Why Hong Kong travellers need continuous connectivity

Continuous connectivity research — Hong Kong report

BAI Communications' 2019 *Continuous connectivity research report* asked 2,538 rail users in five global cities (London, Hong Kong, New York, Sydney and Toronto) about their travel experiences and expectations. It arrived at three global findings:

- Innovative transport systems are a defining feature of smart, world-class cities.
- Commuters require continuous connectivity to realise the benefits of living in a smart city.
- Continuous connectivity transforms cities, helping citizens to be happier and more productive, and organisations to innovate and prosper.

> **In addition to safe and reliable transportation, travellers are increasingly expecting amenities, such as good lighting, security and digital connectivity.**
>
> **— Adam Cohen, Mobility Futures Consultant and Transportation Researcher at the Transportation Sustainability Research Centre at the University of California, Berkeley**

Looking at the results for each city, we saw that while Hong Kong respondents were broadly in line with those of their global peers, there are some important nuances and differences. Hong Kong has an excellent and modern subway system operated by the Mass Transit Railway (MTR) Corporation, which is highly utilised by locals and tourists. The MTR subway has offered excellent mobile broadband and voice coverage for many years; commuters are used to being connected. The telecommunications systems have also been regularly refreshed as data and capacity demand has risen from 2G to 3G to 4G and will continue into 5G.

Commuters in Hong Kong value innovation and safety very highly, with many responses indicating they expect to benefit from connectivity-enabled apps and services. These will not only make their trips more relaxing and enjoyable – they will enable commuters to work while travelling, travel safely, and even make significant lifestyle changes, such as changing where they live.

As commuters come to expect more from their public transit services, it's vital for transit authorities to meet, if not exceed, those expectations. Public transport expert Adam Cohen notes that the digital connectivity underpinning existing services is foundational for further advances in analytics, machine learning, automation and real-time service provision. These technologies and more will continue to transform public transport, and those in Hong Kong have shown they're hungry for continued innovation.

The future of transport: smart, innovative, connected

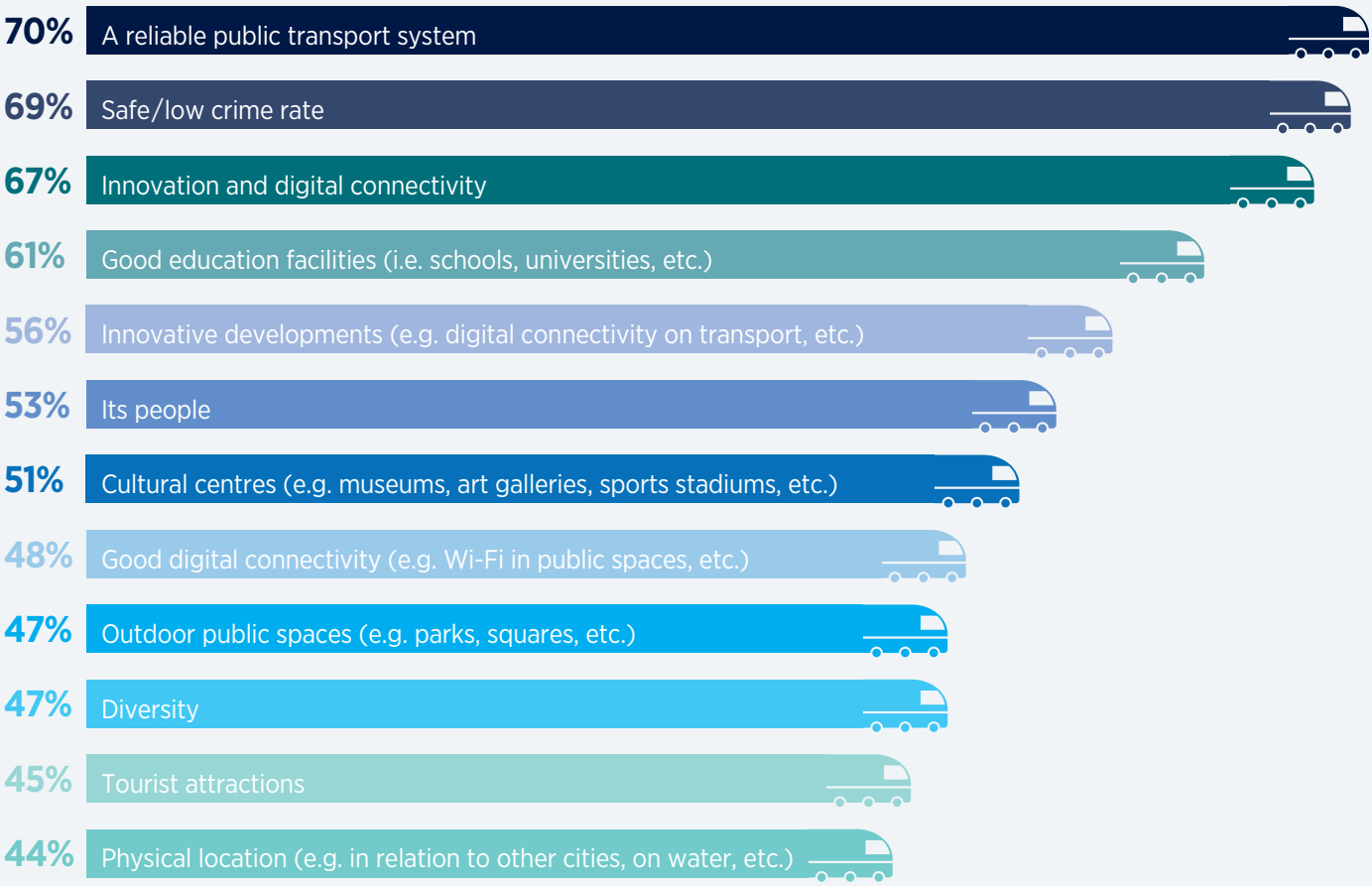
An overwhelming majority (99%) of Hong Kong respondents agreed that public transport should do more than just get them from 'A to B'. A further 92% indicated technology innovations were changing or increasing their use of such services.

