2016 AND BEYOND

New residential units under the 7 property development projects rolled out in 2015 and early 2016

93
New trains procured

7
Railway projects proposed in the Railway Development Strategy 2014

11,410
New residential units under the 7 property development projects rolled out in 2015 and early 2016
INTRODUCTION

Our approach to being a responsible and sustainable business requires us to take a long-term view. In this section, 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 business expansion in the Mainland of China, Europe and Australia.

Global Context

In a recent study launched in 2014, about 54% of the world’s population lived in urban areas, but this proportion is expected to increase to 66% by 2050. According to its 2014 biennial study published by the United Nations Department of Economic and Social Affairs (UN DESA) 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.

Learn more...

World Urbanization Prospects, a study produced every two years by the United Nations Department of Economic and Social Affairs (UN DESA), in its 2014 study, notes that while there were 10 mega-cities with 10 million inhabitants in 1990, there could be as many as 41 mega-cities of this size by 2030.
With the impacts of climate change being felt globally and in Hong Kong, and as a result of the landmark agreement reached on climate change in Paris at the 21st Conference of Parties, 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.”

With our Vision to be a leading multinational company that connects and grows communities with caring service, our 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.

Links to Other Sections

Throughout this report, we have highlighted a number of challenges that have implications on how we deliver our services.

Safety — As new joiners replace more experienced staff who are approaching retirement, we must address the 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. Understanding that new property development projects are a significant source of income, in order to ensure the continued success of our Rail plus Property model, we are working to identify untapped opportunities within our existing portfolio of businesses.

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 the responses of our stakeholders, 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 communicate effectively 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 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.

Supply Chain — We recognise our responsibility to encourage sustainable practices throughout our value chain, including our suppliers, contractors, tenants and passengers.
FUTURE OF RAILWAY IN HONG KONG

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 continue to meet important safety and service criteria in our transport operations in future. With this in mind, we are carefully planning measures to meet the long-term needs of our business and our stakeholders.

What will the future MTR look like?

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.

Upgrading Our Trains

In addition to procuring 93 new 8-car trains, we shared some of the features of the future urban trains with a new-look interior design, including:

- New dynamic route maps in the new-generation train compartments allow for the display of more useful information
- Branched handrails
- Enhanced set back
- Enhanced lighting
- Straphangers

We are planning to refurbish first-generation trains serving the Kwun Tong, Tsuen Wan, Island and Tseung Kwan O lines in the next few years.

How are we preparing for the future?

We are implementing a plan that looks holistically at the systems, processes and skills that we will need to effectively respond to the needs of our passengers in the future. This requires collaboration amongst different departments and openness as to how the future could look. Part of this plan is leveraging big data, advanced technologies and innovation to better predict, prevent, respond and recover from disruptions, further enhancing our service to passengers.

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.
Building new lines with technology

To assist us in building new lines for Hong Kong, we have been exploring the use of Building Information Modelling (BIM) processes and technologies on our current railway projects.

BIM presents the construction industry with an opportunity to enhance the quality and coordination of complex projects and realise the efficiencies seen in other countries and in other industries. Similar sectors are already taking advantage of improved collaboration, quality, coordination and efficiency in their project and production cycles using digital technologies.

We recognise these benefits and industry trends and will be utilising BIM at the heart of our design process on new railway projects. The BIM process will deliver a digital representation of the asset being built, in our case, a railway. This will provide improved information management early in the design process ready to be leveraged throughout each stage of each project. But BIM will also allow us to manage the final asset better due to the accurate, data-rich model created, with every element of the railway identified and with critical operational and maintenance data built-in to the model.

BIM is a game changer to the traditional practices of asset delivery and operation. As we develop our next generation of railway projects, we will be working together with the Hong Kong industry and our design partners both to improve project delivery and grow our ability and competence.

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 will continue to provide technical responses to Government to support the planning and implementation of further rail network expansion plans in Hong Kong.

