

COMMENT

Designing safer alternatives

Cities must take the opportunity to create a comfortable commuting experience for cyclists

By **KIM LUA** and **WEI LI**

Orange, yellow, blue, green, rainbow ... bike lanes in Chinese cities are quite colorful these days.

Thanks to the new bike-sharing business, one of the greenest and healthiest ways to travel is experiencing a surprising renaissance in China. The new bike-sharing companies, such as Mobike and ofo, have placed more than 16 million shared bikes in at least 150 cities. They are changing the way people commute.

While cycling is becoming more fashionable than at any time in the recent past, there are more fundamental improvements in infrastructure that cities should make to create a safe, convenient and enjoyable cycling experience.

According to the World Health Organization, about 8 percent of traffic deaths in China are cyclists (excluding motorized two- and three-wheelers).

Another survey in 2013 found that 85 percent of Chinese residents are not satisfied with their cycling

environment. The reasons can be attributed to traffic safety, bike-lane design and network coverage.

The World Resources Institute has conducted research on the relationship between vehicle speed and crashes. It found that higher speed contributes to more traffic incidents. Moreover, a crash speed of 50 kilometers per hour could put the fatality rate of vulnerable road users as high as 80 percent.

Cyclists are exposed to greater dangers when they share the roads with heavier, high-speed vehicles. Wide intersections are the blackspots for traffic safety in China, because the complex traffic and conflict points create a hostile environment for cyclists to cross and turn.

Another safety issue occurs at bus stops, especially when cyclists find themselves obstructed and trapped by approaching buses.

Lowering the speed limit of vehicles where bike users are present, narrowing the width of intersections and installing protected bicycle lanes with traffic-calming measures — especially in suburban

or peripheral areas where heavy vehicles roam the streets and cars travel at high speeds — can improve safety for cyclists.

Moreover, designing more friendly cycling spaces is important. Cyclists are forced to share limited space with parked cars, mopeds and delivery vehicles in many places.

Those vehicles block the bike lane and force cyclists to ride in the traffic lane or on sidewalks. This creates conflicts between bicycles, vehicles and pedestrians and has negative impacts on safety and comfort.

Cities have yet to formulate proper regulations and enforcement to manage these issues.

For cycling, a systematic approach is the best way to improve safety and comfort. For example, although Chinese cities are building extensive bike lanes, some are one-way bikeways that end abruptly without connecting to other transport networks.

Piecemeal interventions can improve a section of road or an intersection but will not have much

impact on the safety and further development of cycling. This suggests that cities should create cycling network plans linked with greater transportation infrastructure.

Some innovative cities have already proposed such strategies. Shanghai, for example, is working on plans that will improve the safety of its cycling network.

Such networks, sometimes called greenways, not only connect bike lanes on urban roads, but also integrate them with recreation areas and multiple modes of transportation, such as subways and buses.

In addition to bike lane design, other bike facilities are also important to a safe and enjoyable cycling experience. Because of the overwhelming popularity of bike sharing, existing facilities cannot meet the demand.

As a result, sidewalks are clogged with parked bicycles, especially around transit stations. This has created conflicts between cyclists, pedestrians and transit users.

Some policymakers have begun to think bike sharing is a nuisance.

However, the issues can be mitigated by careful planning. Dedicated bike parking should be carefully designed to meet the needs of bicycle users.

Moreover, other facilities can help create a safe and enjoyable cycling environment — bicycle traffic lights, street lighting, bike lane pavement and shade, for example.

It is exciting to see that cycling is making a comeback in China. However, the growing demand has put a strain on the system.

The decision-makers should respond to the increasing demand by providing new cycling facilities and upgrade the existing infrastructure to provide safe, convenient and enjoyable facilities for cyclists.

However, it is still common to see policies that prioritize motor vehicles over bicycles. The decision-makers should put people at the heart of the process and use this opportunity to improve the livability of cities.

The writers are researchers with the World Resources Institute. The views do not necessarily reflect those of China Daily.

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off a cliff only because he hit an abandoned truck. His right arm had a deep gash and he had to be taken to a hospital.

But Pan did not entirely give up, and he followed the group in a van all the way to Beijing. He said: "I hope more disabled people can come out of their rooms and overcome obstacles — not only physical but also in their hearts — and live a normal life."

Dominick is an able-bodied American who has lived in China for 16 years. He became interested in helping people with disabilities after meeting his friend and fellow rider Corridan. Four years ago, he set up a group, Krankin Thru China, to introduce hand cycles to disabled people.

The group does not just focus on epic adventures. It often meets in Beijing to allow local people with disabilities to learn about hand cycling.

On a recent afternoon, near Olympic Forest Park, two women, Lyu Xianglan and Guan Shilian, had huge smiles as they took their first hand cycle rides.

Guan, who had polio, said: "It's my first time experiencing this kind of bike. I never rode a bike before — never even walked like a normal person. It feels great when I can move in the direction that I want to go and make my own way."

Dominick said he is hoping to develop a variety of adaptive sports that can be enjoyed by all people with disabilities. For example, he and Pan were planning to go paragliding in Central China's Henan province.

He said that the goal is not really cycling.

"It's hard for disabled people to move around and exercise, but I want to help them with that. When people have disabilities they tend to lose confidence, feeling that they can do nothing. But when they ride a bike, they will feel better and gain back the confidence to do more. They can live a confident, happy and free life."

He recounted an episode when the group stopped at a waterfall in Guizhou province in Southwest China. The woman who attended the gate there did not want to let them in. She said: "Why are you out? Why don't you just stay home?"

"A big problem is that the general public does not encourage disabled people to take part in normal activities," Dominick said. "It needs to be normal to see a person in a wheelchair doing ordinary things — buying groceries, earning a living, playing with their children."

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Wang Feng and **Domonic Corridan** en route from Xishuangbanna, near the Laos border in Southwest China, to Beijing. PROVIDED TO CHINA DAILY