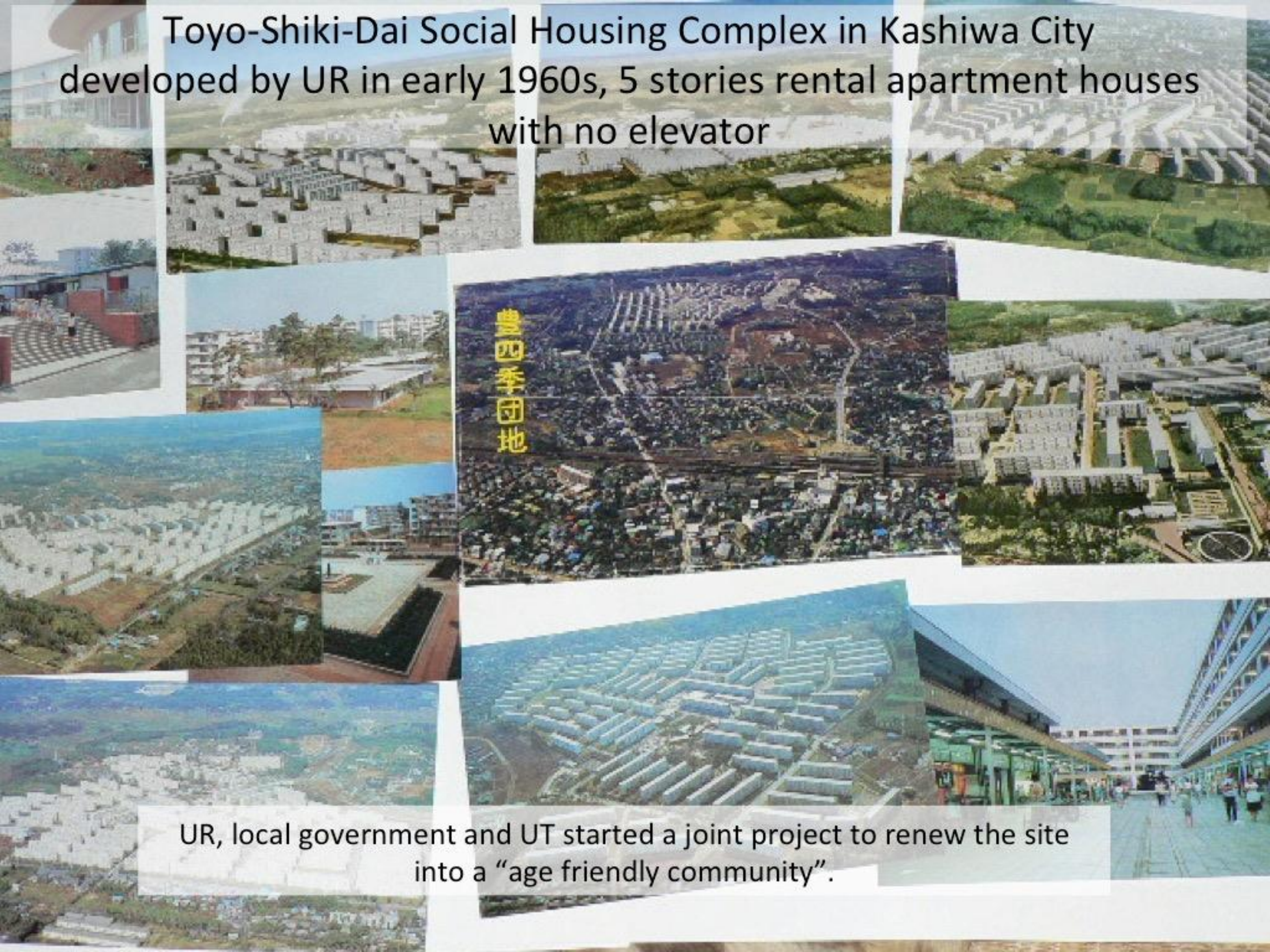
Location: Toyoshikidai, Kashiwa City, Chiba Prefecture  
Size: approx. 32.6 ha  
Management started: FY1964  
Number of households prior to the reconstruction: 4,666 (103 buildings)  
Access between Kashiwa Station and Toyoshikidai Complex  
Distance: about 900 – 1700 m  
On foot: about 12 – 20 minutes  
Loop-line bus: about 5 minutes (service every 8 minutes)



—Toyoshikidai Community (area surrounded by red line) and  
Toyoshikidai Housing Complex (area surrounded by yellow line)



Toyo-Shiki-Dai Social Housing Complex in Kashiwa City  
developed by UR in early 1960s, 5 stories rental apartment houses  
with no elevator



