



Cable car systems like the Ngong Ping 360 is a form of transport that emphasizes leisure over speed.

NO HANGING BY A THREAD WITH CABLE CARS

Of the various modes of public transport, cable cars are indisputably the most scenic and interesting.

Invented in Europe, it is a form of transport most suited to carrying small numbers of passengers across hilly terrain.

It is much cheaper than building highways and bridges, while also having a minimal impact on the environment.

In Hong Kong, we have had cable cars operating at Ocean Park for decades. We also have one of the longest cable car routes in Asia – Ngong Ping 360.

In technical terms, cable car systems are called aerial ropeways.

Tall pylons built on strategic sites allow cables to be hung to carry suspended carriages, which move by grabbing a moving cable to get from station to station.

At a station, the carriages are released temporarily to allow it to drop off and pick up passengers, and upon completing this duty, it grasps a moving cable again to travel to the next station.

To allow a system to cater to various transport needs, it is normally a two-cable system, where one provides the strength to suspend the carriage and the other to pull it along the route.

For lighter duties, one cable can do the job for both functions. For larger carrying capacities, a triple-cable system can be used with two used for suspension.

The Ocean Park system uses a single cable and carries a maximum of six passengers per carriage.

Ngong Ping 360 uses a double-cable system, with carriages carrying 10 passengers each.

For years, Ngong Ping 360 was so successful that queues formed for most hours, and some experts questioned the choice of not using a tricable system, but times have changed recently and these systems had been left idle for months.

All public transport systems must meet a high level of safety standard before being allowed to operate, but it is fair to say that cable cars have a less reliable service record



and occasionally we do see some incidents. But statistically, they are still a lot safer than road vehicles and air transport.

They require a lot more maintenance, and because they were originally designed for leisure and recreation purposes, occasional failures are accepted.

Also, being in open weather, especially high winds, service interruptions can be a lot more frequently than other transport.

However, if you are a tourist being left hanging in mid-air when the system fails to operate, you may have reasons to worry.

Being stranded for hours waiting for the system to be fixed is no fun and can be most frustrating, even though it is still safe.

In extreme cases where the cars cannot be made to move again to discharge stranded passengers to the next station, on-site rescues will be performed.

Such rescue operations sound nerve-racking but in Europe, it has been proven to be intrinsically safe and acceptable.

Rescue teams slide along the suspension cable from an upper station in a service carriage to collect stranded passengers for return to the next station.

In extreme cases, well-trained rescue officers will carry the stranded passengers one by one, abseiling to the ground or to a boat if the stranded site is above water.

No one wishes to have such an experience, but it is comforting to know there are no known cases where passengers cannot return to safety due to operational failures.

We can continue to enjoy the scenic view and fresh air next time we get the experience of a ride in a cable car, and that is thanks to those engineers who designed and operate this interesting mode of transport for our enjoyment.

Veteran engineer Edmund Leung Kwong-ho casts an expert eye over Hong Kong's iconic infrastructure