



## Introduction

Our approach to corporate responsibility requires us to take a long-term view of our business, striving to meet both the current and future needs of our stakeholders. In this section of the report, we provide an introduction to our expectations for the future, including planned improvements to our current services, new railway projects in Hong Kong, property developments that are underway and new opportunities for expansion of our business in the Mainland of China, Europe and Australia.

## Global Context

In 2014, about 54 per cent of the world's population lived in urban areas, but this proportion is expected to increase to 66 per cent by 2050. According to a study published by the United Nations Department of Economic and Social Affairs (UN DESA) in 2014, the majority of population growth is expected to take place in and around the cities of Asia and Africa.

In this context, the UN points out that sustainable urbanisation — involving creation of appropriate urban infrastructure such as public transport and housing — will be key to continued economic and social development in many regions of our planet.

With the impacts of [climate change](#) being felt globally and in Hong Kong, and as a result of increased public attention on this issue following a high profile meeting of global leaders in September 2014, the demand for investment in sustainable public transport has never been more urgent.

Hong Kong is already recognised as a world leader in this regard. In a study published by the International Association of Public Transport (UITP) and management consultancy Arthur D Little, 66 cities were ranked according to their “mobility maturity and performance”. On a scale of 1 to 100, Hong Kong came out on top of the list. In particular, Hong Kong was cited for providing integrated travel services using multimodal mobility (Octopus) cards and a “clear, well-articulated mobility strategy that combines low transport-related emissions with a short average travel time to work.”

### Learn more...

[World Urbanization Prospects](#), a revised study produced by the United Nations Department of Economic and Social Affairs (UN DESA) in 2014, notes that while there were ten mega-cities with 10 million inhabitants in 1990, there could be as many as 41 mega-cities of this size by 2030.

With our Vision to be a leading multinational company that connects and grows communities with caring service, our innovative Rail plus Property model and a strong performance record operating rail services in one of the most densely populated cities in the world, we believe that we are well placed to continue to succeed in the context of these global developments in future.

Learn more...

Please download a copy of Future of Urban Mobility 2.0.

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## Links to Other Sections

Throughout this report, we have highlighted a number of challenges that have implications on how we strive to achieve our Vision and Mission.

Safety — As new joiners replace more experienced staff who are approaching retirement, we must address the safety risks that will inevitably arise in our workplaces. We must also respond to changing passenger demographics, especially an increase in the number of elderly passengers and visitors to Hong Kong who are not familiar with our network, that pose challenges for customer safety in future.

Financial Performance — We recognise that we must balance the expectations of shareholders to receive reasonable investment returns with the needs of other stakeholders to maintain train fares at affordable levels while investing in safe, comfortable and convenient journeys. We are concerned about the overall lack of greenfield development sites in Hong Kong because investment properties are a major source of income for our business. In order to ensure the continued success of our Rail plus Property model, we have set up an internal team to identify untapped opportunities within our existing portfolio of properties and stations.

Environment — Among other significant environmental challenges such as waste management, we are mitigating emissions of greenhouse gases that increase the threat of climate change by using energy and other resources more efficiently. We are also taking measures to identify and adapt to direct impacts from climate change on our business.

Corporate Governance — Learning from earlier mistakes and experiences, we made changes to our corporate governance in 2014 in order to become more transparent about implementation of network expansion projects. We recognise that we must hold ourselves accountable to stakeholders for

other major opportunities to expand and develop our business in future.

Staff — As older members of our workforce prepare to retire, we are stepping up training and development opportunities to equip new joiners with the skills that they need to perform their duties. We are also working to strengthen our corporate culture in order to respond to the changing demands of our business and expectations of our stakeholders.

Community — We will continue to invest in the communities we serve, looking for innovative ways to increase engagement with our stakeholders and to work with community investment partners to support the development of a socially sustainable city in Hong Kong as well as other locations where we operate.

Customers — Continued growth of our patronage places increasing demands on our services. In addition to maintaining world-class levels of train service performance and relieving congestion on our network, we must address the needs of an aging population by improving barrier-free facilities in our trains, stations and properties.

