# Hong Kong Franchised Public Bus Operations

#### The Kowloon Motor Bus Company (1933) Limited ("KMB")

KMB, a wholly-owned subsidiary of Transport International Holdings Limited, is the largest franchised bus operator in Hong Kong, serving more than 2.8 million passenger-trips each day<sup>1</sup>. A workforce of more than 12,700 employees, including some 9,000 bus captains, ensures that customers enjoy high-quality services on a fleet of around 4,000 buses operating on 417 routes.





KMB has been taking the lead in implementing the use of innovative technology in our bus fleet and providing a safe, efficient and comfortable bus service

# COVID-19 Impact

It has been a challenging year for the whole community in view of the outbreak of COVID-19 in 2020. In line with a plunge in demand, measures were carried out to ensure that resources be efficiently utilised. With the Transport Department's approval, the bus service levels have been adjusted to meet the actual demand.

#### **Operational Excellence**

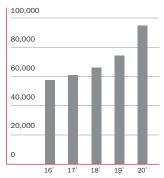
As an industry leader with operational and service excellence, KMB has been providing reliable franchised bus services in Hong Kong for some eighty years. In fulfilling the company's aim to achieve the highest operational and service standards, KMB has been ISO certified for Quality Management Systems (ISO9001) since 1999. KMB adopted the latest version of ISO9001 in 2018 and has been ISO certified for Environmental Management Systems (ISO14001) at its two largest depots since 2003. KMB has also been accredited with Occupational Health and Safety Management System (OHSAS18001:2007) certification for all its depots since 2012. To further improve occupational health and safety, KMB has migrated from OHSAS18001:2007 to ISO45001 certification for Occupational Health and Safety Management Systems for all its depots since 2019.

"Mechanical Reliability" and "Operational Capability" are the key benchmarks of efficient public bus services. Mechanical reliability refers to the average number of kilometres a bus operates before it experiences one mechanical breakdown on the road with passengers on board. In 2020, the mechanical reliability of KMB's fleet was 94,551km:1. Meanwhile, Operational capability refers to the ratio of actual to scheduled departures in the peak direction during the peak hours of 7:00 a.m. to 9:00 a.m. across the entire bus network. In 2020, we achieved an operational capability of 93.96%.

Prior to the COVID-19 pandemic

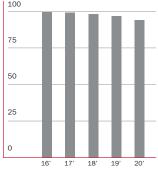
### Mechanical Reliability – KMB





Average number of kilometres operated before one mechanical breakdown while passengers are on board

# Operational Capability – KMB Percent (%)



Percentage of actual number of bus departures to scheduled number of bus departures during morning peak hours (7am – 9am) in the peak direction

Note: Operational capability was affected by social distancing measures in 2020.



The high maintenance standards keep our fleet in tip-top shape





Passengers can open the ventilation windows to let fresh air into the compartment

#### **Bus Fleet and Fleet Upgrade**

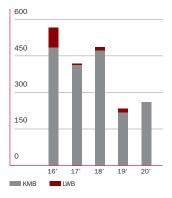
KMB shows its commitment to innovation by introducing a bus fleet equipped with technological advances and environment-friendly features for a more desirable passenger experience.

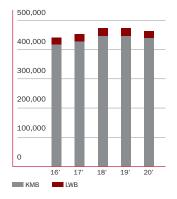
In 2020, KMB entered a new era of eco-friendly bus fleets as all its new licensed buses met Euro VI emission standards. During the year, 221 double-deck buses were licensed. The buses feature a light-directing glass window alongside the staircase connecting the two decks in place of the traditional sealed design, which creates a brighter ambience in the interior and enhances safety for passengers walking up and down. Meanwhile, new buses are also equipped with safety facilities including the Advanced Driver Assistance System, the Electronic Stability Programme and the Drowsiness Monitoring System, and all seats come with seat belts and grab handles, to ensure bus captains' and passengers' safety. Among the new buses, 192 of them are with four ventilation windows, two on each deck. Passengers can open the windows to let fresh air into the compartment.

