

# Conversation and Connecting with SG Commuters

Advisory Report 2018



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# Chairman's Message

This Advisory Report shows what happened when the Public Transport Council (PTC) got up close with our SG Commuters. Commuters' journey experiences are key to an effective public transport system. The PTC, through its Research & Advisory arm, had intensive conversations and engagements with more than 11,000 SG Commuters mainly throughout a challenging and electrifying 2017. While 2017 witnessed many public transport milestones, it also saw two unfortunate and high profile episodes on our public transport rail system which affected our commuters. This extensive engagement with SG Commuters continued from 2016 when we conducted 44 in-depth interviews, 51 focus group discussions and an independent survey of 2,132 SG Commuters. We also monitored 513,413 traction trends on social media. This Report is evidence based.

The initiatives and findings in this Report celebrate, in a way, the SG Commuter. Far from being cantankerous, SG Commuters are, by and large, reasonable, responsible, responsive, resilient and appreciative. They want public transport to be inclusive for the vulnerable or commuters with special needs. They ask to be involved in helping fellow commuters. They want to be active participants in shaping their rail journey experiences. They appreciate the effort put in by the Government, LTA and rail public transport providers to improve the system, and the time needed to get things right and working reliably.

It is heartening that the two co-creation trials described in this Report were wholeheartedly received by the commuters in the respective pilot areas and will be expanded in 2018. The co-creation trials provided commuters a ready platform for, and reduced the social barriers in, stepping forward and helping a fellow commuter who may need assistance in the course of their journey.

In our engagements with Deaf<sup>1</sup> and Hard-of-hearing commuters and visually impaired commuters who need door-to-door assistance, some of them shared that they wanted to feel more welcomed by other commuters. We have also made some practical interim recommendations in this Report, such as an innovative mobility facility, like Mobility as a Service (MaaS), which can provide additional options for their travel needs. Such assistance can also be used by the elderly and families whose needs and travel patterns tend to be different from the average commuter.

The running narrative in this Report is the maturity of our SG Commuters. PTC will continue to listen to them for the public good of our transport system.

**Richard Magnus**  
Chairman,  
Public Transport Council

<sup>1</sup> Deaf (with a capital D) is different from deaf (with a small d). Deaf (with a capital D) describes people with hearing loss who use sign language to communicate, and who identify themselves as members of a Deaf community and culture. They are more likely to have been born or become deaf early in life, and use sign language as their preferred communication mode. With the small d, the word 'deaf' is a general term used to describe people with hearing loss of varying degrees, regardless of the communication mode they use (such as sign language, speaking or lip reading). Source: The Singapore Association for the Deaf, "About Deaf Community and Deaf Culture."

2017

# Year in Review for Public Transport



The public transport system achieved significant milestones in 2017. First, the Government-funded Bus Service Enhancement Programme, which added 1,000 buses and 80 new bus services over the past five years, was successfully completed. This has allowed commuters to enjoy shorter waiting times, better connectivity and more comfortable rides. Second, Downtown Line 3 and Tuas West Extension were opened and 17 more trains were added across other rail lines to shorten waiting times. Third, the second of six important rail renewal projects on the North-South and East-West lines was completed with the replacement of the power rail.

While concrete progress was made, commuter experience was marred by the 7 October tunnel flooding between Bishan and Braddell MRT stations and the 15 November train collision at Joo Koon MRT Station. In the aftermath, news reports, particularly those by foreign media, alluded to Singaporeans' dissatisfaction with their rail system, as well as their disappointment in its perceived unreliability when compared to rail systems in other major cities like Hong Kong and New York.

As part of its ongoing commuter engagement efforts, PTC went to the ground to elicit commuters' sentiments on their rail experience.



# Putting Commuter Sentiments in Perspective



## Commuter Sentiments Remained Firmly Positive Despite Dip

As part of our evidence-based approach, PTC took soundings from the ground through a series of surveys. The intention was to ascertain commuters' reactions towards the rail episodes and their sentiments.

PTC took soundings from the ground through a series of surveys. The intention was to better understand commuters' reactions towards the rail episodes and their sentiments.

The Rail Experience Survey was conducted between July and August 2017 involving 5,000 respondents. To obtain commuter sentiments and reactions following the two incidents on 7 October and 15 November, PTC went to the ground in October and November 2017 to take further soundings through three more face-to-face surveys (each survey's sample size comprised at least 1,000 intercepted commuters).

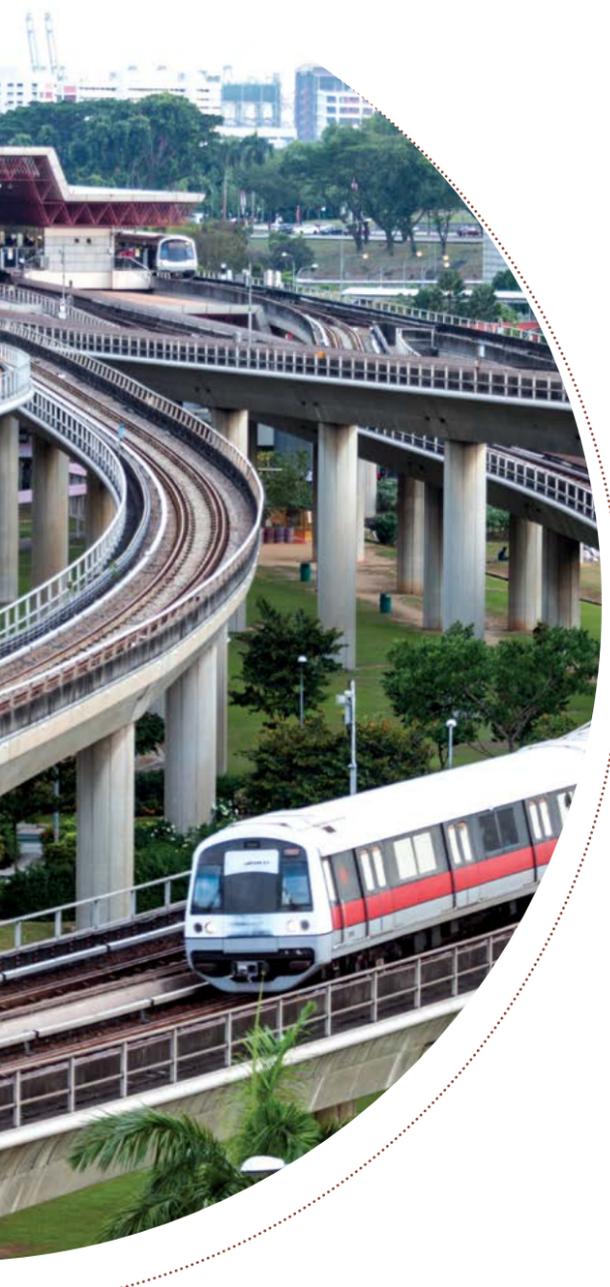
Commuters were asked to indicate their level of agreement on a 10-point scale, with 1 = strongly disagree and 10 = strongly agree. The statements were:

- I believe that public transport operators (PTOs) are doing their best to provide me with good service.
- I believe that the public transport operators (PTOs), LTA and the Government are doing their best to improve my journey experience.
- I trust that the Government is doing its best to provide a good rail system.
- I trust that SMRT is doing its best to provide a good rail service.
- I am confident that our rail system remains safe for travelling.

