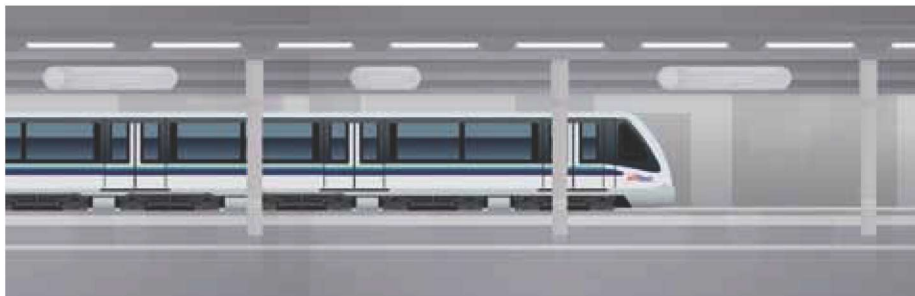


OPERATIONS REVIEW



PUBLIC TRANSPORT SERVICES

BASIC BUS SERVICES / CHINATOWN DIRECT BUS SERVICES /
EXPRESS BUS SERVICES / NITE OWL BUS SERVICES /
CITY DIRECT BUS SERVICE / NORTH EAST LINE /
DOWNTOWN LINE / SENGKANG LIGHT RAIL TRANSIT SYSTEM /
PUNGGOL LIGHT RAIL TRANSIT SYSTEM

1,325.3

Revenue (\$'million)

222

Total Bus Routes Operated

78

Total Stations in Operation

10,946

Total Number of Employees

3,471

Total Bus Fleet

192

Total Train Fleet

BUS SERVICES

We entered into our third year of operating under the Bus Contracting Model (BCM) in 2018. Here, the provision of bus services and the corresponding standards are determined by the Land Transport Authority (LTA) and bus operators are contracted to operate public bus services through a competitive tendering process. Under this model, the Government retains the fare revenue and owns all infrastructure and operating assets such as depots and buses.

In March 2018, we successfully rolled out the Seletar Bus Package, which we won in 2017. It comprised 26 bus services, 12 of which used to be operated by another operator. With this Bus Package, we took over the operations of the new Seletar Bus Depot, which is a purpose-built facility that can house up to 530 buses. We continued to manage the Ang Mo Kio and Yio Chu Kang Bus Interchanges which are part of the Package.

In November, we implemented our second BCM tendered package, the Bukit Merah Bus Package, with 18 services. We took over the newly-built 102,000 square metres Ulu Pandan Bus Depot where we introduced green features such as the use of solar energy and NEWater for non-potable purposes. The Depot has a modern workshop that is equipped with augmented reality (AR) smart goggles for maintenance works, and can cater to 470 buses. It also has an air-conditioned canteen and comfortable rest rooms with free Wi-Fi access and recreational amenities for the 650-odd Bus Captains (BCs) who operate from this Depot.

For our commuters, we rolled out several new initiatives including offering free Wi-Fi service on board more than 300 buses. At the Bukit Merah and HarbourFront Bus Interchanges, we introduced free umbrella rental as well as interactive bus information touchscreen panels to provide travel information. We also installed electronic feedback panels for fault reporting and colourful die-cut messages to encourage positive travel behaviour such as offering one's seat to those who need it more.

The Ulu Pandan Bus Depot also houses the Public Transport industry's Bus Technical Specialist Certification Centre (BTSCC) to raise professional standards for bus engineering and technical staff as part of LTA's Singapore Bus Academy. SBS Transit had helped to set up the 620 square

metre-facility at a cost of \$2.3 million. It houses key bus systems and the chassis of new buses namely the single deck hybrid bus and the double deck Euro 6 bus. It also incorporates AR tools in its training programmes. Our experienced engineering and training staff were involved in its curriculum development and are now conducting the certification of assessment.

In March 2018, we had to shut the New Bridge Road Bus Terminal to make way for developments in the area. Bus operations from this Terminal were transferred to a new facility known as the Kampong Bahru Bus Terminal where we continued to operate the same eight bus services. This new site has sheltered boarding and alighting facilities that are barrier-free, priority queue zone for elderly and disabled commuters and a nursing room for young mothers. Developed by the LTA, this Terminal comes under the Bukit Merah Bus Package.