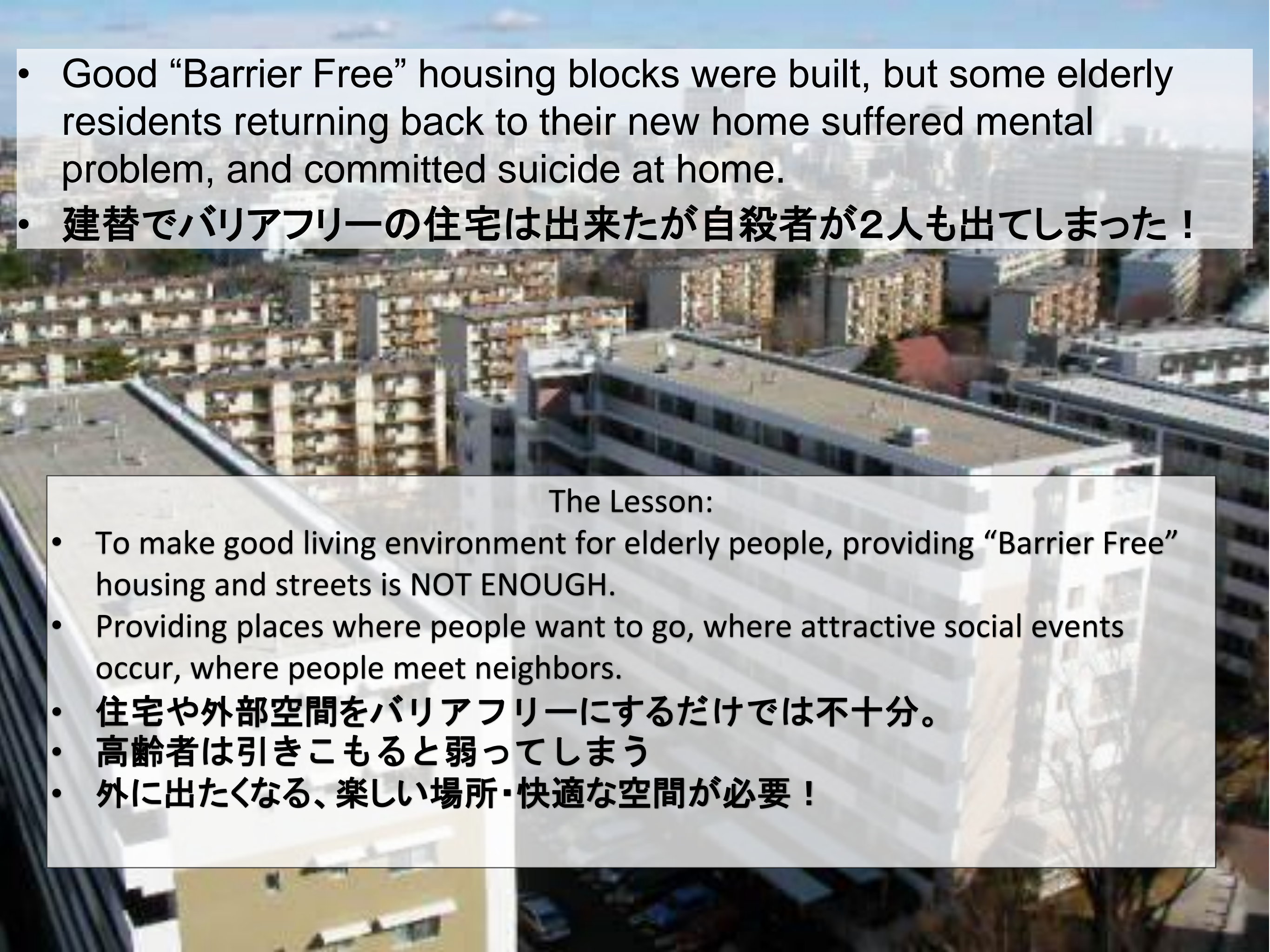
UR, local government and UT started a joint project to renew the site  
into a "age friendly community".



# Concept: Community where you can be 'Aging in Place'





- 
- Good “Barrier Free” housing blocks were built, but some elderly residents returning back to their new home suffered mental problem, and committed suicide at home.
  - 建替でバリアフリーの住宅は出来たが自殺者が2人も出てしまった！

The Lesson:

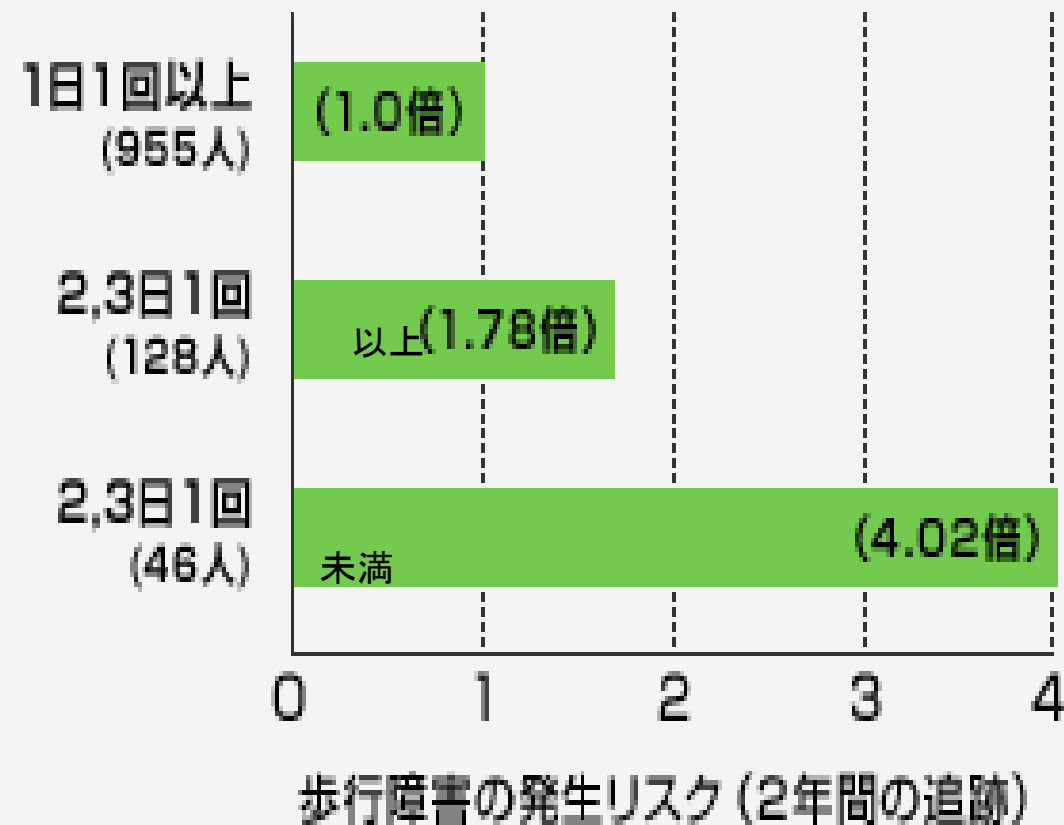
- To make good living environment for elderly people, providing “Barrier Free” housing and streets is NOT ENOUGH.
- Providing places where people want to go, where attractive social events occur, where people meet neighbors.
- 住宅や外部空間をバリアフリーにするだけでは不十分。
- 高齢者は引きこもると弱ってしまう
- 外に出たくなる、楽しい場所・快適な空間が必要！

