Emerging Stronger - The Singapore Journey through Covid-19

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Agenda

1. Context Setting, Mental Model and Messaging
2. Building Confidence
3. Building Resilience
4. Building Back Better – Improving the Public Transport Offering
“Never Waste a Good Crisis”
- Winston Churchill
Turning Crisis Into Opportunity

• 危机 (wei ji) – the Chinese phrase for crisis is a combination of danger and opportunity

• Singapore emerged stronger as a country post crises (e.g. SARS, 2008 economic downturn). Armed with lessons learnt from past crises, Singapore was better prepared for Covid-19

• Change in travel patterns and observed trends offer valuable insights and opportunities to reimagine Singapore’s Land Transport and accelerate/advance transport strategies
Seizing Opportunities to Transform Land Transport

• Building a resilient transport system that is able to remain sustainable during and post crisis

• Providing an efficient and reliable multi-modal transport network to enable options and alternative use of modes and routes

• Determining shifts and new travel patterns and actively reinforce LTA’s strategy of Walk Cycle Ride (WCR) as the preferred option
Singapore’s Covid-19 Timeline

January
22 January: A multi-Ministerial committee was formed
23 January: First case of Covid-19 in Singapore confirmed

April
7 April: Start of Circuit Breaker; initially slated to end on 4 May, extended to 1 June following continued untraced community transmissions
Safe Distancing Measures in Public Transport

June
2 June: Singapore’s safe re-opening Phase 1
19 June: Singapore’s safe transition Phase 2
Transition from Safe Distancing to Safe Management

August
19 August: today, currently in Phase 2, single digit for local transmissions

HOW SINGAPORE WILL SAFELY EXIT THE CIRCUIT BREAKER

Phase 1: Safe Re-opening (from 2 June)
- Businesses that do not pose high risk re-open
- Leave home only for essential activities

Phase 2: Safe Transition
- More businesses re-open with safe management measures
- All students fully return to school
- Sports & recreation facilities re-open with safe management measures

Phase 3 will be the new normal for Singapore as we expect to remain in this state until an effective vaccine or treatment for Covid-19 is developed.
Navigating Circuit Breaker

- Transport remained a vital utility
- Low risk of transmission of Covid-19 on public transport as public transport are transient spaces
- Calibrated approach in adjusting public transport services
  - Suspension of non essential services
  - Maintaining bus and train service headways
- Implementation of Safe Distancing measures in public transport
Consistent Messaging During Pandemic

• Assuring commuters from the onset that public transport is both physically and psychologically safe

• Making the public transport system a safe place for staff and commuters

• Encourage socially responsible behaviours i.e. practice good personal hygiene, monitor temperature and wear a mask
Challenges to the Land Transport

• Intensive construction efforts arising from aggressive expansion of rail lines will be adversely affected due to disruptions in supply chains

• Dependency on foreign workers for both construction projects and public transport operations esp for bus services

• Clearance procedures for release of foreign workers from dormitories
  • Resource allocation of workers and arranging swab test appointments

• Challenge to budget for tender pricing due to difficulties in pricing costs e.g. risk premium that market may price due to ongoing uncertainties
Introduction: Singapore, Island, City-State

- Singapore is one of the most densely populated countries in the world: 5,612 million people living in 724.2km$^2$ area
- Travel demand is growing: expect a 50% increase in total daily journeys from 2016 to 2035
- Space is extremely precious: With 12% of land already occupied by roads, sustainable mobility is critical for future
Daily Public Transport Ridership (Pre Covid-19)

**Bus**
- 4 mil ridership
- >5,600 buses
- >310 bus routes

**Rail**
- 3.5 mil ridership
- 230 km
- 183 stations

**Taxis/PHCs**
- 1.1 mil ridership
- >65,000 vehicles
Public Transport Ridership

- Pre-Covid-19 ridership is based on 2020 Jan week 3 (13-17 Jan 2020)

- Implementation of Circuit-Breaker measure
- Circuit-Breaker measures in place but some further businesses required to close
- Phase 1: Safe-distancing
- Phase 2: Safe Transition
- All students
- School Holidays
- End July 2020

*Pre-Covid-19 ridership is based on 2020 Jan week 3 (13-17 Jan 2020)*
BUILDING CONFIDENCE
Safe Distancing in Public Transport

• Safe Distancing markers on seats and standing positions in trains
• Alternate seat arrangements in buses and trains
• 1m queue markers at bus berths and train platforms
• Campaigns for Safe Distancing using infographics through various platforms
Elevated Levels of Hygiene