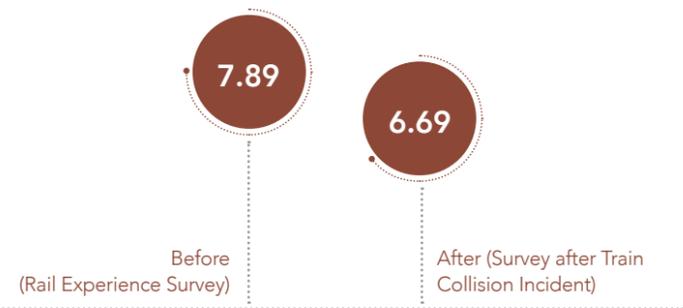
From these surveys, we drew the following conclusions:

### Confidence in PTOs, LTA and the Government

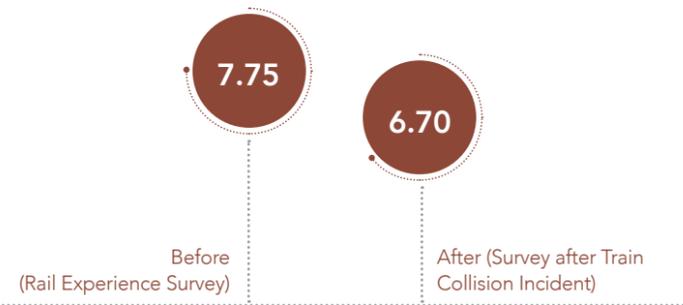
Commuters' confidence in PTOs, LTA and the Government was affected after the train collision episode but remained firmly positive. See Figures 1 and 2 below for the comparison of survey scores.



**Figure 1: I believe that PTOs are doing their best to provide me with good service**



**Figure 2: I believe that PTOs, LTA and the Government are doing their best to improve my journey experience**



### Commuters' Sentiments on the Government, SMRT and Safety

After the train collision incident, commuters were confident that the Government and SMRT are doing their best to provide a good rail system and service respectively, and that our rail system remained safe for travelling (see Table 1).

**Table 1: Results for Commuters' Confidence**

S/N	Question	Mean score after the two episodes
1	I trust that the Government is doing its best to provide a good rail system.	6.83
2	I trust that SMRT is doing its best to provide a good rail service.	6.26
3	I am confident that our rail system remains safe for travelling.	7.15

They are aware of and appreciate the ongoing works by LTA and SMRT to enhance rail reliability, comfort, safety, accessibility and reach. These efforts, among others, should continue to press in.

In addition to their sentiments about PTOs, LTA and the Government, commuters also shared with us their journey experiences, offering us a rich perspective and understanding of the SG Commuter's personal rail experiences.

Commuters' feedback showed that they were:



confident the Government was providing a good rail system



aware of ongoing rail works to enhance rail reliability, comfort, safety, accessibility and reach

# SG Commuters' Rail Experiences



## SG Commuters' Personal Stories

Madam Lydia @ Hamidah Abdul (her real name) is in her 50s and lives in Bukit Gombak. She works part-time near Botanic Gardens MRT Station. She has a son in primary school and her mother is retired.

She prefers taking the Downtown Line (DTL) to get to work instead of the East-West Line (EWL).

Her reasons for preferring the DTL are as follows:



Cleaner



More comfortable



Aircon works well

Madam Lydia's elderly mother has weak knees. Whenever Madam Lydia brings her elderly mother to Seah Im Food Centre to patronise their favourite hawker food stall, she would rather transfer to the Circle Line (CCL) earlier at Buona Vista MRT Station, than take the East-West Line all the way to Outram Park MRT Station before making a transfer to the North East Line (NEL).

Her reason is as follows:



CCL higher chance of getting a seat

Whenever Madam Lydia brings her son to Sentosa to visit Universal Studios Singapore (USS) on their family outing, she prefers a transfer to CCL.

Her reason is as follows:



CCL is less crowded, making it easier to keep a watch on her son to ensure that he does not wander off

The first Advisory Report published in August 2016 had 17 recommendations for an improved transport experience for general commuters, families, seniors and commuters who are wheelchair users. The recommendations were meant to address pain points in their daily commute. All recommendations were accepted by LTA and will be implemented progressively. For example:

- open strollers are now allowed on buses;
- escalator speed at some stations is now slower during off-peak hours to cater to seniors;
- seniors are encouraged through MRT station announcements to use the lifts, and
- under special circumstances when there is an urgent need to use the toilet, there is a grace period for commuters to exit and re-enter through the swing gate, with the assistance of station staff.

In PTC's 2016 Advisory Report, PTC had identified seven Matters of Importance to our commuters when they use public transport. These were:



This year, the Advisory Report reveals a deeper and richer understanding of our commuters' voices, with a focus on our rail system. We better understand their preferences across different rail lines; their willingness to be engaged, to be involved and to contribute. This will unfold in the following sections of the Report as we uncover the story of our SG Commuters from the ground.



Mr Dan Li (his real name) is in his 30s and works in the western part of Singapore. He commutes daily from his home in Bukit Batok to his office. Dan also takes the train frequently to get to various locations around Singapore. If the journey is long and he has alternative routes, he will choose the route that is less crowded.

He has noticed that:



**PTO staff are in general polite**

He finds their guidance at platforms useful. From time to time, he has approached staff at passenger service centres for directions, and they have given him clear instructions on how to get to his destination and showed him alternative routes.

He travels most frequently on the North-South Line and is satisfied with



**The timely announcements and accuracy of next-stop information**

Throughout 2016 and 2017, PTC engaged over 11,000 commuters extensively to understand their journey experiences.

This comprised:  
Over 700 commuters through

**73** in-depth interviews

**100** focus group discussions

Sessions conducted in **English, mother tongue and dialects**

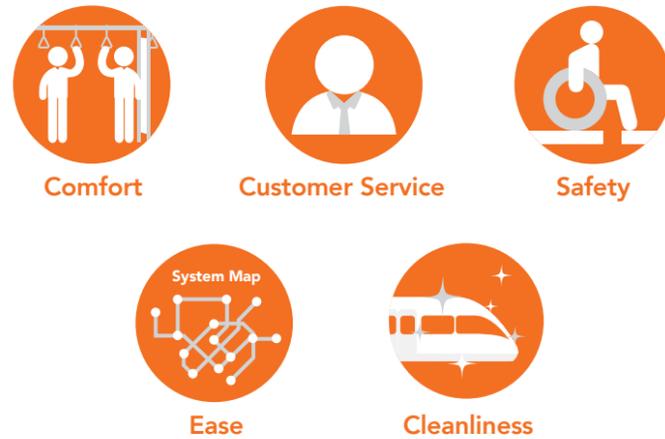
and

**6** surveys with over **10,500** commuters



Across different age groups, profiles and needs, and different geographical areas and rail lines in Singapore.