When asked about what makes a city attractive, 'safety and a low crime rate' unsurprisingly ranked first. Notably, 'a reliable public transport system' ranked second, ahead of other elements such as 'cultural centres', 'tourist attractions' and 'good education facilities'.

Shifting emphasis, respondents were also asked about what makes a 'smart city'. The number-one Hong Kong response, at 80%, was 'innovative transport systems' (including 'smart bus stops' and 'intelligent transport systems'), followed by 'e-governance' and 'smart waste management'.

The critical infrastructure underpinning a smart city, and a public transport system that does more than simply take passengers from station to station, is digital connectivity. A clear imperative and a significant opportunity for public transit providers thus arise; as public transport expert Adam Cohen notes, "Technology is a key enabler of smart cities, enabling enhanced connectivity among travellers, goods, services and infrastructure, which in turn enables more efficient transportation choice and resource use."

Which of the following, if any, do you believe makes a city world-class?



Hong Kong commuters want safety and service

Hong Kong survey respondents made it clear that they want to stay connected as they commute, with 97% believing all rail networks should offer digital connectivity and 96% saying tech-driven solutions would make them more likely to use public transport.

Safety also rated highly as a driver of increased usage, with 79% of rail users saying a safer rail network would lead them to change their behaviour – for example, by using the network more or travelling late at night.

When asked about specific expectations, Hong Kong respondents were similarly clear: they want real-time information about delays and connections; reduced station wait time; and better connections.

These safety and service features are intrinsic to smart cities and depend on reliable network connectivity to function. Connectivity helps all parties and providers deliver these improvements. It enables transit authorities to gather and act upon network data, mobile carriers' customers to access apps and information on their devices, and other service providers to respond quickly to incidents and events.

Moreover, Hong Kong commuters take these requirements seriously. With 96% agreeing that world-class cities should offer seamless connectivity above and below ground and 90% agreeing they would consider changing mobile carriers if a rival offered better coverage on rail networks, carriers must take note.

Rail users expect seamless coverage

All world class cities should have seamless mobile/cell coverage above and below ground

30% Strongly agree

66% Agree

4% Disagree

0% Strongly disagree

Better journeys make better cities

Critically, 97% of Hong Kong respondents agreed they would benefit if rail networks evolved so they could enjoy their journey more. These benefits included arriving at their destination feeling relaxed and happy, enjoying some private 'me time' and taking care of chores such as online shopping and paying bills.

When asked to describe in more detail which activities take up their travel time, nearly two-thirds (65%) are data-driven, such as listening to music, using social media and playing games.

Survey respondents were also asked to think more broadly about the benefits they might expect if they were able to work more effectively while travelling. Ninety per cent agreed they would experience some benefits, with the most popular responses being changes to work arrangements (such as altering their working hours), career improvement (for example, taking a 'more ideal' job), and location and housing changes (i.e. moving to a more agreeable residence).

We believe these findings are highly significant as they demonstrate the broader impact of digital connectivity. That is, while offering an improved travel experience is important, connectivity has a 'halo' of benefits that can help commuters live better lives, employers to manage their workforce more flexibly and cities to offer a greater range of dwelling options.

The ideal rail journey relies on seamless connectivity

● 1st response ● 2nd response ● 3rd response

Logistic improvements	**74%**
• Real-time updates on departure and arrival time	**55%**
• The ability to have 'last-mile' connectivity (i.e. automatically connect with buses, taxis or Ubers to get from the train station to your destination)	**34%**
• Ability to check airport baggage in and have it end up at your destination	**31%**
On-trip digital benefits	**60%**
• Continuous connectivity (i.e. the ability to be online, or using a mobile phone)	**44%**
• A journey with entertainment (e.g. appropriate length TV shows or interactive games)	**27%**
• A journey that incorporates interactive mobile gaming	**19%**
Mechanisms to ensure safety	**49%**
A commute that allows me to work (reducing the time I need to spend in the office)	**33%**
A journey that would be easy with children (e.g. keeping them engaged or entertained, preventing boredom)	**21%**
N/A – There is no ideal commute	**3%**
Other	**0%**

A smart city needs smart infrastructure

With 62% of Hong Kong respondents believing they already live in a smart city, their expectations are rising – and so too are the opportunities to deliver the extended benefits that can result from providing continuous connectivity.

With 5G on the horizon, the prospects for fast connections, large-scale data capture and an expanded Internet of Things (IoT) footprint, the prospects are tantalising. Hong Kong travellers have made it clear that they want to work and play online while travelling, and public transport expert Adam Cohen has some suggestions about what may lie ahead:

"The development and deployment of advanced algorithms, machine learning and artificial intelligence can support the deployment of public transit innovations such as predictive demand responsive services, electrification, and automation."

These technologies are set to transform the way we live, reshape our cities and expand the possibilities for human expression. But they require robust, reliable and secure data networks to flourish.

This makes it imperative that transit authorities, private businesses, telecommunications companies, government and citizens alike support the creation of the necessary infrastructure. Hong Kong commuters have shown they're eager to embrace the future – all they need is the network to take them there.

Download the full *Continuous connectivity research report*:
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