• Stepped up cleaning of trains, buses and common touch points
• Increased cleaning of Public Transport premises
• Use of anti-microbial and self-disinfecting coating

Trains & Buses
• Clean and disinfected before 1st revenue trip of the day
• Clean and disinfect before any subsequent revenue trip from Depot
• Buses are disinfected twice-a-day in between stops at Bus Terminals / Interchanges
Minimising Transmission Risks in Public Transport

• Transport ambassadors to encourage and “nudge” commuters to observe Safe Distancing (during Circuit Breaker)
• Uniformed enforcement officers to ensure compliance with Safe Distancing measures for egregious cases
• Deployment of temperature self-check kiosks at stations and bus interchanges
• Provision of hand sanitisers at public transport infrastructures
Aggressive Contact Tracing

• National digital check in system (i.e. Safe Entry) for all citizens to check in when entering public spaces e.g. shopping malls, parks, offices

• Digital contact tracing app TraceTogether uses Bluetooth to identify other nearby phones with app installed

• Street hail passengers to submit an electronic form via QR code or URL to facilitate contact tracing
Positive, Confident and Healthy Public Transport Workers

• Low numbers of infection amongst transport workers
• Twice a day temperature taking regime for all staff
• Safe Distancing Measures adopted at work places
• Face masks, sanitisers and health supplements were provided
To soften the economic damage from the Covid-19 outbreak, Singapore has since announced a series of stimulus packages of ~$100 billion, for COVID-19 related support. This amounted to about 20% of Singapore’s GDP to help companies cope with the impact.

**Job Support Scheme:** To support businesses through the co-funding of local worker’s wages over 10 months

**Enhancement to Wage Credit Scheme:** To supports business transformation efforts and encourages employers to share productivity gains with workers

**Foreign Worker Levy:** In Apr and May 2020, Foreign Worker Levy rebate up to $750; and monthly foreign worker levy in waived

**Senior Employment Credit:** To support older workers to continue working longer and to be more financially secure in retirement

**Property Tax Rebate:** Non-residential properties given property tax rebate up to 31 Dec 2020

**Corporate Income Tax Rebate:** To provide 25% Corporate Income Tax rebate for all companies
Gauging Commuter Confidence

- Survey to gauge commuters’ confidence in travelling by public transport, and their awareness level of personal safe practices and cleaning measures on public transport.

Results

- Most agreed they felt safe when taking public transport during this period.
- Almost all agreed they personally followed safe behaviours when taking public transport.
  - Commuters say they will wear masks.
- Most agreed that they were confident about other commuters observing safe behaviours.
- High Awareness of the increased frequency of cleaning and safe measures i.e. hand sanitisers made available.
BUILDING RESILIENCE
Safe Re-opening

• Recognition that Safe Distancing was not possible on public transport (capacity had to be below ~75% pre Covid-19 levels for Safe Distancing)

• Continued and enhanced measures to maintain public confidence in the new normal of commuting
  • Mandatory face masks
  • Enhance cleaning regime
  • Responsible social behaviour e.g. refrain from talking
Driving E-Payments - Contactless Fare Payments

• Using contactless CePAS cards to tap and go since 2009 (with multiple e-payment top-up options) on our public transport system

• Introduced SimplyGo* to enable additional payment alternatives and benefits
  • Contactless EMV bank cards which improves commuter journey without need to stop for top ups
  • Facilitates complementary inclusive transport initiatives, such as handsfree RFID payments and auto-crediting of public transport vouchers

• Covid-19 added the impetus for LTA to accelerate transition towards an increasingly cashless e-payment environment
  • Reduce touch points such as ticketing machines as commuters utilize mobile payment channels for top up of CePAS cards
  • Enable vulnerable group of users to receive financial assistance remotely via their CePAS cards, e.g. needy students receive meal allowance while on home-based learning during Circuit Breaker

* SimplyGo is an Account-Based Ticketing system
Promoting Vehicular Electrification

• Commitment towards a clean and sustainable environment, LTA’s EV strategy include
  • Phasing out ICE vehicles, all vehicles to run on cleaner energy by 2040
  • 100% cleaner energy public bus fleet by 2040
  • Expanding public EV charging network to 28,000 points by 2030
  • Introducing Early EV Adoption Incentive (EEAI) and revised EV road tax structure from Jan 2021

• Driving momentum with industry
  • Collaborating with BlueSG (a subsidiary of the French Bollore Group) to introduce EVs via a car sharing programme and charging points
Advancing Autonomous Vehicle as Public Transport in Singapore