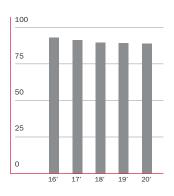
Number of New Buses Introduced to the Fleet

Total Fleet Capacity at 31 December 2020

Percentage of Actual Number of Buses Operated on the Road to Licensed Bus Fleet – KMB







Note: Operational capability was affected by social distancing measures in 2020

KMB's bus fleet	Double-deck buses	Single-deck buses	Total number of buses
As at 1 January 2020	3,938	143	4,081
Additions during year	259	0	259
Disposals during year	(331)	0	(331)
As at 31 December 2020	3,866	143	4,009

KMB continues to invest in the latest eco-friendly buses. In 2009, it became the first public bus company in Asia to introduce the Euro V double-deck buses. In 2017, it again led the industry by introducing the first diesel-powered double-deck bus with Euro VI emission standards in Hong Kong. Euro III and earlier model buses will have been completely phased out within the next five years.

In 2020, 221 Euro VI super-low floor double-deck buses were added to the KMB fleet. As at 31 December 2020, KMB operated a total of 4,009 licensed buses, comprising 3,866 double-deck buses and 143 single-deck buses. The fleet currently features three hybrid double-deck buses, ten electric single-deck buses and eight supercapacitor single-deck buses. In addition to that, 301 double-deck Euro VI buses and eight electric single-deck buses are due to be delivered in 2021.



All newly purchased KMB buses with a number of new safety features enhance safety performance

#### **Bus Service Network**

At the end of 2020, KMB operated a total of 417 bus routes. In a changing operating environment marked by railway commissioning, demographic changes and new highways, KMB reviews and rearranges its resources to cater for the changing demand. KMB strives to operate an efficient, competitive and sustainable bus network while seeking opportunities for new market growth.

In 2020, we implemented 47 route reorganisation proposals, which enhance the whole service network and bring the following benefits to the public:

- Eliminating wasteful duplication of routes;
- Allowing resources to be released for redeployment in high demand areas;
- Straightening routes that are unduly circuitous;
- Introducing new express routes that utilise the new highway infrastructure; and
- Offering greater connectivity between routes by using Bus-Bus Interchanges ("BBI").

In view of demographic changes, urban development and passenger needs, KMB introduced new routes to expand the ridership. To tie in with the completion of a residential area in Pak Shek Kok, KMB further strengthened the services of the district by introducing new peak service, Route 82D. The route takes the expressway directly to Tai Wai Station, and benefits the passengers to interchange to and from the urban areas. Meanwhile, KMB also enhanced the services of key population intake areas such as Pak Shek Kok and So Kwun Wat to meet the needs of residents in the district.



KMB strengthens the services in Pak Shek Kok by introducing Route 82D, which takes the expressway directly to Tai Wai Station





KMB provides affordable and convenient journeys for passengers, including the Monthly Pass Scheme and the first Regional Two-way Sectional Fare Scheme in Hong Kong

In response to the population intake of Fo Tan Chun Yeung Estate, KMB launched new Routes 285 and 285A serving Sha Tin Central and Fo Tan Station, facilitating passenger travel within the district. Extension of Route 48P to the newly opened estate is enhanced in order to provide express bus service for passengers in the morning and evening peaks.

To continually improve services and strengthen the transport network, KMB introduced different express services. For example, more special morning departures connecting Tai Po and Hong Kong Island (including Routes 907B and 907C) have been introduced to provide speedier alternatives for passengers.

#### **New Interchange Hub**

Riding on the success of various bus-bus interchange hubs such as Tuen Mun Road Interchange or Tai Lam Tunnel Interchange, Tseung Kwan O Tunnel Interchange (Tseung Kwan O-bound) has been introduced since 2 October 2020, as KMB runs a total of nine routes via the interchange.

In particular, KMB introduced LOHAS Park Express Service Route 98, providing more convenient feeder bus service for LOHAS Park residents and those who work at Tseung Kwan O Industrial Estate. Passengers of Route 98 can enjoy bus-bus interchange discount with 65 routes in KMB network by interchanging at Tseung Kwan O Tunnel Interchange and Kwun Tong Road Interchange. Special wayfinding signages have also been set up in these interchanges to assist the passengers.



