

The Development of Cycling and Bike Share Systems in Kyoto City with Reference to Vélib' in Paris

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Summary of this study

I focused on two factors that prevent the development of cycling in Kyoto City.

- Bicycle parking
- Illegally parked bicycles



Analyzed Problem
Suggested Solution

Factor 1: Bicycle parking

A lot of citizens answered that ...

- There is a lack of parking.
- It is difficult to use.

...Generally, people were not aware.

We must establish bicycle parking in Kyoto City.

But... it is not enough to meet the needs.

Factor 2: Illegally parked bicycles

- The number of illegally parked bicycles dropped by 10% since 2014.

However...

60% of citizens do not feel the effect.

➡ Problem with temporary parking

However...

Advantages of bicycles

- No discharge of CO2
- Useful to move short distances (such as traveling from home to a supermarket).

In Japan's

- Means of transportation for elderly people

Bike share system

Bike share system

- **New type of urban transportation**
- **We share bicycles with others in this system.**


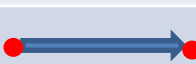
Well known examples

Hangzhou (China), Barcelona (Spain),

Paris (France)



Differ from rent-a-bicycles

Rent-a-bicycles	Bike share system
Generally return bike at place where it is rented (from shop etc.).	It is possible to return bike at a different bicycles station (bicycle parking).
Return trip necessary	Return trip unnecessary.
	



Advantage 1: Offer another form of transportation

Length between stations is about 1km (Kyoto Municipal subway)

→ Traveling by bike is easy between two stations.

➡ Needs of bike share system as a **last transportation**.

Advantage 2: Decrease illegally parked bicycles

Cause of illegal parking

Ex) In Tokyo (questionnaire)

Q. Why do you use a bike share system?

A. Do not have to own bicycle (47.0%)

➡ Would affect the number of illegally parked bicycles.

Advantage 3: Solution to problem about bicycle parking

Bike share system → it must have a lot of stations.

if we can establish enough stations...

➡ it will solve the problem when we cannot return bicycles easily.

➡ Problem can be partly solved.

About Vélib'

- Bike share system in Paris, France.
 - Service began July, 2007.
 - It was used by nearly 28 million people in the first year.
- Now, I want to find solutions to two problems which is thought to occur in Kyoto City with consideration of Vélib'.



Problem 1: Place of ports

In Kyoto, there are few places to put new bicycle ports (stations).

With Vélib', bicycle ports are established about every 300m.

This can be realized in Kyoto by using coin parking, or convenience stores.

I suggest establishing small ports at convenience stores.

Problem 2: Uneven number of bicycles

- The number of bicycles at each port will become uneven.
- With Vélib', it eases the physiographic factor through monetary advantage.
- In Kyoto, the uneven number of bikes during day and night can be solved by using this method.

Introducing a large bike share system in Kyoto City.

➡ It can solve transportation problems and develop cycling, and it would be beneficial to Kyoto City.

We need to consider about the problems which could occur such as ensuring spaces for riding bicycles with consideration of the Vélib' share system and so on.