The stories of Madam Lydia and Mr Dan Li illustrate the needs of our SG Commuters. Feedback from PTC's focus group discussions indicates that certain aspects of the journey experience continue to be of importance for commuters. They are:



On Comfort, commuters prefer a less crowded and more comfortable environment, with seat availability and train cabins that are set at an optimum air-conditioning temperature.

**Female legal secretary in her 30s**

"Don't want it to be so crowded. Really crowded, feel suffocated, claustrophobic. Aircon – really non-aircon. So stuffy."

**Female homemaker in her 50s**

"Very crowded. When it is crowded, we stand quite close to each other. I feel no personal space. Everybody in front, back, side, all people."

Customer service and staff attitude are important to commuters.

**Female customer service staff in her 20s**

"When I alight at Raffles Place, one particular lady jovial and energetic in the morning. I don't see the same kind of behaviour across the service staff."

**Male tertiary student in his 20s**

"There's still some staff with not quite a good attitude."

Commuters' view of safety relates to the timing of the closing of train doors. Commuters found the interval between the audio chime and the door closing to be inconsistent, and hoped for a clearer indication of when the doors would actually close.

**Male editor in his 50s**

"Sometimes the door closes very fast. I have seen people getting stuck in the door. Even has happened to me."

Ease refers to the reach and accessibility of the public transport system. For commuters, Ease of getting to destinations is linked to the information provided to them. Commuters appreciated the information panel inside train cabins with lights indicating the next stop. For trains that do not have this feature, commuters would like announcements to be clearer.

**Male retiree in his 60s**

"I realise that in certain line...they don't have the system...normally the light system – ok, I'm here in where, the next stop is where."

Cleanliness of amenities, the station environment and train cabins also matter to commuters.

**Female customer service staff in her 20s**

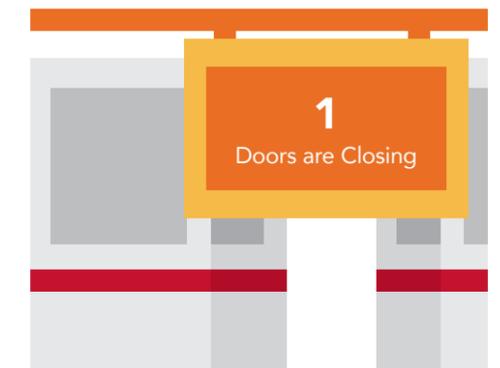
"You can find that there is oil stain on the glass. Things like that make me uncomfortable to lean against the glass."

**Female executive in her 20s**

"When step into transport, should be clean."

Commuter experiences relating to Comfort, Customer Service and Cleanliness differ across rail lines. For Comfort, PTOs should continue to train their service ambassadors to help ease spot crowding at train cabin doors so that there is space for other commuters to board during peak periods. Commuters appreciate staff who are cheerful and friendly when performing their job. Such customer service standards should be more consistent. More attention can also be given to maintaining the cleanliness of the trains, stations and amenities at the stations.

For safety, some new trains have a countdown timer inside the cabin that will activate before the door starts to close. The same information can also be displayed outside the cabin, on display panels at the platforms. For instance, in Sydney, countdown indicators are displayed on screens at train platforms.



For information on next stops, greater effort should be made to ensure the clarity of the announcements. If announcements are provided 'live', staff can be trained to speak loudly and clearly.

PTC's Rail Experience Survey solicited feedback from 5,000 commuters on the last trip they took.

Survey results showed that commuters travelling with young children and wheelchair users preferred the least crowded route. When travelling with elderly dependents or someone who was pregnant, their preferred route was one with a higher chance of getting a seat.



Commuters found the staff on the **East-West Line** to be very helpful when they asked them for directions to a new place.

Commuters liked the way the platform staff on the **North East Line** directed the flow of traffic during peak hours.

Commuters found that information and announcements at stations and inside the trains on the **Circle Line** could be clearly heard and were provided in a timely manner.

Commuters enjoyed taking the **Downtown Line** as it is more comfortable and had more seats available.

Commuters found the station environment of the **North-South Line** clean and well maintained.

Through our extensive ground engagement, set out in two chapters 'Putting Commuter Sentiments in Perspective' and 'SG Commuters' Rail Experiences', PTC uncovered a more robust picture of SG commuters' views and experiences with our rail system and services in an unprecedentedly challenging year of 2017. In particular, PTC found that commuters were:



still satisfied with rail journeys



engaged to improve the public transport journey experience for all

# SG Commuters Care

While SG Commuters are aware that the Government, LTA and PTOs are making improvements and enhancements to the public transport system, they also believe that they can play a part to create a better journey experience.

Co-creation allows for commuters' participation and gives them a sense of ownership of public transport. It also enables an inclusive public transport system by taking into account the views and contributions of commuters, who act as value creators and co-producers of public results. Co-creation involves businesses, civil society organisations, communities and individuals working in a collaborative manner to deliver outcomes.<sup>2</sup> This approach is called co-creation.

Our commuters highlighted that one of the issues facing Singapore commuters is our norm of being more socially reserved.

#### Female retiree in her 70s

"If they ask for help, we help. If they tell us, we can help. If they don't tell us, we can't help them."

#### Male undergraduate student in his 20s

"The problem is that Singaporeans do not generally speak up or step out of our comfort zone to speak to people if they don't speak to us first."

This tends to make commuters more reactive when it comes to offering help. Commuters said that they felt happy helping fellow commuters and hoped others would also help them in time to come.

#### Female homemaker in her 50s

"For my case, I will feel happy if I can help people and the other party get good benefits."

#### Female homemaker in her 70s

"Now we help others, later we are old, people can help us."

<sup>2</sup> Source: Lecture by Professor Peter Shergold (2016), "Creating Public Innovation through Collaboration: Government, Business and the Social Services Sector," in "Adaptive Governance for a Changing World," edited by Wu Wei Neng, Civil Service College Singapore, p 126.





Mr Ivan Hong (his real name) is a postgraduate student in his 30s who often takes public transport. On several occasions during his commute, Ivan had the opportunity to offer his help to others, but faced a dilemma. He was afraid that his help might be rejected, or that he might have incorrectly identified the person in need. One such dilemma is the fear of offending someone whom he thinks may be elderly or pregnant through his offer of a seat.

Our focus group discussion participants shared stories of similar dilemmas they face during their commute on public transport.

**Male medical social worker in his 40s**

"I do not know how to help the other person. There is a likelihood that I will just walk away. It takes somewhat a certain level of courage."

