

Building a walkable city (Healthy City)



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Scope of social innovation for realizing Healthy Cities

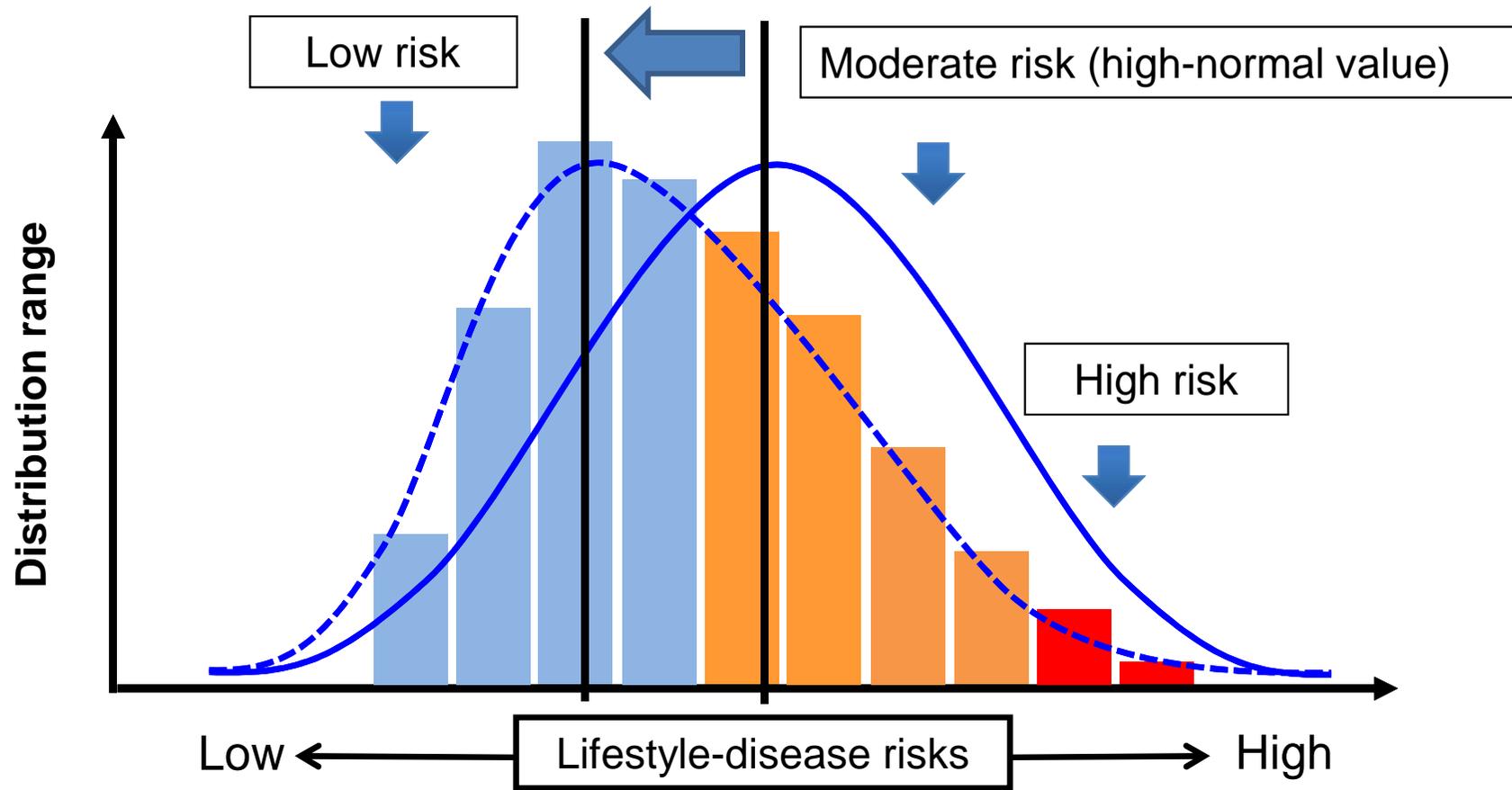