A green icon is installed, allowing passengers to recognise the card reader's location under the Regional Two-way Sectional Fare Scheme

#### **Two-way Sectional Fare**

KMB launched the first Regional Two-way Sectional Fare Scheme in Hong Kong on 8 August 2020. The scheme includes 17 routes serving Northwest New Territories, with such passengers could save HK\$14.10 at most for each journey.

In the past, only individual routes allowed passengers to tap the Octopus cards in the compartment before getting off the bus, so as to implement two-way sectional fare. KMB has overcome physical constraints by installing card readers at the bus stops with electricity supply, making it possible for regional two-way sectional fare. This not only provides passengers with choices and comfortable bus service, but also eases the burden of public transport.



KMB Monthly Pass Scheme has been well-received since its launch. Passengers may also buy it through App1933



#### **KMB Monthly Pass**

KMB continues to enhance its service by providing affordable and convenient journeys for passengers. KMB launched the Monthly Pass Scheme, whereby passengers can take ten rides per day on KMB buses for HK\$780 (and two additional trips on Route B1). The Pass covers over 400 KMB routes, including regular routes, overnight routes and racecourse routes. Jointly operated cross-harbour bus routes operated by KMB are also included in the Scheme.

The KMB Monthly Pass Scheme has been well-received since its launch. Other than purchasing from the kiosks set up at various bus termini, passengers may also buy the Pass through "App1933" (compatible with iOS since January 2020).

#### **Rewards to passengers**

Various promotion campaigns have been introduced throughout the year. A 4-week lucky draw promotion campaign was introduced on KMB Cross-harbour Routes in summer 2020. In the end, a total of 4,000 KMB Octopus cards with KMB Monthly Passes embedded were offered to the winners.

To reward our loyal customers, the company offered gifts rewards to the pass holders since March 2020. The gifts include KMB limited Octopus Card, KMB face masks and bus tickets of LWB A-Routes and KMB Route B1.

KMB and LWB introduced the new rewards scheme "KMB x LWB FUN Redemption Scheme" starting from 1 October 2020. In order to join the scheme, passengers are required to register via App1933 and travel on our services to earn points. Passengers can redeem gifts using the points accumulated at 12 designated locations in Kowloon and the New Territories.



KMB introduces a 4-week lucky draw on Cross-harbour Routes and offers 4,000 Octopus cards with KMB Monthly Passes to the winners



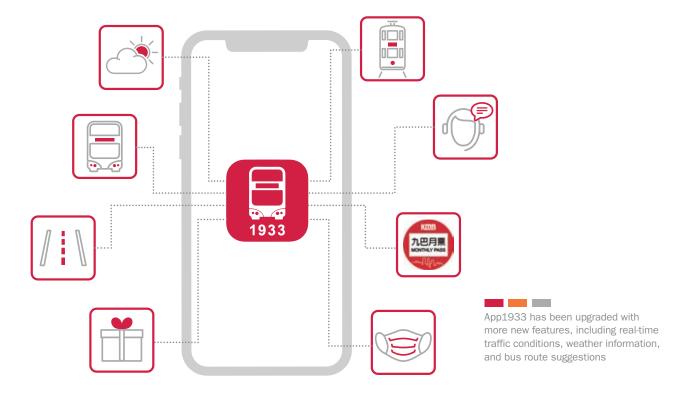
#### **Depots**

Routine maintenance and repair services are provided in KMB's four major bus depots at Kowloon Bay, Sha Tin, Lai Chi Kok and Tuen Mun. In addition, there are also eleven smaller depots that supply minor maintenance services and parking. The KMB Overhaul Centre in Tuen Mun supports major overhaul services. Depot facilities are continually upgraded to ensure consistent service quality and a high level of productivity.

#### **Major Depots Serving KMB and LWB Buses**

Depot	Areas served/ Main purpose of depot	Gross floor area (square feet)	Number of buses served as at 31 December 2020	Year in which operations commenced	Remarks
KMB depots:					
Kowloon Bay Depot	East Kowloon	768,038	1,088	1990	The depot land was acquired at market price from the Government in 1986 under a Private Treaty Grant
Sha Tin Depot	North and East New Territories	720,005	1,160	1988	The depot land was acquired at public auction in 1984
Lai Chi Kok Depot	South and West Kowloon	648,946	850	2002	The depot land has been leased from the Government on a short term tenancy#
Tuen Mun Depot	West New Territories	148,961	911	1979	The depot land was acquired at public auction in 1974
KMB Overhaul Centre	Bus overhaul	380,915	NA	1983	The depot land was acquired at market price from the Government in 1979 under a Private Treaty Grant
LWB depot:					
Siu Ho Wan Depot	Lantau Island	82,422	241	1998	The depot land has been leased from the Government on a short term tenancy#
Total		2,749,287	4,250		

<sup>#</sup> Under the short term tenancy agreements, rentals are payable to the HKSAR Government at market rates.