**Male PhD candidate in his 30s**

"I face issues trying to see whether women are pregnant or not. I have given seat to people who are not pregnant. Very embarrassing for both of us."





As seen from the examples above, while commuters wished to help, they did not quite know how to do it, and preferred visible opportunities to offer and to receive help.

**Female editor in her 20s**

“Sometimes go to certain train station, like Chinatown, some would come up and approach me and ask me where to go. I just offer help. Because if not, people have to go to the counter to ask. Look out for people who look confused, if it helps.”

**Male public servant, age not disclosed**

“There are people who are lost in the station. They clearly need help, but shy. Maybe can have zone, if lost, stand there. Grid says, I am lost, help me. People will go and help them. People who visually see that they need help, and have time to help will just help.”

For commuters who need help, some have suggested having volunteers render assistance through small gestures and acts of help. Volunteers said those who need help must speak up or allow themselves to be identifiable as commuters with needs. Commuters also suggested visible platforms so that commuters who need help could have access to help, and those who are ready to help, could offer assistance.

**Male director in his 40s**

“Some of the stations are very big. Dhoby Ghaut – so elderly, not even those who can’t read – I have heard someone say I am not taking MRT because got lost at Dhoby Ghaut. Maybe lost in the interchange. How do you have a system to say I just tag along someone going in the same direction?”

Commuters said they would help look out for more needy fellow commuters under special circumstances such as during train disruptions. Such actions would be useful as our visually impaired commuters face tougher challenges during disruptions and often have to rely on passenger service staff who may be occupied with other duties.

**Male tertiary student in his 20s**

“Guide them. For most of the train disruption, panicking, confused, don’t know what to do. Some don’t know which way to head out. Some can help each other by directing them to correct route to the exit.”

Finally, commuters suggested a form of recognition to elevate the contributions of caring commuters and raise the prominence of such behaviour.

**Female human resources manager in her 20s**

“Recognise someone, good commuter on train. Start this recognition thing. All these stories are being shared. In train, such stories can be more prominent.”

**Male manager in his 30s**

“Just an article – create news about it. This person did very well, want to recognise with this award.”

**Male manager in his 30s**

“Is there a platform to celebrate or to thank people publicly for doing good deeds?”

The stories of their dilemmas and ideas from our commuters demonstrate the need to develop more flexible and tailored approaches rather than relying on simple ‘one-size-fits-all’ solutions for mass transit systems. By connecting with fellow commuters during their journeys, commuters can enable simpler journeys for one another in terms of accessibility and way-finding. This builds a more welcoming and caring public transport experience, especially for our elderly and vulnerable groups who will feel more at ease. These are the ‘soft’ aspects in co-creation that can make a big difference to the public transport experience.

**Engaging SG Commuters to Co-create**

To engage commuters on a wider scale on co-creation, 5,000 commuters were asked in our Rail Experience Survey if they thought they had a role to play to improve their travel experience.

Survey results showed high levels of agreement for the statements below:

**95.8%**

**“Commuters have a part to play to make the public transport journey better for all”**

**88.7%**

**“I believe a fellow commuter will help me if I ask for help”**

Commuters see that they have a role to play for better public transport journeys, and believe in shared responsibility.

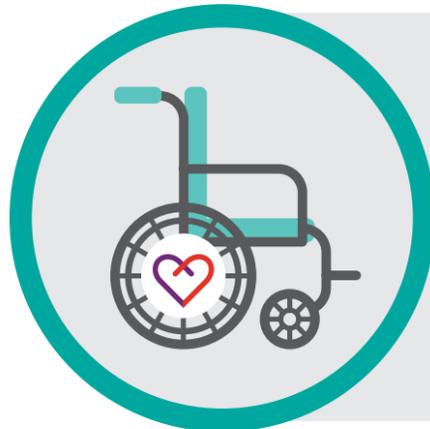
There is room to grow platforms and opportunities for commuters to help one another.

With the positive survey results and suggestions obtained, PTC was keen to see if co-creation ideas could be carried out in actual trials.

### The SGH/Outram Park MRT Story (launched on 14 August 2017)

#### First Trial: "Heart Zone"

A number of commuters who alight at Outram Park MRT Station are elderly, frail or visually impaired patients of the Singapore General Hospital (SGH) and medical centres in the SGH Campus. They can benefit from assistance and support to get to their various destinations. Under the Heart Zone initiative, commuters who need help navigating to the SGH Campus can wait at two designated meeting points (Heart Zones) located within Outram Park MRT Station for their fellow commuters to offer assistance.



#### Second Trial: "Heartwheels@Linkway"

Outram Park MRT Station also serves as an interchange station for the East-West Line and North East Line, which are connected via a 210-metre pedestrian linkway. Due to the distance, elderly commuters or those with physical difficulties (especially commuters who need to visit the hospital) can sometimes find navigating the linkway a challenge. To help them, the rail operators have provided wheelchairs under the Heartwheels@Linkway initiative, at both ends of the linkway. Commuters were encouraged to extend a helping hand to fellow commuters in need of these Heartwheels@Linkway by pushing them along the linkway.

PTC launched two month-long co-creation pilots on 14 August at Outram Park MRT Station. The pilots met with overwhelmingly positive response, with more than 1,200 commuters helped in a month. PTC decided to extend the pilots with continued support from SGH, LTA, the PTOs and new partners from the SGH Campus (Singapore National Eye Centre and National Heart Centre Singapore) for as long as they continue to benefit commuters.

#### Professor Kenneth Kwek, Chief Executive Officer of Singapore General Hospital

"The Heart Zone project provides our staff with the excellent opportunity to go beyond the hospital walls to help patients who have difficulty navigating their way from the Outram Park MRT Station to the various institutions on SGH Campus. This is a meaningful partnership that enhances our patients' journey even before they enter our Hospital grounds."

Madam Shirley Lee (her real name) is a retiree who lives in East Coast. She takes the MRT (East-West Line) to get to her eye appointments at the Singapore National Eye Centre (SNEC). As her appointments are made every six months, she finds it difficult to remember which exit to use once she exits Outram Park MRT Station. The situation was made worse with all the hoardings around the station due to the construction of the Thomson-East Coast Line. Today, as Madam Lee exited the fare gantry and took the escalator up to the street level, she spotted the Heart Zone and sat down on the orange metal bench to wait for help. Shortly after, a fellow commuter working at SGH spotted her and asked if she needed any assistance. Madam Lee told the SGH staff she could not recall the way to the SGH Campus shuttle bus pickup point. The SGH staff told Madam Lee that she would be happy to walk her to the shuttle bus pickup point.



PTC solicited feedback from more than 700 commuters about the two initiatives and most of them said such initiatives are beneficial for our elderly such as Madam Lee, and agreed that the initiatives made travel to SGH easier and more convenient. Commuters also wanted to see more Heart Zones at MRT stations near hospitals.