In total, we now operate seven bus depots, one bus park, 17 bus interchanges and 14 bus terminals.

With LTA as the central planner of bus routes, we rolled out two new services in 2018, which brought the total number of bus services that we operated to 222. We remained the largest public bus operator with a market share of 61.2%.

To better serve the changing travel needs of commuters, we amended 11 routes and beefed up seven high-demand services by adding additional buses to their operating fleets. We also amended the routes of another four services due to road changes resulting from the opening of the South-bound Lornie Highway.

On the eve of public holidays and major events such as the Formula One Grand Prix, we extended the operational hours of selected bus routes to cater to increased commuter demand for late night services.

On festive occasions, when families pay respects to their departed loved ones, we make it more convenient for them to visit the Choa Chu Kang Cemeteries and Columbarium with a special bus service, Service 405.

As part of the public transport community, we also supported SMRT when it conducted engineering works on its North-South

Line and East-West Line that involved the early closure of several stations on selected Fridays and weekends in 2018. We ran shuttle buses in partnership with SMRT and the LTA as well as extended a total of 78 regular bus routes to enable commuters to get home on public buses.

We also conducted planned temporary route diversions for our bus services due to road closures to facilitate events such as runs and festive celebrations. Additionally, we conducted ad-hoc diversions where our buses were unable to travel on their regular routes due to flooding, accidents or other factors that rendered the roads impassable.

During the year under review, all nine of our Fast-Forward services – 10e, 14e, 30e, 74e, 89e, 147e, 151e, 174e and 196e – were renamed Express Services as part of LTA's streamlining and renaming exercise across the industry. Four feeder services - Services 291 and 293 in Tampines and Services 811 and 812 in Yishun – also added a "T" suffix to their service numbers to inform commuters when the trips were terminating at the interchange.

Under the BCM, we took delivery of 289 buses from LTA, which increased our total fleet by about 7% to 3,471 compared to 2017. Comprising 57% single deck buses, the rest were double decks or articulated¹ buses. Our fleet of double deck buses increased by 109 or about 8% to better cater to bus services with higher demand. The number of wheelchair accessible buses also increased to 98.2% from 96.5% in 2017.

Since December 2018, we have been involved in a six-month diesel hybrid bus trial for the LTA. We now operate these buses on Services 59, 93 and 272.

Apart from hybrid buses, we also operate autonomous buses on Jurong Island and Sentosa in an on-going trial with ST Engineering.

We also commenced a six-month trial for the LTA to operate Singapore's first On-Demand Public Bus services. Conducted during off-peak hours on weekdays, it involves five of our low demand bus services – 253, 255, 257, 400 and 402 – serving Joo Koon and Marina-Downtown areas. Using a mobile application, commuters can book a ride by requesting to be picked up and dropped off at any bus stop within the defined areas, even if the bus stops are currently not served by the same bus service. The trial, which started in December 2018, is meant to help LTA evaluate the feasibility of operating public bus services based on real-time commuter demand and along dynamic routes.

In the area of safety, our accident rate dropped by 0.03 per 100,000 km to 0.12 per 100,000 km for 2018. Besides instituting safety protocols, policies and procedures, we continued to invest in training and technology to help our BCs to be safer drivers and provide commuters with smoother and more comfortable rides. Our efforts were recognised by the LTA which awarded our Bedok² Bus Package with the "Safe Bus Operator of the Year Excellence Award 2018".



1 An articulated bus is a high capacity vehicle. It is a single deck bus with two passenger compartments that are linked by an articulation joint. For this reason, it is commonly known as a 'Bendy Bus'. Its combined length is about 18 metres, which is about a-third longer than the regular 12-metre single deck public bus.
2 The LTA divides public bus services into 14 Bus Packages. The Bedok Bus Package with 24 services is one of the nine packages operated by SBS Transit.

OPERATIONS REVIEW

RAIL SERVICES

Demand for our rail services continued to increase with close to 428 million passenger trips made in 2018, representing a double-digit growth of 20.2% over the previous year. The increase can be attributed largely to the Downtown Line (DTL), which became fully operational in October 2017. With all its 34 stations opened for passenger service, ridership on the DTL soared from 101.9 million in 2017 to 164.1 million in 2018. Ridership on the 16-station North East Line (NEL) also grew by 2.7% to 215.8 million while demand on the Sengkang-Punggol LRT (SPLRT) systems increased by 8.9% to 48.0 million in 2018.