Railway Development Strategy

To meet Hong Kong’s growing public transport needs, Government’s strategy is to continue using railway as the backbone in the development of our public transport network. Beyond the four rail lines that we are building now, Government has identified seven new rail projects under its Railway Development Strategy 2014 to be implemented in phases up to 2031, of which three are priority lines, namely the Tuen Mun South Extension, the Northern Link including Kwu Tung Station, and the East Kowloon Line. We continue to work with Government in taking forward these rail expansion plans.
Should construction of these seven railway proposals go ahead, the railway network is expected to serve areas inhabited by 75% of the local population and about 85% of job locations.
Should construction of these seven railway proposals go ahead, the railway network is expected to serve areas inhabited by 75% of the local population and about 85% of job locations.
Railway projects proposed in the railway development strategy 2014

**PROJECT**

East Kowloon Line

**DESCRIPTION**

- a new line running along the north Kwun Tong area connecting the Diamond Hill Station of the Kwun Tong Line (and the future Shatin to Central Link) and the Po Lam Station of the Tseung Kwan O Line
- a route length of about 7.8km
- indicative implementation schedule for planning purpose: 2019 to 2025

**PURPOSE**

- provide additional transport capacity to serve the planned developments in the north Kwun Tong area
- improve operational robustness of the railway

Should construction of these seven railway proposals go ahead, the railway network is expected to serve areas inhabited by 75% of the local population and about 85% of job locations.
Should construction of these seven railway proposals go ahead, the railway network is expected to serve areas inhabited by 75% of the local population and about 85% of job locations.
Railway projects proposed in the railway development strategy 2014

**PROJECT**

Hung Shui Kiu Station

**DESCRIPTION**

- a new station on the West Rail Line between Tin Shui Wai Station and Siu Hong Station
- indicative implementation schedule for planning purpose: 2021 to 2024

**PURPOSE**

- support and tie in with the development of the Hung Shui Kiu NDA

Should construction of these seven railway proposals go ahead, the railway network is expected to serve areas inhabited by 75% of the local population and about 85% of job locations.
Railway projects proposed in the railway development strategy 2014

**PROJECT**
South Island Line (West)

**DESCRIPTION**
- a new line linking the South Island Line (East) to the West Island Line
- a route length of about 7.4km
- indicative implementation schedule for planning purpose: 2021 to 2026

**PURPOSE**
- serve any increase in public transport demand resulting from the potential development in the western part of the Southern District
- relieve pressure on the road network in the Pok Fu Lam area

Should construction of these seven railway proposals go ahead, the railway network is expected to serve areas inhabited by 75% of the local population and about 85% of job locations.
Railway projects proposed in the railway development strategy 2014

PROJECT

North Island Line

DESCRIPTION

- 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
- a route length of about 5km
- indicative implementation schedule for planning purpose: 2021 to 2026

PURPOSE

- divert the harbour-crossing passenger traffic
- meet transport demand of the expanding Central Business District
- improve operational robustness of the railway network

Should construction of these seven railway proposals go ahead, the railway network is expected to serve areas inhabited by 75% of the local population and about 85% of job locations.
NEW PROPERTY DEVELOPMENTS AND INVESTMENT PROJECTS IN HONG KONG

New Property Developments

In 2015 and early 2016, seven new property development projects were rolled out, including one where we were acting as agent for the relevant subsidiaries of Kowloon-Canton Railway Corporation (KCRC), to respond to the community’s housing needs. These developments comprise about 11,410 new residential units, and we look forward to bringing this supply of housing to the market.

Over the next 12 months or so, subject to market conditions, we expect to tender out three property development packages with one more at LOHAS Park and our first property packages at both Ho Man Tin and Wong Chuk Hang.

We continue to assess the feasibility of other property developments along our railway lines to increase housing supply in Hong Kong. One possible site is above our depot in Siu Ho Wan on Lantau Island where, with the necessary zoning and other approvals, not less than 10,000 residential units can be built. Much work is still required including zoning, site planning, depot re-positioning, obtaining necessary approvals, land premium assessment as well as the business model to implement the works. At this preliminary stage there can be no assurance that this proposal would become a viable commercial project for MTR.