# 外出機会と健康の関係(Relation between going out and health )

外出することは、介護予防、認知症予防にも効果あり！

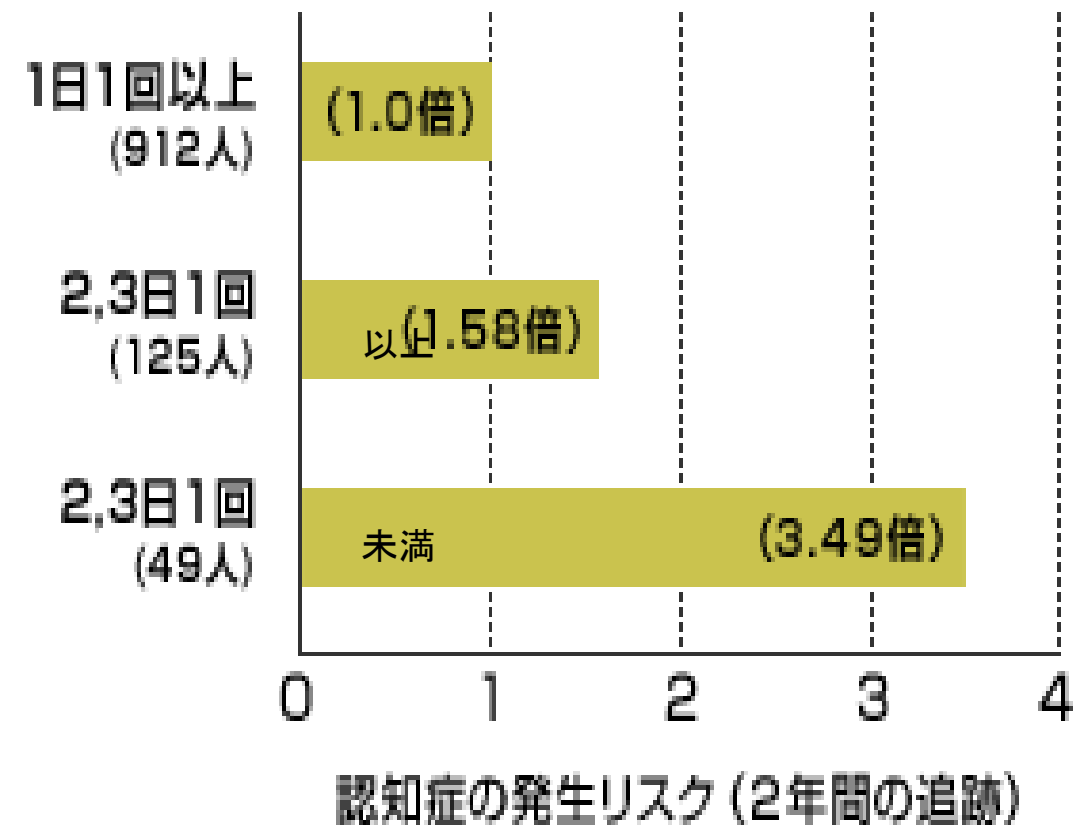
The generating risk of gait disorder

## ● 外出頻度と歩行障害の発生リスク



The generating risk of dementia

## ● 外出頻度と認知症の発生リスク



新潟県Y市で65歳以上の高齢者を対象に2001年から2年間追跡調査した結果

※両グラフとも、もともとの健康状態や社会的役割の差による影響を除いて比較

(資料) 財団法人 東京都高齢者研究・福祉振興財団 東京都老人総合研究所[第93・95回老年会公開講座 第三のキーワード!]より



IOG + KashiwaCity + UR (2009-)

Design and Development of Age-Friendly Model Community

**Our Concept = 'Aging in Place'**

By Providing 3 types of Community Infrastructure

**Care Support System**

多分野多職種連携の包括的ケアシステム  
**【医】次世代地域包括ケアシステム**

**Social Support System**

住民主導の地域交流・社会参加の場づくり  
**【職】生きがい就業・起業の活動**

引きこもらず人と集い楽しむコミュニティ  
**【住】コミュニティスペース豊かな  
 歩いて暮らせるまちづくり**

**Housing/Public Space/Mobility**



# 【医】多分野多職種連携地域包括ケアシステムの構築

## Care Support System

柏市における在宅医療を推進する6つの事業

### 事業⑤在宅医療の啓発



病院

短期受入れ

通院困難等



### 東大柏キャンパス

- ・教育研修企画・運営
- ・主治医・副主治医モデル等の実証研究

退院

### 事業②在宅医療研修システム

#### 副主治医

(在宅療養支援診療所)

#### 主治医

・補完的訪問診療

・訪問診



グループ化した医師

コーディネート

### 事業①地域医療拠点の整備

- ・主治医・副主治医・看護・介護サービスの調整
- ・多職種が集う場
- ・情報システム運営管理
- ・研修スペース
- ・市民相談・啓発スペース

相談・啓発

### 事業③情報共有システム

多職種連携



訪問介護

ケアマネ 他

訪問看護

### 住まい

戸建・UR賃貸・民間分譲住宅等

### 事業⑥サービス付き高齢者住宅の建設

訪問診療・在宅ケアの提供

### 事業④在宅医療試行モデルの実施



# 在宅医療推進のための取り組み

- 1. 在宅医療の負担を軽減するバックアップシステムの構築**  
**Development of a backup system to mitigate the burdens on home based care**
- 2. 在宅医療を担う医師等の増加と多職種（看護師、薬剤師、介護関連職種など）連携の推進**  
**Development of a system that increases the number of the physicians available for home based medical care and improves the quality of their care**
- 3. 情報共有システムの構築**  
**Development of an information sharing system**
- 4. 市民への啓発，相談・支援**  
**Consultation and educational promotion aimed at the citizens**
- 5. 上記を実現する中核拠点（地域医療拠点）の設置**  
**Establishment of a central base (community care base) for actual implementation of (1) – (4) above**

# 地域医療拠点の整備(Establishment of a central base (community care base))

様々な医療・介護サービスを組み合わせたモデル拠点を豊四季台団地に整備 【平成26年初旬完成】

## ◆イメージ図

サービス付き高齢者向け住宅  
(house for elderly people with service)

自立棟

介護棟

小規模多機能

グループホーム

24H訪問介護

居宅介護

24H訪問看護

在宅療養  
支援診療所

主治医  
診療所

薬局

地域包括  
支援センター

地域交流  
スペース

子育て  
支援施設

※本図は、実施設計前のイメージであり、完成後の建物とは異なる場合があります。

提供：株式会社学研ココファン



# For Promoting ‘Social Participation’: 「セカンドライフ就業」の推進実験

Promoting employment and local small business  
as a opportunity of “social participation” of  
elderly people  
(Second Life Working Place)