#### **Comprehensively Upgraded Smartphone App**

Since the launch in September 2016, the new version of the KMB and LWB mobile app, App1933, has been well received by the public. Passengers may check information about bus routes and estimated time of arrivals at their fingertips.

In 2020, App1933 upgraded the Bus Estimated Time of Arrival ("ETA") service by integrating the ETA of other franchised bus operators to make bus journey planning more comprehensive and easier for passengers. In spite of receiving nearby route information at the bus stops through Bluetooth Beacon signal, App1933 has enhanced an intrinsic location-based function to provide relevant traffic conditions, weather information and bus route suggestions based on passenger's current location through the new "myFavourite" feature.

#### **Application of Information Technology**

The use of information technology can benefit passengers by providing bus arrival information via Estimated Time of Arrival ("ETA") display panels at bus termini and bus stops, as well as on App1933 and the KMB and LWB websites. In addition, information technology enables KMB to manage and monitor its intricate operations with ease. These applications include the Integrated Bus Service Information Display System (IBSID), the Electronic Bus Stop Announcement System (BSAS), the Terminus Management System (TER), the Traffic Operations Management System (TOM), the Bus On-board Monitoring System (BOM) and the Operations Communications Management System (OCM).

# Hong Kong Franchised Public Bus Operations

#### Long Win Bus Company Limited ("LWB")

LWB has been operating franchised public bus services to and from the New Territories, Hong Kong International Airport and North Lantau since 1 June 1997. LWB's network currently covers the Airport, Tung Chung, the Hong Kong Port of the Hong Kong-Zhuhai-Macao Bridge, Hong Kong Disneyland, the Ngong Ping 360 cable car and AsiaWorld-Expo.





With the commissioning of Tuen Mun-Chek Lap Kok Tunnel, LWB enlarges the catchment within Tung Chung and Tuen Mun District

#### **COVID-19 Impact**

As LWB largely relies on tourists and related industries' transport demand, the COVID-19 pandemic has an additional impact on ridership than other franchised bus operators in the urban area. LWB has liaised with the Transport Department to reduce its service levels to meet the actual demand.

#### **Bus Service Network**

At the end of 2020, LWB operated 38 routes. Despite the decline in passenger demand in 2020 under the anti-epidemic measures, LWB continued to strengthen the bus network coverage riding on the commissioning for the new infrastructure and new residential development in North Lantau.

In conjunction with the commissioning of Tuen Mun-Chek Lap Kok Tunnel ("TMCLKT"), LWB introduced new Route A34 and rationalised five existing routes travelling between Tuen Mun and the Airport through the new tunnel. The revamped services also enlarged the catchment within Tung Chung and Tuen Mun District. In addition, new interchange hub at the TMCLKT Interchange was set up to provide a more comprehensive network. Passengers could enjoy the benefits by shortening the journey time significantly and reducing the travel expenses with the fare reduction for the routes concerned.

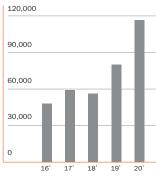
To enhance Tung Chung and the Airport's connectivity, LWB introduced a new Route S65 plying between Mun Tung Estate and the Passenger Terminal. This serves as a new option with shorter journey time for the Airport commuters living at the new residential area in Tung Chung West.

New Octopus Bus-Bus Interchange ("BBI") Schemes between three LWB routes and fifteen KMB routes with the maximum discount at HK\$5.0 in the second leg was launched. Passenger can travel between Tung Chung and the urban area in Kowloon and Hong Kong Island by interchanging at Tsuen Wan or Kwai Chung to enjoy a competitive fare for the whole journey.