Volunteers enjoyed the opportunity to do good and make a difference to someone's day. They felt only minimal amount of time and effort were needed on top of their daily rhythm of life.

**Female commuter who volunteered at the Heart Zone**

"It doesn't take a lot of effort to help someone to go to SGH, especially if you are working there. But it makes a lot of difference to the patient who is lost. You also feel good after helping someone, that you have made the patient experience better."

Volunteers would recommend others to do the same. They believed the trials could transform Singapore's public transport culture into a more caring one.

**Female commuter in her 50s**

"Welcome more of such initiatives, makes for a more caring society."

Volunteers hoped to start a virtuous cycle, especially in anticipation of their own aging.

**Volunteer at Heart Zone**

"Having heard about the Heart Zone initiative, I will definitely volunteer to help out whenever I exit Outram Park MRT Station. I help people today, I hope other people can also help me next time when I become older."

Caring commuters need to be a visible part of public transport culture. Active publicity by all public transport stakeholders is necessary so that commuters can draw inspiration from one another. Many commuters told PTC that the initiatives were good and wanted to see them continue. Commuters asked for more publicity so that more volunteers would step forward and more commuters could access help.



**The Bukit Panjang Light Rail Transit ("BP LRT") Story**

Mrs Sunita Pavate (her real name) lives in the West, and travels to Choa Chu Kang MRT Station by the North-South Line in order to transfer to the BP LRT system. She greatly appreciates the convenience of having the LRT system as it reduces her travelling time. However, she finds that the air-conditioning in the LRT can be improved as it is too stuffy.

She likes the new trains as:



**Air conditioning is more comfortable**



**Cabins are cleaner**

Ms. K.C. Tan (her real name) lives near Pending LRT Station. Although Ms. Tan has never encountered an LRT disruption before, she wishes to receive timely information if a disruption were to happen so that she can avoid the disruption and make alternative plans quickly.

The views of Mrs Pavate and Ms. Tan about the Bukit Panjang LRT echo those of commuters engaged by PTC. The LRT attracted public attention after several breakdowns and problems. A tender will be awarded this year to revamp the BP LRT. As this major task would take several years, PTC headed to Bukit Panjang to explore if the residents there, grassroots leaders, LTA and SMRT could work together on an interim project to mitigate commuters' daily challenges. PTC visited all 14 LRT stations along BP LRT to conduct a survey to understand the problems faced by the commuters there.

PTC engaged commuters and community leaders<sup>3</sup> to understand their thoughts and sentiments. PTC found that they valued the BP LRT. Instead of overhauling the system, they suggested more targeted improvements such as improving the air-conditioning of the older trains; increasing headway and frequency as well as to reduce crowding during peak hours. PTC immediately brought the feedback to both LTA and SMRT and also took the opportunity to better understand the issues faced by the latter.

Community leaders expressed willingness to partner and co-create with SMRT to help disseminate information to residents during disruptions. This could address an immediate major need so that commuters would avoid heading to the LRT station during a train disruption and be able to make other alternative plans. SMRT and the community leaders will work through the communication mechanism as well as enhance the comfort of the BP LRT commuters.

Disruption management is one area where PTOs can improve. In our focus group discussions, commuters wanted

- to know of any ground developments before they reached the affected station(s);
- channels for commuters to report delays and send messages so that others are kept informed, and
- to help others by offering information.

**Female undergraduate student in her late teens**

"Wondering whether if possible to have official channels for people to report delays even if minor. Now see only from official operators. People like to stay informed and won't have unnecessary panic. Kind of prevent social media panic."

**Female hotel staff in her 30s**

"Encourage commuters to post on social media."

**Female revenue management officer in her 30s**

"I will tell other people take other alternative because there is train disruption. I will tell there is no service. Maybe you have to find alternatives."

**PTC's Rail Experience Survey findings showed that**



of the respondents were not satisfied with disruption management, especially on the speed and clarity of information transmitted.



**Mr Foo Hee Jug, CEO, Ng Teng Fong General Hospital**

"Ng Teng Fong General Hospital is uniquely positioned and well-connected to Jurong East MRT Station via the J-Walk pedestrian network. While the way to the hospital is directly accessible and very convenient, some patients, especially the elderly and those with mobility issues, will definitely appreciate the extra help to navigate their way from the MRT station, which can be very crowded during peak hours. Having a dedicated Heart Zone in the station will certainly focus the attention of our staff, volunteers and other caring commuters to look out for and extend their help to our patients. We are very happy and fully supportive to be part of this meaningful partnership to make trips to the hospital more hassle-free for our patients."

**Dr Eugene Fidelis Soh, CEO, Tan Tock Seng Hospital**

"Many of our patients and caregivers use public transport to get to and from our hospital. Some, especially the elderly and the physically challenged, need some assistance to get around. We are very happy to partner PTC in this effort by activating our staff and volunteers to watch out for commuters at the Novena MRT Station and help those in need."

**Recommendations for co-creation in public transport**

Our commuters have given PTC practical and innovative ideas through focus group discussions, and have expressed clearly in our Rail Experience Survey that they believe in a shared responsibility to make public transport journeys better for all. These sentiments have been validated by the overwhelmingly positive response received for the co-creation trials at Outram Park MRT Station. Our commuters' voices indicate that there is a positive case for co-creation to be developed as a deliberate part of the public transport landscape.

**Expansion of initiatives at more MRT stations with the Hospital sector**

In 2018, PTC will expand Heart Zone and Heartwheels@Linkway in collaboration with hospitals and PTOs. We will work with the two hospitals mentioned specifically by commuters, at Jurong East MRT Station and Novena MRT Station respectively. Each hospital will have to refine and develop the initiatives to suit their patients' needs and profiles. Both hospitals will work out the details on wheelchair assistance, volunteer recruitment and coordination, and awareness-building of the initiative for patients to access help.

<sup>3</sup> Dr Teo Ho Pin and his community leaders



### LTA and PTOs to drive ground-up co-creation efforts

Through our ground engagement regarding the BP LRT, PTC learnt that the community leadership wanted to take greater ownership in improving the travel experience for their constituents. This included wanting to work closely with SMRT to disseminate information to them so that residents could be alerted before they reached the station.

PTC recommends that

- individual MRT stations take the lead to identify key stakeholders in their immediate community and establish direct communication links with them.
- the stakeholders (SMRT, community leaders, constituents and LTA) engage in productive dialogue sessions on the overhaul of the BP LRT system so that the final outcome would benefit from joint solutioning and the sharing of expert opinions. Constituents will also feel invested and involved in the process, as their inputs will lead to practical enhancements.

A scenario could also be for Caldecott MRT Station staff to have a communications channel to alert the nearby Singapore Association of the Visually Handicapped in a timely manner during disruptions. As the visually impaired face even more challenges during a disruption, more can be done to assist them.