# Working Places for the Second Life

都市型農園事業

**Community Farm**



コミュニティ食堂

**Community Eatery**



屋上農園

**Roof Garden**



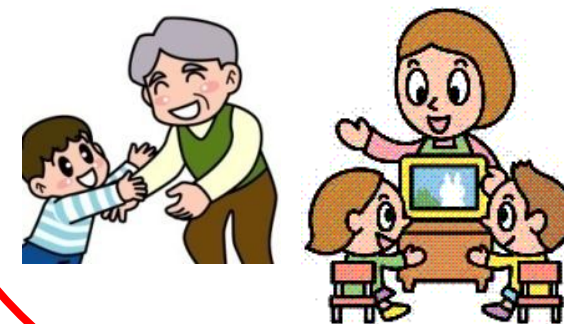
ミニ野菜工場

**Mini-vegetable Factory**



(学童) 保育事業

**After-school Program**





# Second life working places in Kashiwa, Chiba





# Second life working places in Kashiwa, Chiba

## Teaching English communication after school hours

学習塾での英対話授業



## Reading to children in a kindergarten

くるみ幼稚園での読み聞かせ





# Second life working places in Kashiwa, Chiba



## Mini-vegetable factory



# Our Approach:

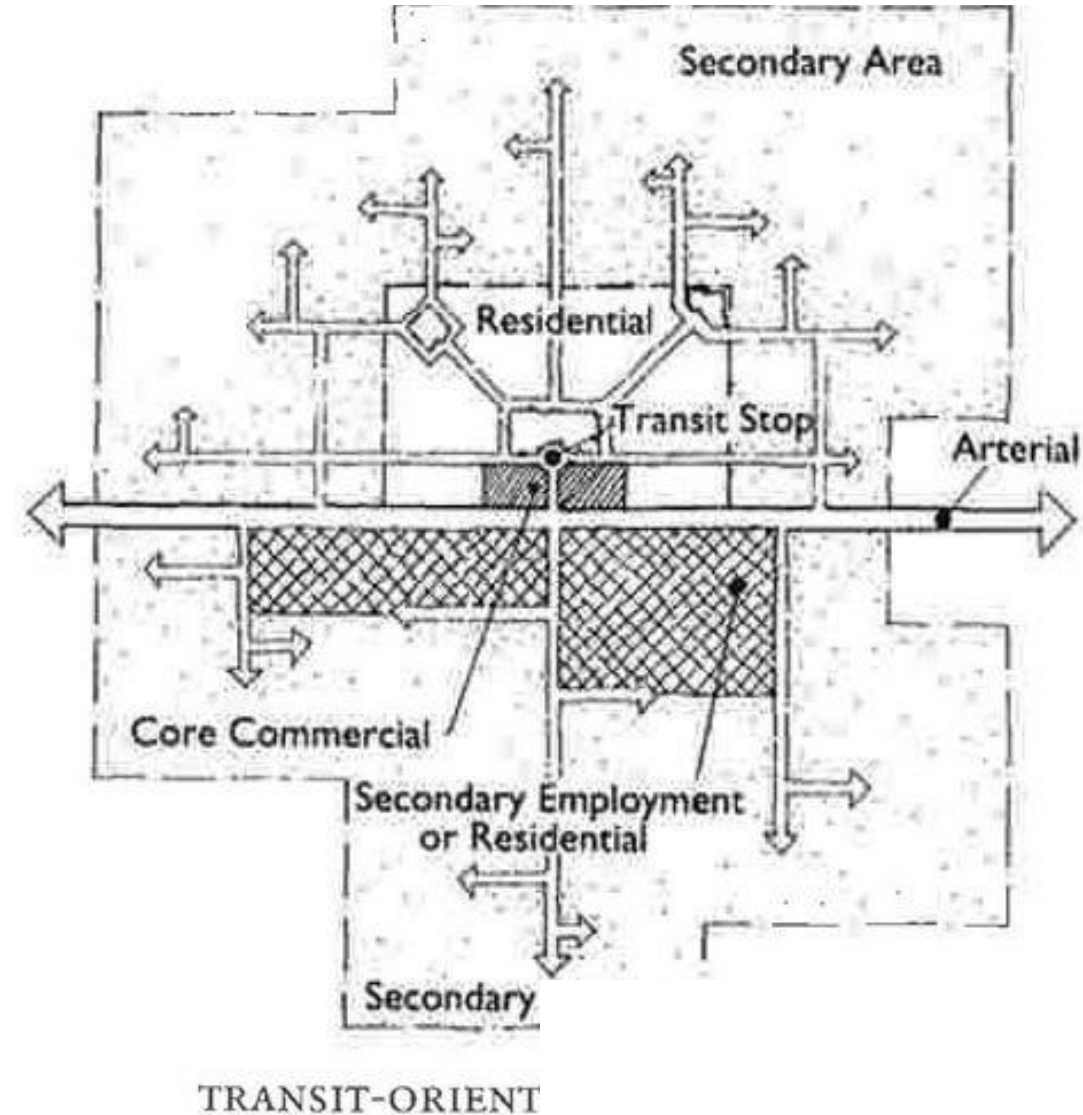
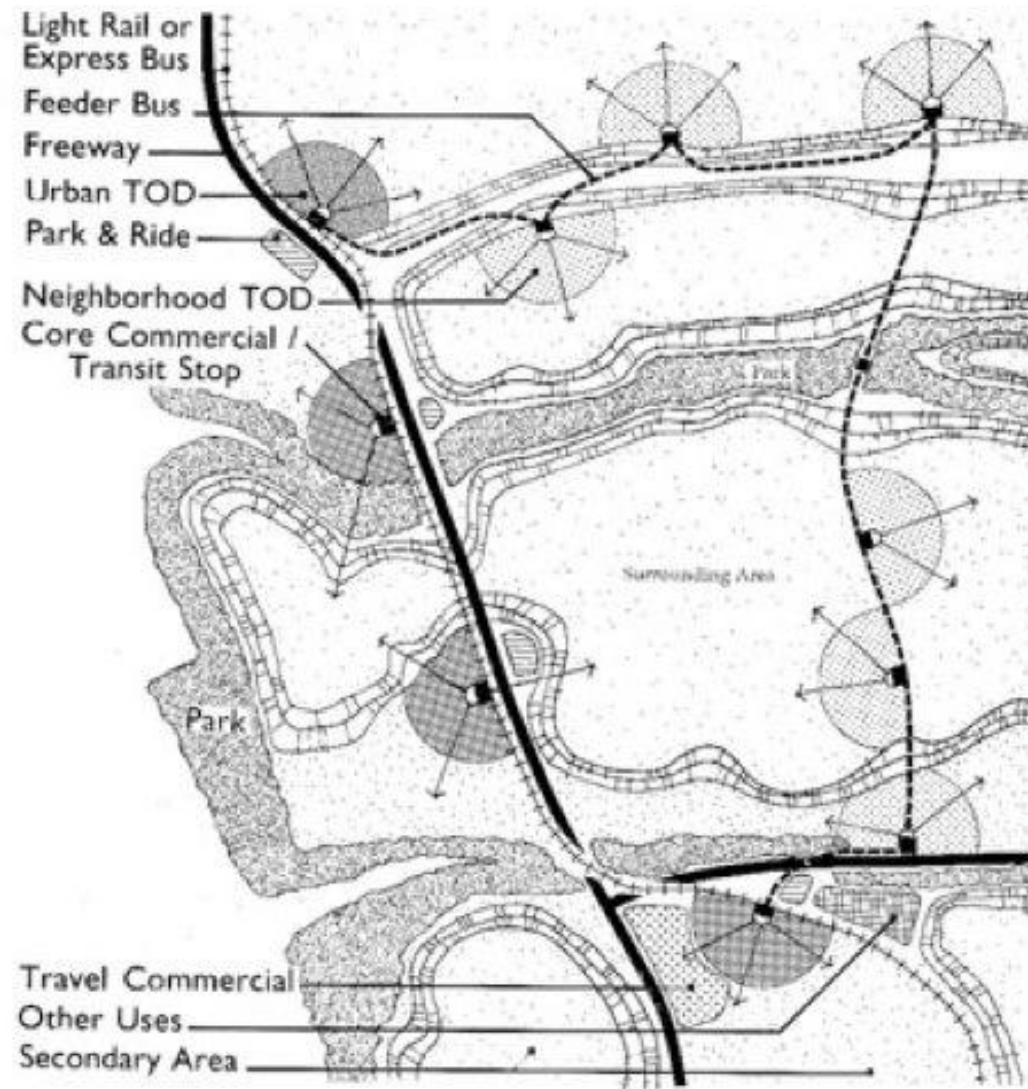
Providing / enhancing 3 tiers of community infrastructure:

- 1) Social involvement/social participation supporting system
- 2) Integrated community care system
- 3) Livable physical/spatial environment with various community spaces





- Age-Friendly Cityつまり超高齢社会対応の物的空間的都市形態 (urban form) とは、サステナブルな都市形態と、ほぼ同じ
- Age-Friendly Cityの物的空間的都市形態とは、歩いて暮らせる基礎的日常生活圏が公共交通でネットワークされた都市形態



## Transit Oriented Development by Calthorpe (1990s)

One alternative to sprawling strip development involves creating nodes of transit-oriented development at one-mile intervals along a corridor.

*Courtesy of Calthorpe Associates.*

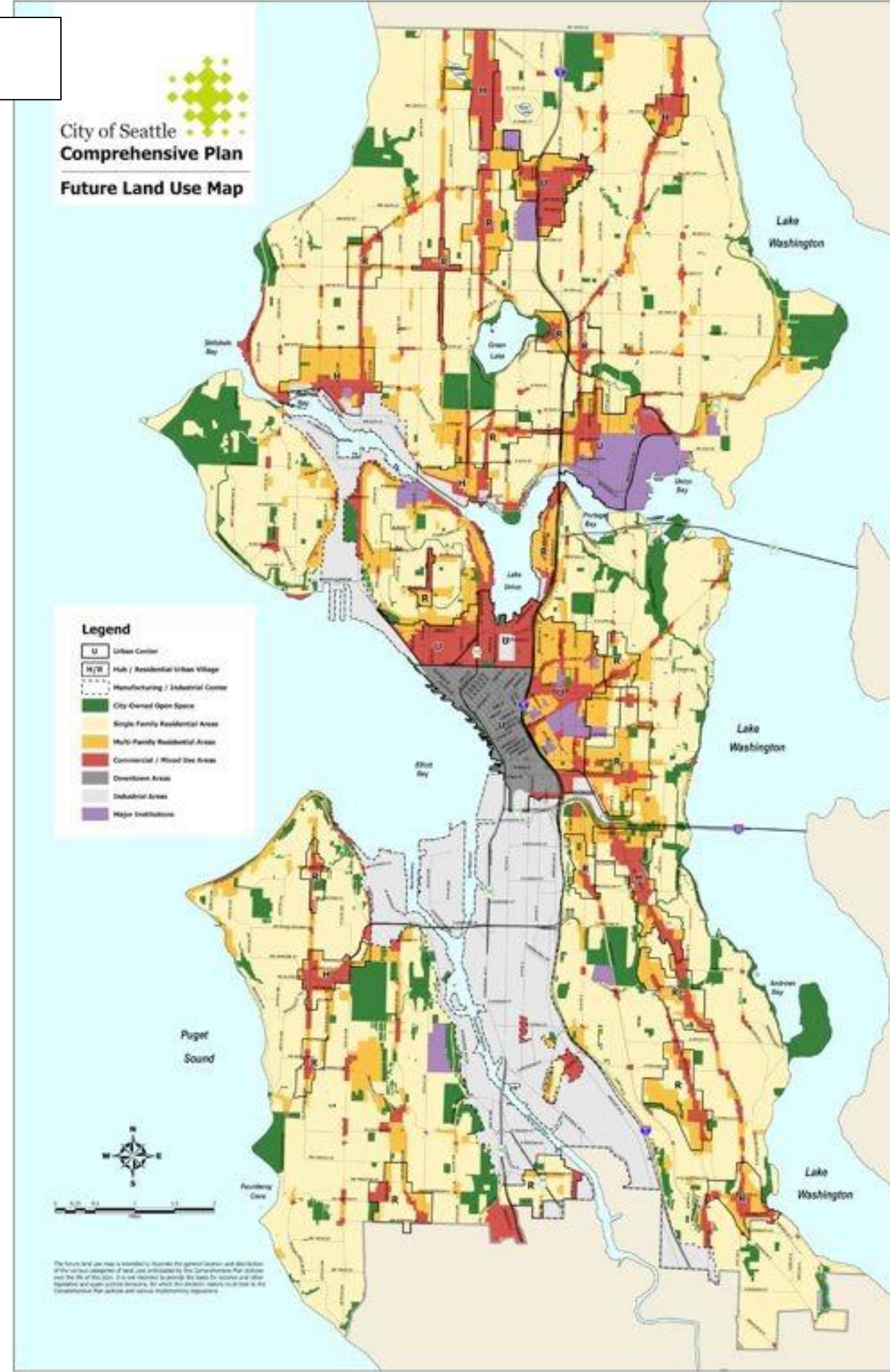


# An example of an age-friendly urban form

## Creating “Urban Village”

- Designation of high density Urban Villages:
  - Urban Center
  - Hub Urban Village
  - Residential Urban Village
  - Neighborhood Anchors
  - Manufacturing/Industrial Center
- Public transport system that connects urban villages