Goal

👉 Reduce the average risk of the entire group

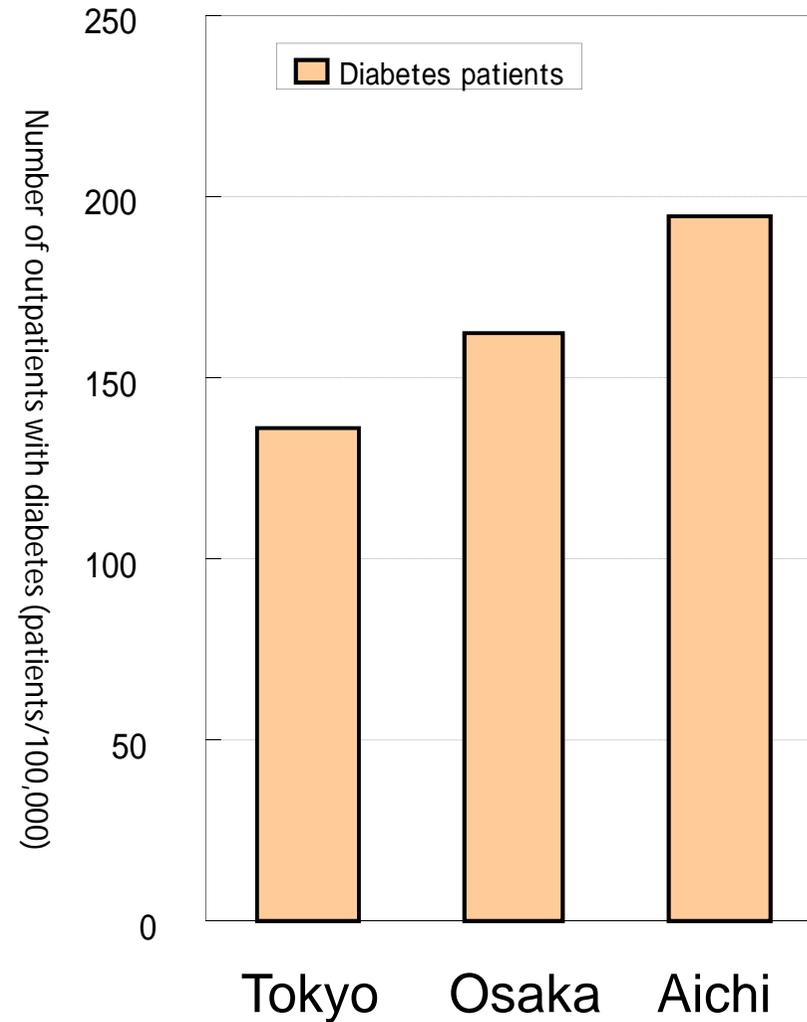
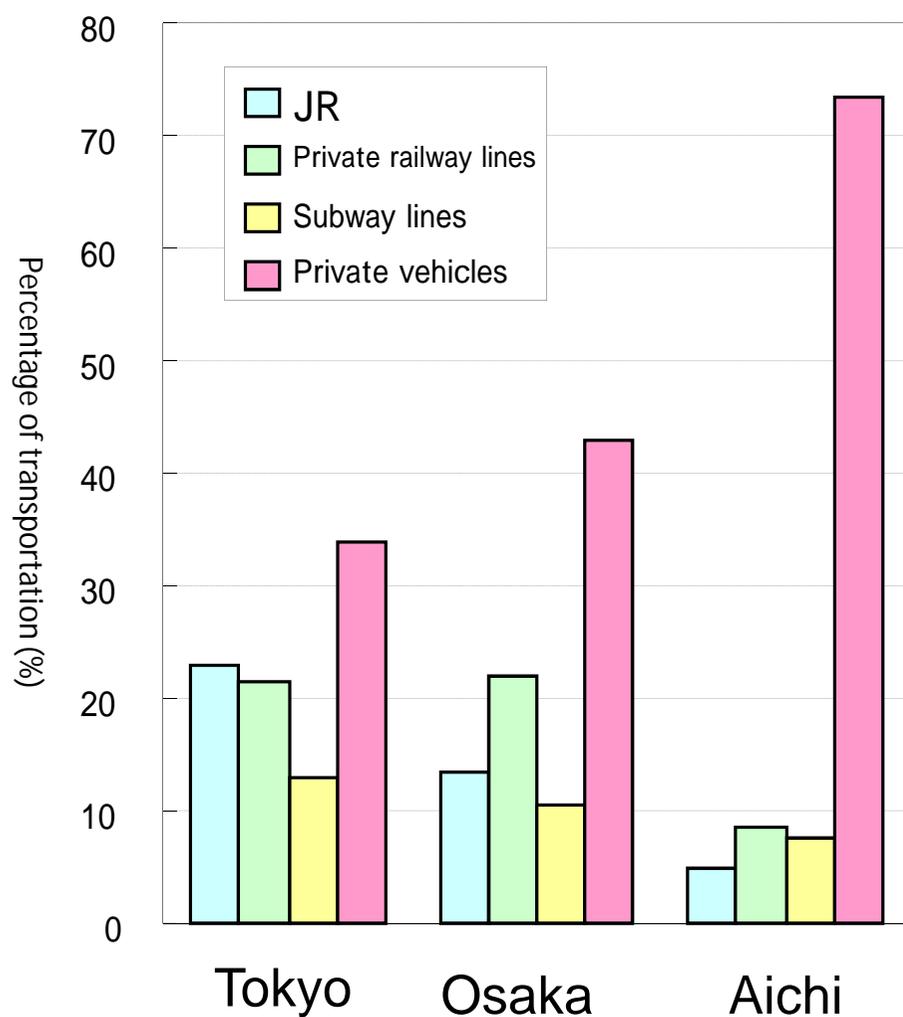
Issues and challenges