### Expansion of more Heartwheels@Linkway ideas at MRT stations

With regard to the Heartwheels@Linkway initiative, commuters felt that other MRT stations with long linkways such as Dhoby Ghaut and Serangoon MRT stations would benefit from the initiative. Rail operators should review existing stations to determine if there is a need to provide wheelchairs for commuters to mitigate a long walk.

PTC's direct engagement with commuters on the ground have brought up insightful feedback and lessons to improve way-finding and disruption management. Commuters helped to solve gaps for a 'no-man's land' between the MRT station and the hospital, and brought human warmth to a simple journey. The willingness of Dr Teo Ho Pin's team to be the first responders to disseminate timely information has also revealed an untapped resource for SMRT to improve commuter experience during disruptions. Both co-creation examples show how gaps in public transport can be addressed through 'soft' measures.

LTA and PTOs should study how a dynamic structure can be set up to take co-creation to the next level to fund, drive and sustain a caring commuting culture.

PTC will also develop more co-creation trials with a focus on our elderly, as well as on enhancing disruption management measures.

Given that commuters suggested an award to encourage and recognise caring commuters and inspire others, PTC recommends that a caring commuter award be introduced by LTA on an annual basis.

Commuters' feedback showed that they:



felt happy helping fellow commuters



preferred visible opportunities to offer and receive help



wanted an award to recognise caring commuters



enjoyed the opportunity to do good and make a difference to someone's day



believe that they have a role to play for better public transport journeys



welcomed more co-creation initiatives to grow a more caring society

The next section presents an understanding of the needs of our commuters for an inclusive public transport, with a focus on visually impaired, and Deaf and Hard-of-hearing commuters based on our ground engagement efforts.

# A More Inclusive Ride



## Visually Impaired Commuters

An inclusive public transport is anchored by a commuting culture that is caring and welcoming of different needs. This culture can be nurtured through both good customer service and caring acts from commuters. Four broad themes (from PTC's first Advisory Report) that concern the general commuting public as well as wheelchair users are:

- Inclusive Public Transport - customer service
- Access to Information
- Good Neighbours on Public Transport – commuter actions
- Good Design

These themes are also relevant to visually impaired commuters.

PTC engaged clients from the Singapore Association of the Visually Handicapped to better understand their commuting needs.

Mr Francis Tay (his real name), age 57, has low vision but he still travels independently. He uses a white cane when commuting. Whenever commuters see him standing beside the road with his white cane, they will offer their help, although some may not know how to best help him. When taking the bus, he wishes that there is a better way to know when his bus has arrived. He also wishes that commuters can be more specific in their instructions to him when they are offering him a seat.



**Inclusive Public Transport (through good customer service)**

Visually impaired commuters said that they may fall when they are alighting from a bus that has not stopped near enough to the kerb.

**Male in his 60s, currently not working**

“I tend to move to the front door, never the back door. Because of (the) crowd, the driver also (will) know whether I am coming down properly or not... Driver advised me so many times. Uncle, don’t go to the back. I cannot see you.”

Bus captains in Singapore are trained to stop as near as possible to the kerb. Stronger emphasis can be made during trainings for bus captains to pull close to the kerb. They can also be reminded to do so as part of their refresher trainings. In addition, bus captains can encourage visually impaired commuters to exit from the front of the bus for added safety.

**Access to Information**

To enjoy ease of travel, visually impaired commuters taking buses need to know the service number of the bus arriving at the bus stop and also when they have reached their destinations.

**Male retiree in his 60s**

“To summarise – two problems we all face. How do you know (your) bus is coming and has arrived? How do you know when to get down? Some routes are straight routes. Not quite easy to tell (how many bus stops have passed).”

Allow visually impaired commuters to know the service number that is arriving at bus stops and when they have reached their destinations via the following ways:

- a. Know Your Commuter by Bus Captains. PTOs can deepen their training of bus captains to be more sensitive when they ply routes that are habitually used by the visually impaired. Bus captains on seeing a visually impaired commuter (such as one carrying a white cane) at a bus stop could stop and announce the service number of the bus. The latter is now implemented by two PTOs. Other PTOs can adopt this practice. In the United States of America, the Americans with Disabilities Act requires bus drivers to open the bus door and announce the route name and number to commuters. Since 2014, automated audio announcements are made inside and outside Metro Transit buses in Minnesota to provide way-finding information to passengers. Metro Transit also worked with the visually impaired and cognitively disabled riders to formulate their current stop announcement system. External announcements are made each time the driver opens the front door.

- b. Provide more information to clients by the Singapore Association of the Visually Handicapped and SG Enable on how to

- screen readers that read apps (converting text to speech) and allow the visually impaired to use apps like SG Next Bus and My Transport to flag the correct bus at bus stops.
- Moovit, which provides audio alerts when the right bus is arriving or when it is reaching the desired bus stop; or
- iMove, which reports GPS locations in real-time.

LTA is also conducting trials on audio announcements of the next stop in some buses.

**Good Neighbours on Public Transport**

Visually impaired commuters are sometimes uncomfortable with the responses of other commuters and hope for more acceptance. More Helpfulness would aid their journey.

**Female retiree in her 70s**

“(There was) one incident (that happened when I was) holding (a) tiny white cane. (There were) a lot of people. (I took) 145... (and stood) near the driver. There (was) a man. When the bus jerked, I accidentally touched (him). “Why you keep on touching me?” “I’m so sorry, I am visually impaired.” “How do I know you are visually impaired?” Even (though) I told him already, he (was) still like that. Terrible.”

**Female therapist in her 30s**

“Some public scared of white cane. Some never come across people (who are) visually (impaired), (and) have fear. Old people superstition. I sit in bus old people see and run away. This white cane is like ghost – all move away.”

Some commuters are helpful and want to assist the visually impaired but do not know how to do it properly and safely.

**Male retiree in his 60s**

“Don’t pull us by the cane...I ever have people pull me by the T-shirt. Stop, don’t do that to me. Hold (out) your elbow. Very rude by pulling my shirt, and pulling my cane, like a dog, I am running behind. Very rude to see.”

**Male in his 60s, currently not working**

“Sometimes go up the bus,(they say) sit here here here. I don’t know where the “here” is... Normally (should say) 12 o’clock, 3 o’clock, 6 o’clock, 9 o’clock...The seat was here once, here here here, and I went and sat (at the place) without the seat. Almost fell down.”

Some commuters may push and scold them especially when they do not carry a white cane.

#### Female retiree in her 60s

"People push. Bus inside. People push and scold. Why you don't go in?"

#### Female teacher in her 50s

"Basically they don't know we have problems with (our) eyes (as) most of us look normal, unless we take the cane. Sometimes we don't take the cane."

More public education on commuting with visually impaired commuters could help the public to be more sensitive to the needs of visually impaired commuters who do not carry a cane. Public education can also include information on the appropriate way to help a visually impaired person on public transport. Such initiatives can be introduced under the Public Transport Graciousness campaign.