In tandem with the increase in passenger demand, more train trips were operated. A total of 309 more weekly trips were added to the schedules of the NEL and DTL while 2,071 more weekly trips to the SPLRT.

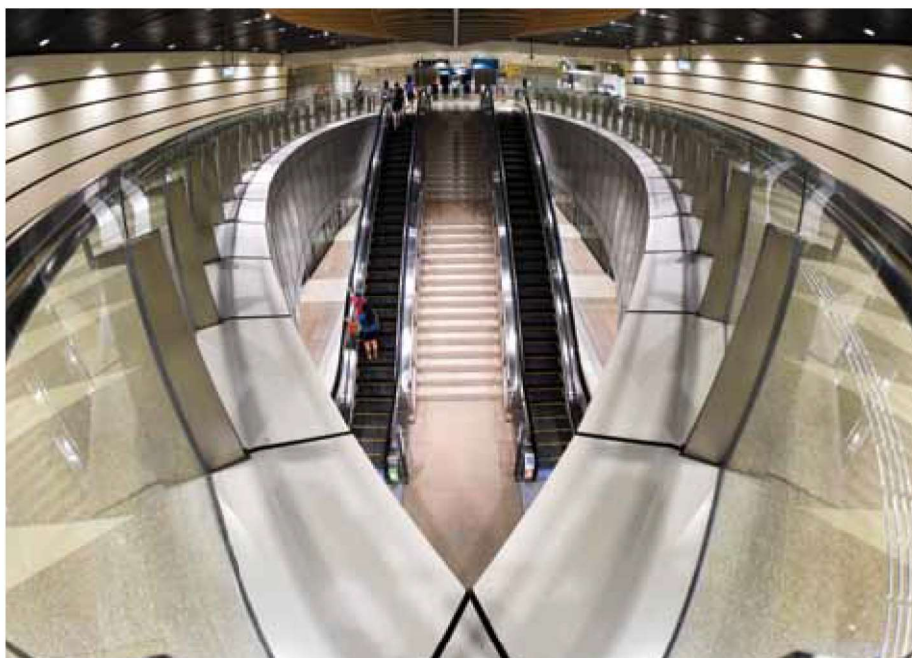
Similar to our bus services, we also extended the operational hours of our rail services on the eve of public holidays and major events such as New Year's Eve to better cater to our commuters' demand for late night services.

LRT services were also enhanced with the start of bi-directional services on the Punggol West Loop in September 2018. Commuters enjoy faster rides and shorter waiting times as they no longer have to travel in the opposite direction to get to the Town Centre Station. This is especially so for commuters travelling from Sam Kee Station during the morning peak hours. With this service enhancement, all loops on the SPLRT systems now operate bi-directional services throughout the day.

To-date, all 29 stations on the SPLRT systems are opened for passenger service except for Teck Lee Station on Punggol West Loop. It will open in tandem with developments in the area.

With the three rail lines spanning a combined total of 82 km, our market share of the rail network is 36.3%. We operate a total of 78 stations and a fleet of more than 190 trains.

In rail reliability, the NEL clocked 1.37 million train-km in Mean Kilometre Between Failure (MKBF) in 2018, which more than doubled the 663,000 train-km clocked in 2017 while the DTL clocked 928,000 train-km compared to the 650,000 train-km recorded in 2017. Overall, they outperformed the nationwide



MRT network which clocked an average of 690,000 train-km. SPLRT achieved 216,000 train-km while the nationwide LRT network's average was 82,000 train-km.

On 1 April 2018, we transitioned to the New Rail Financing Framework (NRFF) for the NEL and SPLRT systems – joining the DTL which has been operating under this framework since 2011. An asset-light operating framework, we hold the responsibility for the operations and maintenance of the rail lines while the LTA owns all the operating assets such as the trains and signalling system and will pay for replacements and upgrades. With the NRFF, we have been granted a 15-year licence to operate the two lines until 31 March 2033.