Value Chain — We recognise our responsibility to encourage sustainable practices throughout our value chain, including our suppliers, contractors, tenants and passengers.





## Investing for the Future

Growing patronage combined with a maturing and expanding network will invariably place greater strain on our assets and on our ability to meet important safety and service criteria in our transport operations in future. With this in mind, we are carefully assessing the costs and benefits of various measures to meet the long-term needs of our business and our stakeholders.

### Optimising our Assets

We strive to optimise our assets by regularly evaluating their performance. Our plan for asset renewal over the next 50 years is updated regularly to incorporate information about all assets owned by the Company, including their condition and performance records, operating and maintenance cost trends, and asset replacement strategies

#### Science Fact, Not Fiction

What if MTR could identify equipment failures before they actually happen? It sounds like science fiction, but in fact we believe that it's a plausible reality for the not-too-distant future as a result of advances in sensor technology, big data and cloud computing.

The possibilities are truly amazing. State-of-the-art sensor technology installed on our trains and other equipment would act just as our five senses do to collect operational data in real time. All of the data would be sent to the brain of the system — a cloud server — where real-time data can be compared against pre-set alarm thresholds using sophisticated analytics and artificial intelligence.

Although we don't have a timetable for this system of predictive maintenance, our vision would allow us to identify failure patterns and solve problems before they occur, thereby providing safer and more cost-effective train services.

## New Signalling Systems

We have initiated the process to replace fixed block signalling equipment across our network with advanced Communications Based Train Control (CBTC) technology. We anticipate that over time this investment will reduce lifecycle costs of these systems.

Many of our lines are already operating at full capacity during rush hours. Upgrading the signalling systems will help to relieve some congestion by minimising headway (the time interval between two trains), maximising train throughput (the number of trains that can pass through a station in a specified time) and improving train service reliability. However the long-term solution to congestion involves construction of additional lines that will enhance the overall robustness of our network.

## Upgrading our Stations

We are investing in our stations to minimise crowding and improve customer service. Two of our busiest stations — Mong Kok Station and Kowloon Tong Station — have been selected as model stations for our work programme, which is intended to give all stations in our network a new look and feel by redesigning station layouts for improved accessibility, and installing additional lifts, escalators and CCTV systems to relieve congestion and improve security. We also plan to improve information signage and provide public toilets at interchange stations.

## Upgrading our Trains

In addition to procuring 78 new 8-car trains, we are planning to give all of our trains a makeover with new external car designs, seating options and overhead hand grips for a more aesthetically pleasing, comfortable and secure ride.

## Latest Technologies

Our Asset Strategy 2030 plan focuses on adopting advanced technologies such as cloud computing, smart sensor technology and sophisticated analytics that will bring about the “internet of things” while providing the best possible assurance against security threats and cybercrime.



## New Railway Lines

We recognise that in order to connect and grow communities in parts of Hong Kong that are underserved by an efficient mass transportation system, we must continue to explore

opportunities to expand our network. For this reason, we are working with the Government to investigate options for construction of additional lines.

## Railway Development Strategy

The Government's Railway Development Strategy 2014 (RDS-2014) is the first major update of Hong Kong's plan for railway development since 2000. Based on recommendations from advisors and views collected from the public, the strategy provides a blueprint for railway development up to 2031. It considers various factors such as transportation benefits, land use planning, economic returns, environmental impacts, engineering feasibility and financial viability, and recommends the following seven projects for development:

### New Railway Development Projects



- 1. Northern Link and Kwu Tung Station** — A major regional line formed by linking Kam Sheung Road Station on the West Rail Line to a new station at Kwu Tung on the Lok Ma Chau Spur Line.
- 2. Hung Shui Kiu Station** — A new station on the West Rail Line between the existing Tin Shui Wai Station and Siu Hong Station.
- 3. Tung Chung West Extension** — A new line

formed by extending the Tung Chung Line westward with a new station at Tung Chung West.