New Property Developments in Hong Kong

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Tender Awarded</th>
<th>Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOHAS Park Package 6</td>
<td>January 2015</td>
<td>Nan Fung Group Holdings Limited</td>
</tr>
<tr>
<td>Tin Wing Stop [Light Rail] Property Development</td>
<td>February 2015</td>
<td>Sun Hung Kai Properties Limited</td>
</tr>
<tr>
<td>LOHAS Park Package 7*</td>
<td>June 2015</td>
<td>Wheelock and Company Limited</td>
</tr>
<tr>
<td>Yuen Long Station Property Development**</td>
<td>August 2015</td>
<td>Sun Hung Kai Properties Limited</td>
</tr>
<tr>
<td>LOHAS Park Package 8</td>
<td>October 2015</td>
<td>Cheung Kong Property Holdings Limited</td>
</tr>
<tr>
<td>LOHAS Park Package 9</td>
<td>December 2015</td>
<td>Wheelock and Company Limited</td>
</tr>
<tr>
<td>LOHAS Park Package 10</td>
<td>March 2016</td>
<td>Nan Fung Group Holdings Limited</td>
</tr>
</tbody>
</table>

* Apart from profit sharing in the residential component, we will also contribute HK$4.98 billion to the development, retain ownership of and fit out the shopping centre.

** As agent for the relevant subsidiaries of KCRC.
New Investment Projects

We are enhancing the existing assets of our existing shopping centre portfolio while making significant additions. These projects will add a total of about 120,620 square metres (gross floor area, “GFA”) to the existing retail portfolio, increasing the attributable GFA by approximately 40%.

Extensions/Enhancements

<table>
<thead>
<tr>
<th>Key Additions</th>
<th>GFA (SQ M)</th>
<th>TARGET DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tai Wai</td>
<td>60,620</td>
<td>3rd quarter 2021</td>
</tr>
<tr>
<td>LOHAS Park</td>
<td>44,500</td>
<td>4th quarter 2020</td>
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</table>

<table>
<thead>
<tr>
<th>extensions/enhancements</th>
<th>GFA increase (SQ M)</th>
<th>TARGET DATE</th>
<th>OTHER NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maritime Square</td>
<td>12,100</td>
<td>4th quarter 2017</td>
<td></td>
</tr>
<tr>
<td>Telford Plaza</td>
<td>3,400</td>
<td>2th quarter 2017</td>
<td>Meet growing demand for retail services in East Kowloon</td>
</tr>
</tbody>
</table>
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. 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) signed a Concession Agreement for the investment, operations and maintenance of a new line, Beijing Line 16, on 28 November 2015. This 50km line will run from Beianhe to Wanping and will have 29 stations.

Shenzhen
We signed a Strategic Cooperation Framework Agreement in 2014 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 line.

Chongqing
We signed a Memorandum of Understanding in 2014 with the Chongqing Municipal Government and have begun preliminary discussions regarding metro and property development opportunities in the municipality.

Sweden
MTR Stockholm was recently awarded a six-year extension from 2017 to 2023 on the Stockholm metro operations and maintenance (O&M) concession. Besides, MTR Nordic was also awarded the O&M concession for the Stockholm Commuter Rail Systems (Stockholms Pendeltåg) for an initial period of 10 years, starting from December 2016, with an option to extend for a further four years. It is the second largest railway concession in Sweden after Stockholm Metro.

Consultancy and Contracting Services
We offer worldwide consultancy and contracting services on railway planning, design management, system integration and assurance, project management, construction management, railway operations and maintenance and non-fare revenue businesses. We have offered services to a number of railway and metro companies, government authorities and rail system suppliers in Australia, Mainland of China, India, the Middle East and Southeast Asia. Locally in Hong Kong, we have been providing operation and maintenance services for the Automated People Mover (APM) at Hong Kong International Airport. The APM is currently being expanded to match the growth in air travel.