A tender to carry out mid-life refurbishment and upgrading of the 25 first-generation NEL trains was awarded in December 2018 to CRRC Nanjing Puzhen Co Ltd. The contract is worth about \$116.7 million and comes under the NRFF. It includes the installation of a new condition monitoring system that will provide early warning of impending faults so that preventive actions can be taken. The air-conditioning, ventilation and passenger information systems will also be upgraded. Even the interior fittings of the trains such as seats, panels and flooring will be replaced for more pleasant and comfortable rides for commuters. As part of the contract, detailed inspections will be conducted on all the mechanical and electrical systems of the trains, where parts will be

repaired or replaced where necessary. Works have started and are expected to be completed by 2024.

Concurrently, intensified preventive maintenance activities also started in January 2019 on the 16-year-old NEL to improve its overall service reliability. The scope of maintenance works covers parts of the NEL power system and platform screen doors. There is also an acceleration of the replacement of rail crossings, signalling point machines and tracks. The rail crossings and signalling point machines are essential to allow trains to switch between tracks, and their timely replacement ensures that rail services can continue to run safely and reliably. This requires extended engineering hours with affected stations closing earlier than usual at approximately 11.00pm on selected Fridays and Saturdays. To minimise inconvenience to commuters, shuttle bus services are available to serve the closed stations.

On the SPLRT, we continued with our asset renewal and preventive maintenance works from January to October 2018. Rectification works were carried out on the concrete plinths, which are elevated slabs for the wheels of the Light Rail Vehicles (LRV) to run on. The finger joints of these plinths had shifted over time due to the constant movement of the LRVs and they had to be re-positioned to continue to provide a smooth and comfortable ride for commuters. In addition, the power rail and power rail assemblies were replaced while preventive

maintenance works were carried out on the signalling cables. The upgrading of the LRVs is in the pipeline.

Meanwhile, the replacement programme for the bogie frames of the LRVs is on track. Mitsubishi Heavy Industries, the train supplier, had re-designed the frame structure following the discovery of hairline cracks on 12 LRVs in 2016. A total of 48 re-designed bogie frames have been completed since 2017 and the remaining 68 are expected to be delivered by 2020.

In 2018, there were seven major disruptions/delays on our rail network with the NEL and DTL having two incidents each while the SPLRT had three. For all the incidents, we adopted the "People, Environment, Equipment, Procedures and Organisation" (PEEPO) methodology in our investigations to enhance our ability to systematically identify the root and contributory causes that resulted in the disruptions. We have since implemented action plans comprising design enhancement, maintenance improvements and asset renewals to prevent a recurrence of the incidents.

We also steered our efforts to enhance reliability through the structured ISO 55001 asset management framework. Under this framework, we conducted reliability and vulnerability assessments of our systems and implemented improvement plans encompassing design enhancements, maintenance programmes, asset renewals as well as condition monitoring. With this process clearly in place, we were able to identify signalling components where the designs could be enhanced to improve reliability. For instance, a design enhancement was carried out for the repeated relay unit used on the LRT system.

To further strengthen our engineering and maintenance capabilities, we signed a Memorandum of Understanding with the Taipei Rapid Transit Corporation (TRTC) and its subsidiary, Metro Consulting Service in April 2018. This enables us to leverage on each other's competencies and experiences through mutual exchanges, study visits, training and the sharing of best practices. We followed up with a visit to TRTC in September with a team of 12 rail executives to glean best practices in rolling stock, signalling, electronics repair as well as in station and passenger operations.

We also worked closely with tertiary institutions, including the National University of Singapore, the Nanyang Technological University and the Singapore Institute of Technology, on rail-specific projects to tap on their areas of expertise while nurturing the next generation of rail engineers. Currently, we are engaged in 14 projects that cover areas such as condition monitoring, failure analysis and rail simulation.

In contingency planning, we remain committed to reviewing and enhancing our Rail Incident Management Plans to ensure their relevance. Three exercises – one for each line – were conducted in 2018. Two of the exercises also involved a cyber attack scenario to test our preparedness and response.

We also participated in joint exercises with the LTA and external agencies such as the Police and the Singapore Civil Defence Force (SCDF). With the LTA, we were involved in two security screening exercises that were conducted at two of our MRT stations – one at DTL's Newton Station and the other at NEL's Hougang Station. Codenamed "Exercise Station Guard". They were conducted during passenger service hours to validate the security measures and plans during periods of heightened security. Commuters entering the stations had to pass through metal detectors while their belongings and baggage were scanned by X-ray machines.