#### Volunteer at SAVH

"Public education in regard of cane. Not just cane (means) visually impaired. (There are) different levels of blindness. Public education in regard of this would be good. People and commuters in MRT station are able to help more. Important be it passer-by or commuters, bus captains, a lot of them *paiseh* to open the mouth. Actually do you need help?"

#### Good Design

Commuters with low vision may not be able to detect the last step on a flight of stairs or the escalator.

#### Male retiree in his 60s

"The last few steps going down, the last one – one corner the angle, there is a step – draw the yellow line to be aware of the step going down... sometimes we do trip."

#### Female therapist in her 30s

"Escalator at old MRT station. Don't have yellow line. Escalator old one all black, if have yellow then can see."

According to LTA's Architectural Design Criteria for MRT stations, "There shall be a permanent tonal contrast between treads and nosing for all steps." PTC recommends that the painting of yellow lines be consistently applied at older MRT stations for flights of stairs and for escalators for commuters with low vision.

Visually impaired commuters face challenges at fare gates. They

- may not be able to tap their fare card accurately on the reader,
- do not know if the card has been properly tapped, and
- need a longer time to walk through the fare gate.

#### Male retiree in his 60s

"I think if you have to tap your card into the train station, when you tap your card in, as a blind person (I) do not know how much is being deducted. Sometimes you tap, you are not sure whether the card registered and (the) gate opened. There were such instances, go in and cannot come out because card not properly tapped."

#### Female therapist in her 30s

"The tapping card, cannot aim properly. Difficult."

In Switzerland, Swiss South Eastern Railway is exploring a Be-in/Be-out hands-free ticketing system on all its trains. Travellers' transactions are automatically captured via Bluetooth on a smartphone app when they enter and exit the trains. The system then calculates the appropriate fare for the route. In Dubai, the Roads and Transport Authority of Dubai is also developing proof of concept for Be-in/Be-out for its buses. It was reported that "Once the commuter hops on the bus, the onboard smart fare collection system immediately registers the time of riding and the location of the bus, and processes automatically the fare payment required."<sup>4</sup> LTA is planning to conduct a proof-of-concept trial for hands-free fare ticketing and this will benefit commuters with disabilities.

#### Deaf and Hard-of-hearing Commuters

PTC also engaged clients from The Singapore Association for the Deaf. Deaf and Hard-of-hearing commuters face special challenges because their disabilities are not readily discernible. Other commuters and public transport staff may not be aware that they may need help.

Mr Neo Hock Sik (his real name) is 52 years old and is Deaf. He looks like any regular commuter. He navigates the public transport system well, and uses it regularly for both work and social activities. At times, Mr Neo has to interact with other commuters or service staff during his commute and he occasionally finds it difficult. For example, when asking for directions from staff, Mr Neo finds that not all service staff are fluent in English and some are unable to communicate with him through written English.



<sup>4</sup> Source: "RTA displays a smart system to pay bus fare," Emirates 24/7, 21 October 2017.

### **Inclusive Public Transport (through good customer service)**

Deaf and Hard-of-hearing commuters like Mr Neo who are English educated find it difficult to be understood when they write their destination in English as some service staff may not be familiar with the English names of these destinations.

#### **Female in her 50s**

"If, for example, I need to find a place, I have it written on paper in English, sometimes the bus captains...may not understand what I have written. They reply in Mandarin which I don't know. So I have to get down from the bus because I didn't know whether this is the correct bus to take to get to where I want to go."

PTOs can help Deaf and Hard-of-hearing commuters who are English educated, through greater emphasis on bus captains' familiarity with the names of the landmarks in English along their routes.

#### **Access to Information**

When announcements are made on buses or trains, Deaf and Hard-of-hearing commuters are unable to hear them. This is especially challenging in situations like train disruptions.

#### **Male tech executive in his 50s**

"Can you please write the announcement on a paper and hold it up so that Deaf people can see what is happening rather than the announcement they can't hear. And then when there is a lot of people and it is very crowded right, everybody is pushing their way out and all that, it is very difficult to get help. So why not you get the staff at the train station to hold up the announcements at the MRT stations so that they can see straightaway."

#### **Male production staff in his 60s**

"Recommends lighting or siren. So once (we) see the flashing lights, (we) will understand that it is an indication of service disruption."

LTA and PTOs have now standardised notices displayed when there are train disruptions. However, there are other announcements that Deaf and Hard-of-hearing commuters have no access to. In Europe, the EU research project aim4it developed an aim4it app that provides disruption information in sign language. Should a disruption occur along a planned route, the passenger receives a push notification in real-time. This notification consists of a video of an avatar signing the text. The aim4it app was tested on wheelchair users, visually impaired and Deaf and Hard-of-hearing persons as well as passengers without impairments in Vienna, Austria, and Karlsruhe, Germany. LTA can explore the feasibility of this option.

Deaf and Hard-of-hearing commuters said that they cannot predict the interval before MRT doors actually close even though there are flashing lights. In addition, the flashing lights may be too dim at times.

#### **Male retail assistant in his 30s**

"Rings cannot hear, difficult for Deaf. Deaf see blinking means door is closing soon, always rush in. Need to add timer, with a blinking so know how many minutes more... Easier for Deaf people to see with timer and blinking."

#### **Male in his 60s, currently not working**

"Lights have no timing. Maybe suggest light 5, 4, 3, 2, 1. Either a timer with blinking light or do like traffic light - green, amber, red."

Countdown timers on display panels at the platforms will benefit Deaf and Hard-of-hearing commuters. This recommendation has already been proposed in the chapter 'SG Commuters' Rail Experiences' to benefit other commuters.

Some buses do not have an indication of what the next stop is and Deaf and Hard-of-hearing commuters have difficulty knowing where they are, especially at night.

#### **Male artist in his 50s**

"In the buses, it will be good to have LED panels where you can announce where the next bus stop is or where the bus is heading. So it helps us to know where we are and where the bus is stopping at."

#### **Female file clerk in her 50s**

"At night, sometimes cannot even see the bus stop. Will be good to have the captioning on bus to show which bus stop that is."

Some trains do not have indicator lights that show where the train is, the next stop and the direction of travel.

#### **Female administrator in her 50s**

"I hope (in) the MRT train (to) see the lights that tell me the name of the next station. That day I was going to Tanjong Pagar, I see Raffles Place blinking, I know Tanjong Pagar next. I realise not all MRT has this visual. This is a very good visual for us. To let us know. Deaf depend on our eyes. For you, announcement you can hear, but for Deaf, we can't. We see things. More visible."

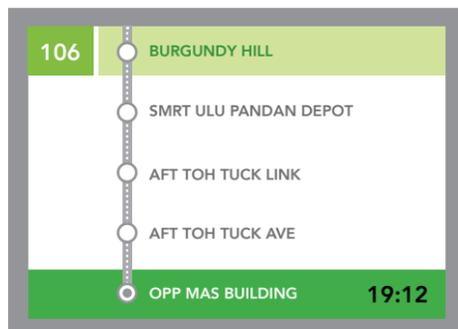
The accuracy of information showing the next stop for trains is an issue.