👉 Embodiment of the population approach

Potential for city planning to make a contribution!



The trigger of the lifestyle disease is not only the individual factors, but environmental factors in the area and nearby areas play some role as well



(Hiroyuki Tamemoto: "Obesity and Diabetes," 8: 923 , 2009)

Science-based

The effect of walking is cumulative

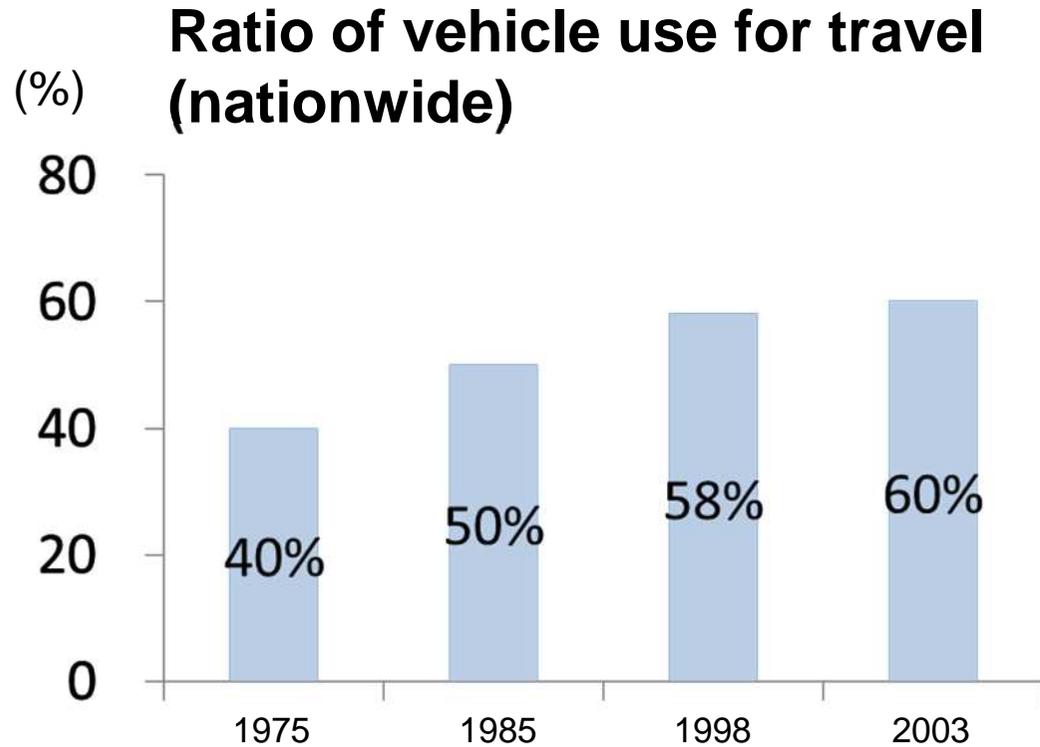
☞ Moving from one place to another can be exercise

The effect is the same regardless of whether one walks continuously for 20 minutes or more, or walks a total of 20 minutes in small increments



Town planning can contribute to health (super-aging society support)!