The SCDF exercise involved a train that had caught fire in the tunnel and tested the coordination of rescue efforts between our two organisations. We supported the Police in the conduct of its tactical drill of a security incident on board a train.

SERVING OUR COMMUTERS

Our commitment and efforts to doing more did not go unnoticed by our commuters. A total of 46,632 compliments/commendations were received during the year. This represented an increase of 20.6% over the previous year.

In the Public Transport Council's Annual Customer Satisfaction Survey for 2018, the overall satisfaction score for bus services remained at 7.9, similar to the previous year but the percentage of respondents satisfied with bus services increased to 98.0%, up from the 96.7% in 2017. The overall satisfaction score for rail services was 7.9, an improvement from 7.5 in the previous year. The percentage of respondents satisfied with rail services also increased from 91.8% to 97.8%. Notably, our rail overall satisfaction score was a tad higher than the industry average at 8.0 and with the percentage of respondents satisfied with our rail services clocking in at 98.3%.

More details of our bus and rail efforts are on pages 24 to 29 in the sustainability chapter of this Annual Report.



OPERATIONS REVIEW



OTHER COMMERCIAL SERVICES

BUS ADVERTISING / IN-TRAIN ADVERTISING /
BUS HUB ADVERTISING / TRAIN STATION ADVERTISING /
SHOP SPACE / ROAD SHOW SPACE

58.3

Revenue (\$'million)

.....

90

Total Number of Employees

ADVERTISING

Our sister company, Moove Media, continued to roll out innovative advertising campaigns to capture the attention of commuters and consumers at our stations and bus interchanges, and on board trains and buses.

At the Downtown Line (DTL) Bugis Station, commuters were treated to a sensory experience with the Changi Airport Group's Changi Millionaire 2018 campaign. Through the creative use of sensors, light and sound projections were used to create awareness of the participation details of its lucky draw where participants stood to win a luxury car in the grand draw. This campaign was so successful it emerged as a finalist in the "Out-of-Home Advertising" category at the Marketing Excellence Awards 2018, which was organised by Marketing Magazine.

Over at the North East Line (NEL) Dhoby Ghaut MRT Station, Moove Media upped its game with a moving conveyor belt of empty Tiger Beer bottles to convey the product's distinctiveness as a freshly

brewed beer. The unusual display caught the attention of many commuters thanks to its originality.

At the Ang Mo Kio Bus Interchange, sunflower stickers adorned a wall where members of the public could peel them off and receive surprise gifts including free tickets to Gardens by the Bay. In a different campaign for Golden Village, popcorn stickers were featured with discounts given for movie tickets.

For the Singapore Grand Prix, the team mounted 3D installations of F1 cars on the top of five of our buses. These plied the roads between August and September to fuel excitement for the races.

Throughout the year, trains on the NEL and DTL were given makeovers to increase public awareness of various causes such as mental health, autism, breast cancer and cyber wellness among others. In collaboration with the Land Transport Authority (LTA), the team also decorated trains with festive themes during Christmas, Deepavali and other occasions.

RENTAL OF COMMERCIAL SPACES

In 2018, we leased 93% of the 8,527 square metres of commercial space at our bus interchanges and train stations. Tenants included convenience stores, medical clinics as well as those in the food and beverage and beauty and wellness businesses.

During the year, we introduced a parcel locker system at five of our MRT stations. Installed at the Punggol, Sengkang, Buangkok and Hougang Stations on the NEL and the Bukit Panjang Station on



the DTL, the lockers serve as convenient and accessible pick-up points for commuters to collect their online shopping parcels if they are not at home to receive them. This is in support of efforts by the Info-communications Media Development Authority and the LTA to ease the last-mile fulfilment challenges faced by merchants and logistics firms in the growing e-commerce sector.

In support of our tenants, we conducted special promotions to boost patronage at their outlets during major festive occasions. For instance, during the Chinese New Year period, we gave away free Chinese calligraphy couplets to commuters who hit a minimum spend. We also organised carolling sessions at some of our premises during the Christmas season to add to the good cheer.