4. **Tuen Mun South Extension** — A new line formed by extending the West Rail Line southward from Tuen Mun Station to a new station at Tuen Mun South.
5. **East Kowloon Line** — A new line running in the northern East Kowloon area connecting Diamond Hill Station on the Kwun Tong Line (and the future Shatin to Central Link) and Po Lam Station on the Tseung Kwan O Line.
6. **South Island Line (West)** — A new line linking the South Island Line (East) to the West Island Line.
7. **North Island Line** — A new railway line on the northern shore of Hong Kong Island formed by extending the Tung Chung Line eastward and the Tseung Kwan O Line westward.

Should construction of these new lines go ahead, the coverage of our railway network would increase to 75 per cent of Hong Kong's homes and 85 per cent of its places of work.







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## New Property Developments in Hong Kong

2014 was a busy year for our Property Division with a number of new property development projects being rolled out to respond to the community's housing needs. These developments comprise about 10,000 new residential units, and we look forward to bringing this supply of housing to the market.

### New Property Developments in Hong Kong

	Tender Awarded	Developer
LOHAS Park Package 4	April 2014	Sun Hung Kai Properties Limited
Tai Wai Station	October 2014	New World Development Company
LOHAS Park Package 5	November 2014	Wheelock and Company Limited
LOHAS Park Package 6	January 2015	Nan Fung Group Holding Limited
Tin Wing Stop (Light Rail) Property Development	February 2015	Sun Hung Kai Properties Limited

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## Future Plans Outside of Hong Kong

Hong Kong is our home but we also see opportunities for expansion of our businesses in the Mainland of China and overseas markets where we have a presence. We have been awarded a number of new railway-related projects that we look forward to building and operating in the years ahead.

### Beijing

Beijing MTR Corporation Limited (BJMTR) initialled a Concession Agreement for the investment, operations and maintenance of a new line, Beijing Line 16, on 8 February 2015. This 50km line will run from Beianhe to Wanping and will have 29 stations.

### Shenzhen

We have signed a Strategic Cooperation Framework Agreement with the Longhua New District Administration Commission to explore cooperation for the North Extension of Shenzhen Metro Longhua Line. Our subsidiary in China will offer advice and technical support for the construction of the extension as well as a light rail system in Longhua.

### Chongqing

We have signed a Memorandum of Understanding with the Chongqing Municipal Government and have begun preliminary discussions regarding rail and property developments in the municipality.

### United Kingdom

We have signed the Concession Agreement with Transport for London (TfL) to operate the new Crossrail service for an eight-year period with an option to be extended to ten years. Crossrail is a new rail service currently under construction and will be launched under a staged approach. MTR (Crossrail) Corporation, a 100 per cent MTR-owned subsidiary, will start operating the first stage of the service from May 2015, and the service is scheduled to expand to its full scope in 2019.

## Sweden

Our wholly-owned subsidiary MTR Express (Sweden) AB will operate a new rail service — MTR Express — using existing rail tracks and infrastructure between the country's two largest cities, Stockholm and Gothenburg. The 455km line will provide 110 weekly train trips, with partial service starting in March 2015 and full service scheduled to commence in August 2015.

## Australia

Northwest Rapid Transit Consortium (NRT) was awarded the Operations, Trains and Systems Public-Private Partnership (PPP) contract for the Sydney North West Rail Link, our first international PPP project. MTR will design and deliver the rail systems, and its subsidiary Metro Trains Sydney (MTS) will operate and maintain the system for 15 years after service opening.



## Rail-related Property in the Mainland of China

In addition to railway projects, we are also undertaking property development projects on Shenzhen Metro Longhua Line Depot Site Lot 1 and a site at Beiyunhe Station on Tianjin Metro Line 6.



## International Consulting

Our consultancy services continue to expand to new cities across Australia, South-East Asia, the Mainland of China, the Middle East and Europe. Our services include railway planning, design management, system integration and assurance, project management, construction management, railway operations and maintenance, and non-fare revenue business.

Beyond our current commitments, we see opportunities to serve new customers in markets that would benefit from our expertise in urban development, especially in parts of the world that are experiencing rapid urbanisation.