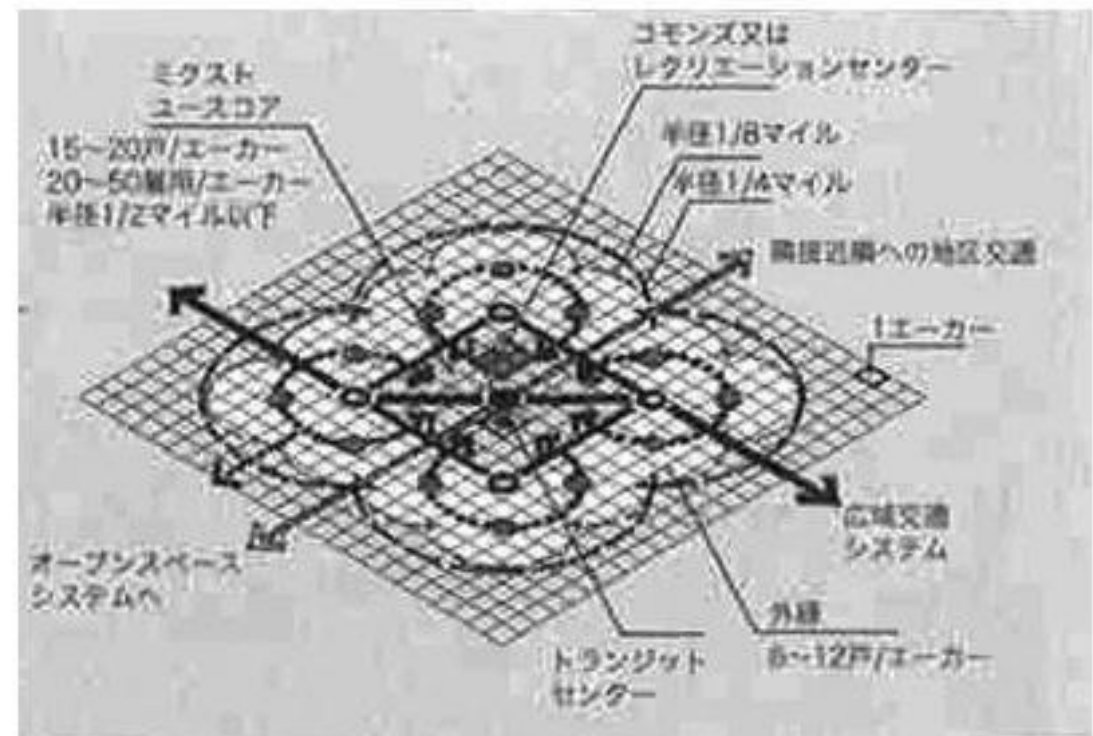
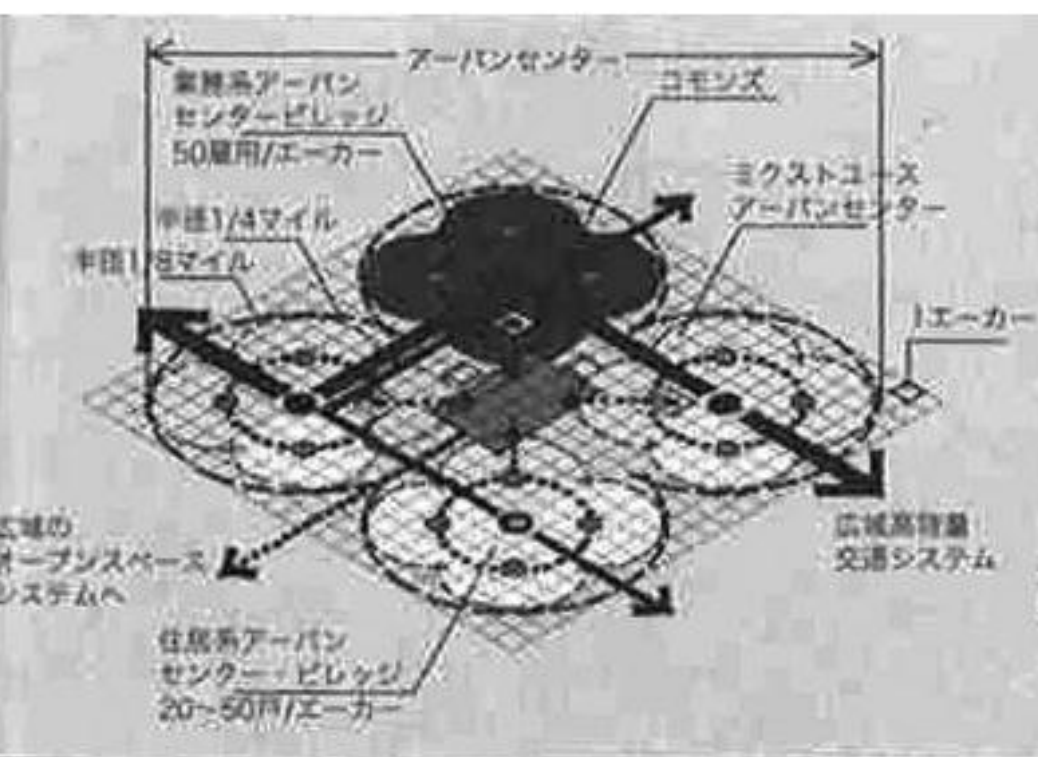
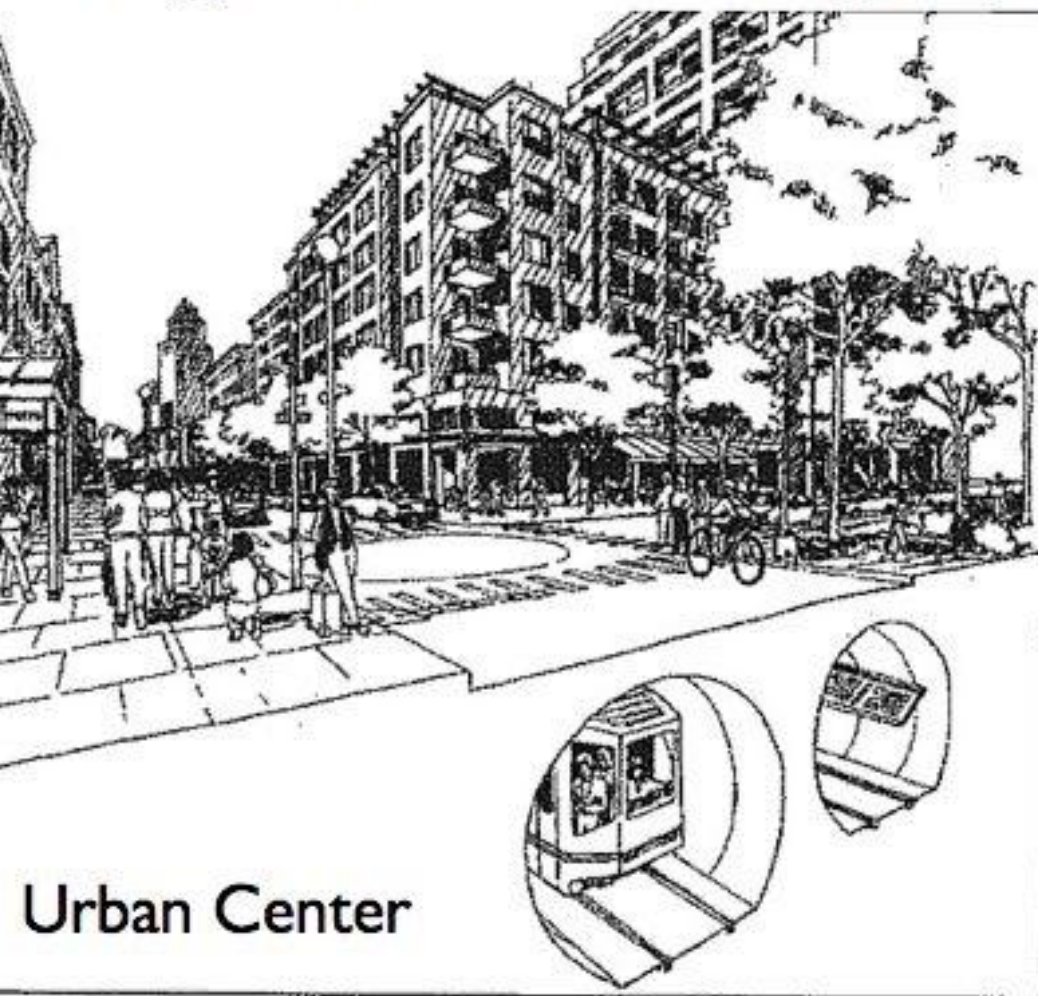
超高齢社会対応の都市空間形態  
の有効なモデルの例として：  
シアトル市のアーバンビレッジ構想