Issues and challenges of cities in Japan



(Ministry of Land, Infrastructure, Transport and Tourism, 2007)



(Sanjo City center)

Urban environment centered around vehicles relates to decline of the city center, more difficulty moving for seniors and an increase in the number of those who have difficulty shopping (METI 2010)

Loss of local community function, weakening of the community network (Ministry of General Affairs, 2007)

Urban environment expanding with no order and centered around vehicles relates to increases in lifestyle diseases such as obesity and diabetes

(Lofors et al. 2006, Wood et al. 2008, Kim et al. 2006, Smith et al. 2008)

Healthy Cities should be aimed at supporting the super-aging society

The future direction of city planning is to create Healthy Cities where people walk regardless of the intention. For this, consolidation of the urban functions, development of walkable spaces and public transit, and renewed vibrancy of the city-center streets (revitalization of shopping districts) are needed. With this type of planning, many other community issues are expected to be solved, not just health issues. (Kuno, 2011, Hiroi, 2012)

In the 1970s



Current (as of 2011)



44 years ago, Freiberg City in Germany banned vehicle use in the city center and re-established public transit such as LRT. This succeeded in creating the comfortable walkable space.

Advantage of walkable residential city

Positive medical effect

Contribute to increase of social capital

☞ Good effects on health

☞ Positive effect on crime

☞ Positive effect on disaster preparedness and disaster management

Contribute to community vitalization

☞ Create bustle

☞ Increase sales in shopping district

Contribute to the environment

☞ CO2 reduction

Walkable city

In order to achieve



1. Change the lifestyle so that citizens do not overly pursue only convenience

2. In order to support,

- Building the space for social participation (outings)

- Creating bustles

- Develop a comfortable walkable space

- Redevelop public transit to move away from car dependency

Benefits of the walkable town

👉 **Creating a walkable residential city**
Contributing to reduced medical costs by
increasing the number of steps taken by residents

An additional 2,000 steps per day by 20,000 people,

0.061 yen per step X 2,000 steps X 365 days X 20,000 people
= 800, 000,000 yen

(Calculation based on data from
Tsukuba University Kuno Research Laboratory)

Challenges of the walkable residential city

People do not walk just because of infrastructure development



A city with population of 300,000 (weekday daytimes in the prefectural capital city center, 2012)

Essential challenges if aiming for a healthy city

Think what works to create the walkable city
(where it ends up being natural to walk)

The one who first gives up the use of his own private vehicle in favor of public transit will be disadvantaged in the society where private vehicles are the major means of transportation (all the local cities except the big cities such as the Tokyo Metropolitan Area).

In the society that assumes that citizens use private vehicles, the rational strategy is to keep using the private vehicle.

Regardless of whether the vehicle-dependent society is the result of people's desires in the past or even today, the societal infrastructure is already here. **“The very nature of the issue is that it makes little sense to attempt to break free of this society by depending on individual efforts.”**

Excerpts from “City Planning of Freiberg” (Japanese-language book) by Atsushi Murakami

Barriers to realizing Healthy Cities

Lack of recognition of the possibility of a new social system

Regarding the latent needs for a new social system, it is hard to find out through passive methods such as sending out surveys.

Converting behavior into expectation is difficult when one has given up on a thing for a very long time.

Individuals usually have limited imagination about a society different from what they see in front of them.

This is a particularly large factor in the case of change in a social system that has persisted over a long period.

Lack of investment in social infrastructure as the foundation of the super-aging society

Existing infrastructure (both physical and social infrastructure) is barely supporting the current system. Not enough social investment is made in support of the aging society.

This infrastructure must place an emphasis on achieving social innovation. It is characteristically different from conventional public investment. An important point is to base it on integration and evidence.



**It is necessary to repeat the cycle of “making a policy”
based on evidence from “social experimentation” !**