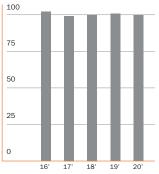
#### Mechanical reliability - LWB

Kilometres



Average number of kilometres operated before one mechanical breakdown while passengers are on board

# Operational capability – LWB Percent (%)



Percentage of actual number of bus departures to scheduled number of bus departures during morning peak hours (7am – 9am) in the peak

Note: Operational capability was affected by social distance measures in 2020.

#### e-payment

To provide convenience for passengers, especially those overseas passengers with no access to local currency or Octopus Card upon arrival at the Airport, LWB introduced new fare collection means in March 2020 and extended to cover all LWB routes in May 2020. The new e-payment system accepts contactless payment including Mastercard, UnionPay and Visa; QR code payment like AlipayHK, Alipay, UnionPay, and mobile payment such as Apple Pay, Google Pay and Samsung Pay. In addition to collecting single trip fare, the new system also supports Bus-Bus Interchange concessions between LWB routes. The new payment method is well received by passengers, making LWB the first franchised bus company in Hong Kong to provide diversified e-payment services.

#### **Performance Assurance**

LWB constantly reviews its bus services and maintenance regime to ensure that safety and efficiency should be maintained at the highest level across its bus fleet. LWB measures its operational performance by reference to two key performance indicators: mechanical reliability and operational capability. Mechanical reliability is the average number of kilometres a bus operates before it experiences a mechanical breakdown on the road with passengers on board. Operational capability is the ratio of actual to scheduled departures in the peak direction in the peak hours of 7:00 a.m. to 9:00 a.m. across the whole bus network. In 2020, LWB achieved 116,421 km:1 in mechanical reliability and 99.60% in operational capability.

LWB obtained ISO9001:2008 Quality Management Systems certification in November 2012. LWB has adopted the latest version of ISO9001 since August 2018.

#### **Bus Fleet and Fleet Upgrade**

Owing to the drop in demand, LWB did not introduce any new buses in 2020, and transferred 38 buses to other operators. As at 31 December 2020, LWB operated 237 double-deck buses, and four electric single deck buses, all wheelchair accessible and equipped with the On-board Electronic Bus Stop Announcement System. To meet passenger demand, 61 buses are 12.8 metres in length, offering a higher carrying capacity.

#### **Depots**

The depot at Siu Ho Wan provides daily bus maintenance, refuelling, bus washing and parking for the LWB fleet. The depot is equipped with a waste water treatment system to ensure that waste water quality should comply with the statutory requirements before discharging into the public drainage system.

LWB's bus fleet	Double-deck buses	Electric single-deck buses	Total number of buses
As at 1 January 2020	275	4	279
Additions during year	0	0	0
Disposals during year	(38)	0	(38)
As at 31 December 2020	237	4	241





LWB always provides convenient and innovative service for passengers. We have launched the first diversified e-payment system in Hong Kong

#### **Safety and Customer Service**

Regular and thorough inspections of LWB's buses are undertaken to make sure that they should be maintained at the highest standards. Driving instructors monitor bus captains' driving performance and customer service delivery, while safety briefings are held from time to time and safety reminders circulated to bus captains. To enhance driving safety, there are Drowsiness Monitoring System and Advanced Driver Assistance System installed on LWB buses, both of which give early warning to bus captains and assist with their driving performance. In addition, the LWB customer service and airbus ticket offices at Hong Kong International Airport's Ground Transportation Centre and the Hong Kong Port of the Hong Kong-Zhuhai-Macao Bridge offer e-payment methods to provide more choices for passengers and tourists.

#### **Environmental Protection**

LWB is fully aware of the importance of environmental protection, as it continues to invest in ecofriendly buses to meet the stringent emission standards of the European Council of Environmental Ministers. With the transfer of 38 buses away, the proportion of Euro V or electric buses in its fleet is currently over 85%. In addition, it has retrofitted Diesel Particulate Filters on all its Euro III buses to reduce the emission of particulates.

The electrostatic air filtration function in the air-conditioning system of LWB buses significantly improves the air quality in the bus compartment. The Eco-driveline system reduces both fuel consumption and exhaust emissions.



Professional bus repair and maintenance services minimise emissions and waste disposal