

Bicycle Sharing (Public Bike)

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What is bicycle sharing (public bike) in China?



A number of bicycles made available for shared use amongst individuals who do not own the bicycles

Evidence from Beijing, Shanghai, and Hangzhou shows:

- **Public Bike is public transit:** Vast majority trips are commuter and utilitarian trips.
- **Public Bike enhances other forms of transit:** it solves “last mile” issues with other forms.
- **Public Bike does things other modes do not:** faster than bus or rail for short trips, flexible routes, runs 24 hours, cheaper.

How is Public Bike Public Transport

City	% of trips for work commutes	% of trips combined with another form of transit	% of trips that replace transit trips	% of trips that would have been made by car
Hangzhou	43%	84%	51%	8%
Shanghai	75%	58%	43%	6%
Beijing	79%	55%	48%	8%

Why are people using public bike systems

- 35% - Convenient for transfer
- 32% - Saves time versus previous mode
- 18% - Environmental Friendly
- 16% - Convenience

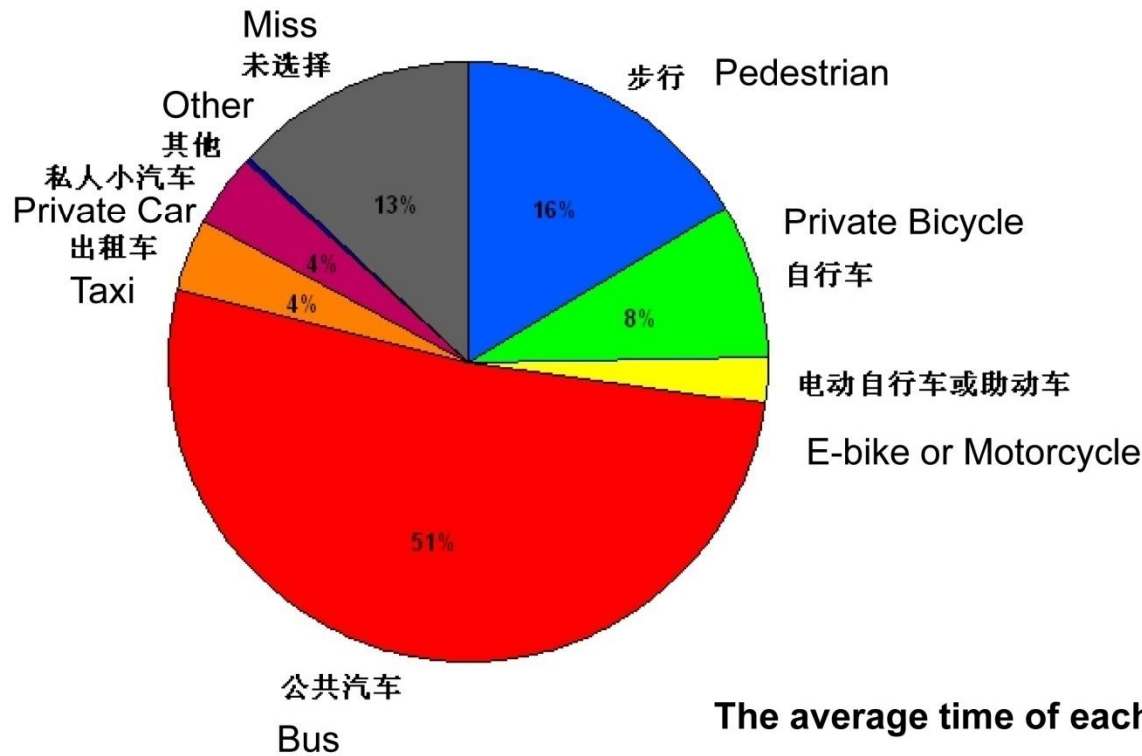
Source: Tongji University; Berkeley IURD

Over 60% of people use public bike because it is more efficient than their previous means of transport

Who's changed their travel mode to Public Bike in China



Mode shift from



Technology System differences found in China

High Tech System

- Higher initial capital costs
- Easier to integrate with other forms of transport (bus, metro, car parking)
- Lower maintenance costs
- Modern, trendy appeal

Low Tech System

- Lower initial capital costs
- Higher operating costs
- Creates employment
- More bicycles per square meter of pavement space

Examples of Low Technology System



Require interface between customer and attendant

No auto locking mechanism

Timely manual recording of customer information



Problems with Low Tech System



Without good quality docking stations the bicycles look disorderly and messy



Because the system is not automated there is long waits for service

Example of High Technology System



How does it work?



How does it work?



China's Bicycle Sharing Statistics

	Hangzhou	Shanghai	Nanchang	Wuhan	Taipei	Kaoshung
Date Started	October 2008	August 2009	August 2009	November 2008		March 2009
Number of Bicycles	50,000	28,000	1000	20,000		4500
Number of Stations	2,000	330	30	718		50
Registered Users	1,200,000	100,000	10,000	560,000		40,000
Operator	Hangzhou Public Transport Bicycle Service Development Co.	Forever Bicycle	Xinfieda	Xinfieda	Giant	Merida
Rides/bicycle/day	8	5.7	4	5		

Financing

- Capital Costs are usually absorbed by the government
- Operational Costs can be paid through:
 - Government Subsidy (Shanghai model)
 - Advertising Revenue and government subsidy (Hangzhou model)
 - Advertising Revenue (Wuhan [Xinfieda] model)

Operations

- ❖ Government usually gives the operations to an operator
- ❖ The operator makes money off the registration fee, rentals, advertising and in the future naming rights on the stations
- ❖ The largest challenge to operations is the movement of bicycles from one stations to another

This is aided by RFID technology

Pricing model

Time Used	Price
1 hour	0 RMB
Additional 1 - 2 hours	1 RMB
More than 3 hours	3 RMB

The goal of the pricing model is to encourage short trips
not to maximize revenue.

In Hangzhou 95% of the trips are less than 1 hour
- so they are free

Marketing and Maps

The screenshot shows the homepage of the Hangzhou Public Bicycle website. At the top, there is a navigation bar with links for '首页' (Home), '租车地图' (Rental Map), '列表' (List), '规定' (Regulations), '报道' (Reports), '声音' (Voices), '游记' (Travelogues), '取经' (Learning), and '论坛' (Forum). Below the navigation bar, there are several sections: a '最新公告' (Latest Announcements) section with a list of news items, a '租车服务点信息统计' (Rental Service Point Information Statistics) section showing a total of 1080 stations across various districts, a '网友游记' (User Travelogues) section, and a '网民声音' (Netizen Voices) section. There is also a '公共自行车热点问题全解' (Comprehensive Solution to Public Bicycle Hot Issues) banner and a '公共自行车' (Public Bicycle) section with a '什么是公共自行车' (What is a Public Bicycle) article.



The website and marketing is a platform to inform users and keep them up to date on new developments in the system

www.chinabikesharing.org

Thank you