# Creating "Urban Village"

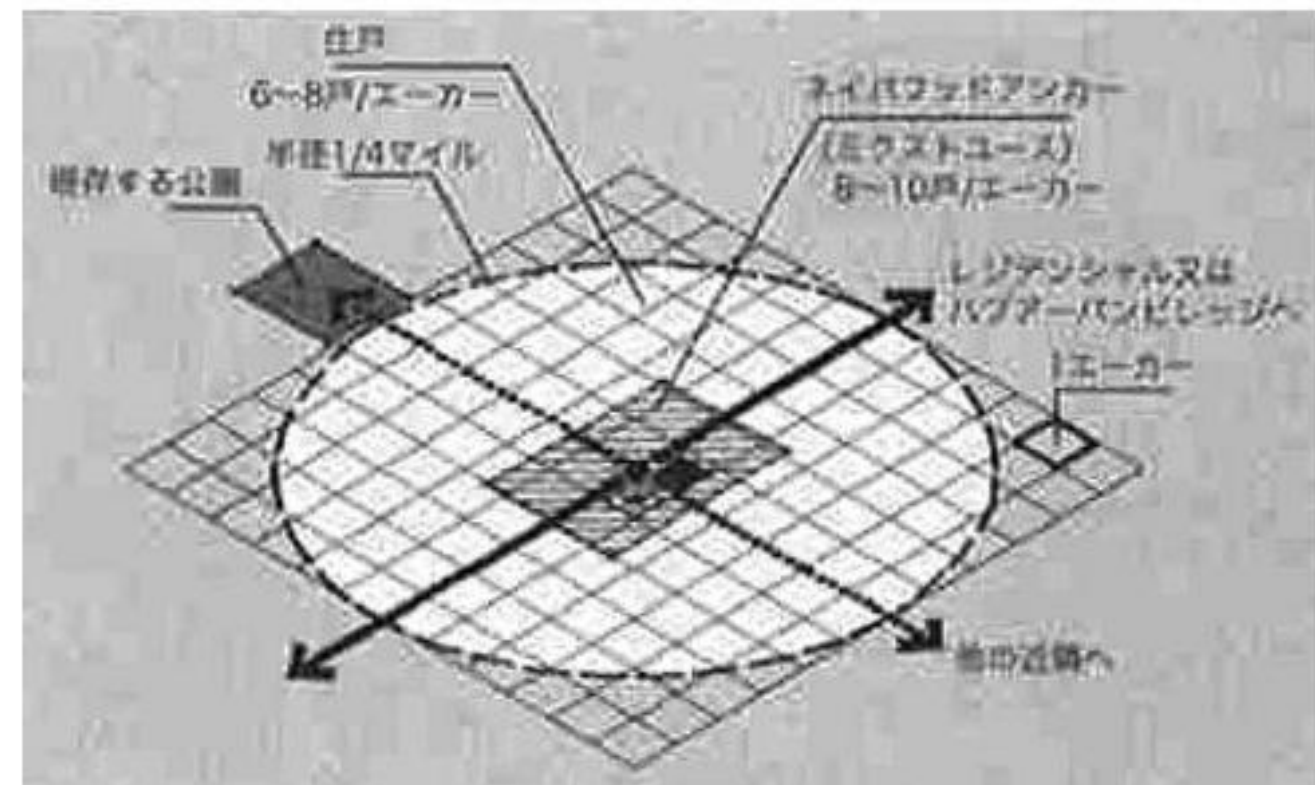
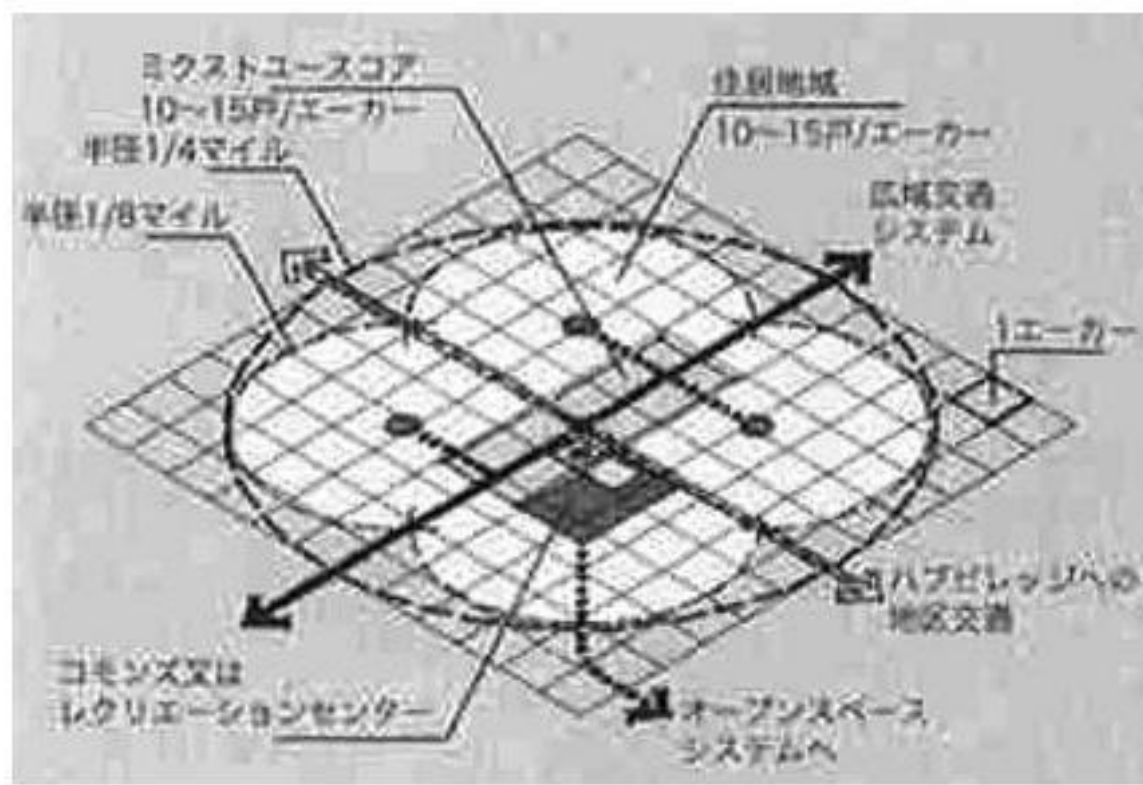
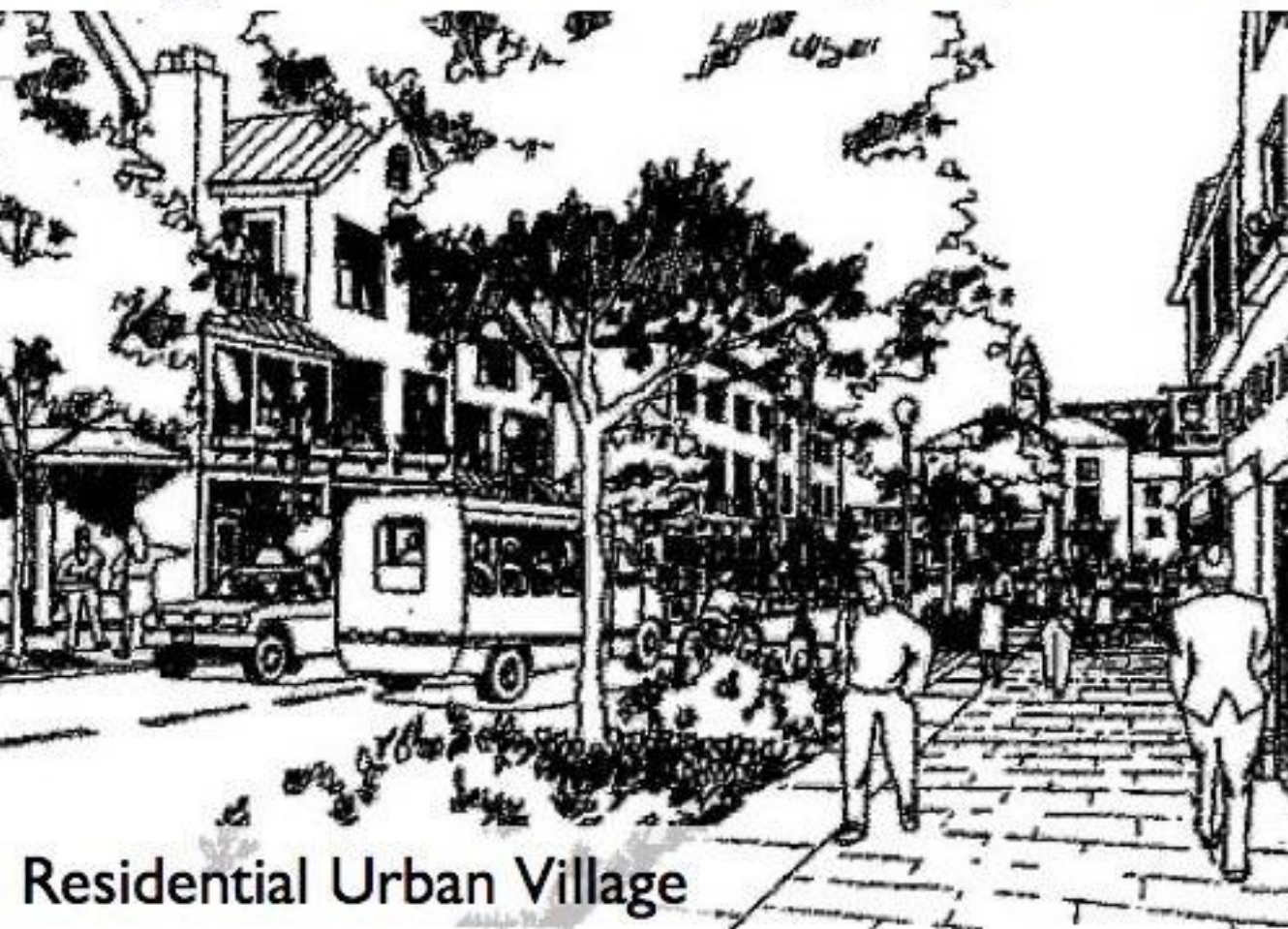
## Image of Urban Villages (Seattle)





# Creating "Urban Village"

## Images of Urban Villages (Seattle)





# Interconnected elements of “Urban Village”

超高齢社会に適合し、かつサステナブルな都市空間形態の7原則



(I) Everyday life without automobile

自家用車に乗らなくても暮らせる生活環境



# Interconnected elements of “Urban Village”



(2) Good pedestrian environment

安全で快適な歩行者環境





# Interconnected elements of “Urban Village”



(3) Street vitality

路上の活気と賑わい・交流



# Interconnected elements of “Urban Village”



ヒューマンスケールな街並・  
商業用途の計画的混合

(4) Human scale and mixed use



# Interconnected elements of “Urban Village”



多様なタイプの住宅供給

(5) Well designed affordable housing for diverse population



# Interconnected elements of “Urban Village”



豊かなパブリック・スペース

(6) Comfortable public open space



# Interconnected elements of “Urban Village”



(7) Good cyclist environment

新しい個人輸送手段の導入