• Development of AVs starting in the early 2010s, with focus on public transport

• Promising results from initial technology trials, with next phase of AV extending to pilot deployments of AVs as public transport in three towns in early 2020s
  • 2-ha Centre of Excellence for Testing and Research of AVs (CETRAN) to simulate road environment before deployment on public roads, launched Aug 2016. Whole of western Singapore (1,000km of public roads) opened up for AV trials in 2019
  • 2 on-going trials to demonstrate a typical feeder bus services using single-deck 12m autonomous bus

• Review of autonomous dynamically routed, on-demand services to complement and augment public transport offerings

• Scale AV deployment nation-wide when technology is matured
Fortifying Public Transport Financial Models

- Covid-19 exposed the vulnerabilities of a revenue driven financing model
- Potential review of transport financial models to better allocate risk between LTA and public transport operators

Different PT Financing Models:

- **Asset Heavy** (Services provided commercially)
- **Asset Light** (Net Cost with risk sharing)
- **Asset Light** (Gross Cost)

White Paper 1996 Framework
- Original rail model

- All rail lines except Thomson East Coast line

- Thomson-East Coast Line
- Bus industry
Building A Resilient Workforce

• Adoption of technology e.g. automation of construction processes/equipment and AV buses to reduce reliance on manpower

• Reduce reliance on foreign transport workers through the formation of a stronger core of Singaporean workforce transport industry

• Aggressively offering more Singaporean jobs in the public transport sector and reskilling of workers
  • Increase in the number of Singaporean applicants to the public transport operators Bus Captains, with ~440 hired to date
  • Reskilling of taxi drivers to Bus Captains
BUILDING BACK BETTER - IMPROVING THE PUBLIC TRANSPORT OFFER
Recap: Land Transport Master Plan 2040
Walk Cycle Ride SG - Pivotal Strategy

What is WALK CYCLE RIDE?

- Shared Transport
- Mass Public Transport
- Active Mobility
Validating and Reinforcing Land Transport Strategies

• Review of strategies under the LTMP 2040 in light of Covid-19 has validated that strategies remain highly relevant and directionally clear

• Through levers and structures, actively shape Covid-19 travel trends into shifts that reinforce strategies
  • Entrench work from home/telecommuting post Covid-19 and staggered working hours to “flatten” the peak curve

• Recalibrating the mobility demand and supply to better optimise the transport network

• Resolving to strengthen and enforce our vehicle ownership and usage demand management tools
Rail as Backbone of Public Transport

Network up to 2030
Open and Contestable Market – Bus Network Tendered Packages

- Over 300 bus services
- All bus routes in Singapore are grouped into 14 packages for economies of scale to attract new bus operators
  - Area-based, centered around depots
  - Each depot has 300 – 500 buses
- The 4 packages on this slide are tendered.
Going local – 20 Minutes Town

• Increased activities in town centres serves as opportunity for LTA to precipitate the new trends of ‘going local’
  • Monitor public sentiment / receptivity of WCR initiatives and impact to mode share

• Advance WCR projects in various towns to improve intra-town connectivity on WCR modes and continue to ensure that our transport environment contributes to healthy lives and safer journeys
  • Time savings from traveling used for other activities
Acceleration of Road Repurposing Projects

- Prime walking and cycling as the preferred mode for easy and safe intra-town journeys
- Series of road repurposing projects lined up to be implemented in the immediate term, taking advantage of lower vehicular traffic
  - Give buses priority and increase bus speeds through conversion of road lanes to bus lanes
  - Deliver our commitment of a > 1000km Island wide Cycling Network by 2026 (800km by 2023)
  - Implement pedestrianisation of streets/widening of footpaths
  - Enhance wellbeing and livability of built environment
Intensify Decentralisation/Polycentricity

- Land use resilience/flexibility required as land constraints continue to remain the biggest inhibitor

- Reduce mobility needs to relieve public transport infrastructure strains

- Work with other land use agencies to entrench more localised travel in the longer term by encouraging more jobs to be located in the heartlands
  - Upcoming development of 4 new core employment centres
Emerging Stronger Post Covid-19

• **Consistent** and clear messaging from the onset that public transport remains safe to increase commuter confidence

• Overcome challenges and **seize opportunities** brought about by Covid-19 to **actively shape travel patterns** and guide commuters towards the desired modes of travel

• Pursue **fleet electrification** and **autonomous public transport** to attain environmentally sustainable goals

• **Strong governance** to build a **financially sustainable** and **workforce resilient** transport system that is future proofed

• Reinforcing **Walk Cycle Ride Strategies** and **Building Back Better** by enhancing the Public Transport Offer
Thank you
Stay Safe and Healthy