#### **Male fashion designer in his 50s**

"I was in the train where there were LED panels throughout that would explain the next destination. I was planning to go to Marina Square – but I don't know why for the ride, the panel was wrong and (showed the train as) going back to Jurong East. I was very puzzled. Please don't play with us Deaf people. We really need that information from the panel to get to where we want to."



In Singapore, LTA started a trial in December 2016 for a new information display system on one bus plying the service 106 route (operated by Tower Transit Singapore). The LCD panel displays information such as bus service number, current and upcoming bus stops and the end destination. LTA will install this system on new buses. This will over time alleviate the problem of commuters not knowing what the next stop is.



In London, new digital route displays will be installed on London's 51 fully electric buses on two bus routes. The displays will show the next five bus stops in the same style as the Underground maps. Information on how the Tube and Overground services are running will also be displayed, as well as local street maps if a bus diverts from its usual route due to roadworks.

### Good Neighbours on Public Transport

While the trains are being upgraded, Deaf and Hard-of-hearing commuters could also seek help from other commuters through written messages. PTC recommends that other commuters be reminded that there are commuters with 'invisible' disabilities and render assistance if approached. Such reminders can be made part of the Public Transport Graciousness Campaign.

Deaf and Hard-of-hearing commuters may face discomfort from the reactions of other commuters to their disability. A Deaf commuter shared that her children often felt embarrassed and uncomfortable whenever she used sign language to communicate with them while on public transport. They eventually requested her to stop signing because they noticed how other commuters were staring.

### Female account executive in her 40s

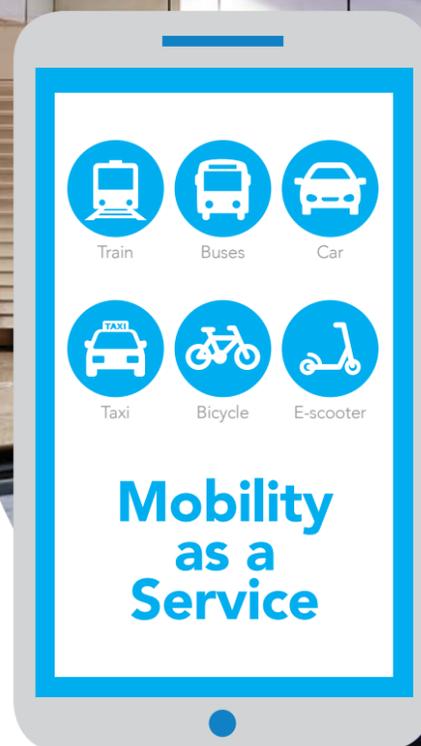
"My experience is that when we start signing, other people will look at us very weird. Because I have two young children. So when I bring them out and they take MRT, when I start communicating with my children by signing, my children will feel very shy and say mum don't sign to me...So because of all these looks from other people (we) feel weird."

However, PTC is mindful that not all commuters with special needs are comfortable with being clearly distinguished from other commuters on our public transport system. There needs to be an ongoing conversation with the Association, LTA and PTOs.

To make it easier for others to help those with special needs, in Tokyo, a ribbon-shaped badge was created as a discreet way to indicate that the wearer has an invisible disability and may need help, despite appearing normal.



# A Shared Future for SG Commuters



Having obtained a rich perspective of SG Commuters' views and have offered recommendations on how best to address their needs, this chapter now discusses how technology like MaaS can benefit SG Commuters' door-to-door journey.

## Mobility as a Service

Mobility as a Service (MaaS) is an innovative transport solution that has great potential as an enabler for Singapore public transport. It can change the way SG Commuters travel in the future. It is

- Able to meet the door-to-door needs of the general commuter, and
- Inclusive, meeting the needs of
  - The visually impaired
  - The Deaf and Hard-of-hearing
  - Wheelchair users
  - The elderly

MaaS is a "combined mobility, which means offering integrated mobility services with public transport as a backbone complemented by other modes such as car-sharing, bike-sharing, taxis, cycling and on-demand services."<sup>5</sup> Users can pay-per-use or pay a monthly subscription for their chosen transport packages. The benefit of MaaS to commuters, such as special needs commuters, is that government entities can use their power to foster equity in transportation provision, ensuring geographic coverage and accessibility, and better serve underserved populations.<sup>6</sup>

MaaS is an attractive option for enhancing door-to-door mobility because of several key characteristics. They are:

- integration of transport modes;
- one platform to plan, book, pay and obtain real-time information;
- participation of multiple parties including suppliers of transport services, users and platform owners;
- demand-oriented with users choosing what is best for them;
- personalised to users' preferences and recommendations, and
- customisable with the options to modify service offered.<sup>7</sup>

<sup>5</sup> Source: Caroline Cerfontaine, Manager, Combined Mobility & Transport and Urban Life Issues, UITP, quoted in "Mobility Options Expand through Innovative Mobile Technologies", UITP.

<sup>6</sup> Source: Warwick Goodall, Tiffany Dovey Fishman, Justine Bornstein and Brett Bonthron (2017), "The rise of mobility as a service – Reshaping how urbanites get around," Deloitte Review, Issue 20, p 111-129.

<sup>7</sup> The full list has nine characteristics and includes use of technologies (smartphones, e-ticketing and e-payment systems and other IT infrastructure), tariff options (mobility package or pay-as-you-go) and registration requirement as well. Source: Peraphan Jittrapirom, Valeria Caiati, Anna-Maria Feneri, Shima Ebrahimiagharehbaghi, Maria J. Alonso-Gonzalez and Jishnu Narayan (2017), "Mobility as a Service: A Critical Review of Definitions, Assessments of Schemes, and Key Challenges," Urban Planning, Vol. 2, Issue 2, p 13-25.

According to the Singapore Ministry of Health, there will be over 900,000 seniors in Singapore by 2030.<sup>8</sup> SG Enable projected that the number of persons with disabilities in Singapore will reach 100,000 by 2030. Together, they will constitute a sizeable one million commuters by 2030. As Singapore society progresses, the nature of public transport must evolve to meet the changing needs of these commuters.

Transport for London (TfL) in the UK has recognised the need to improve door-to-door and other assisted transport services<sup>9</sup> for commuters with special needs. Their Assisted Transport Services programme will deliver more integrated services for customers facing accessibility challenges including more flexible door-to-door services and initiatives such as Travel Mentoring, which will help customers access the wider public transport network.

In Singapore, seniors can access MaaS services for active mobility. "With easy-to-use apps, a no-hassle ride experience, and the ability of family members to schedule rides for their loved ones from anywhere, today's ride-hailing providers have improved upon many of the challenges seniors have long faced in utilising traditional taxis."<sup>10</sup> This gives Singapore seniors a 'second chance' to regain their personal freedom and mobility.

Apart from our rapidly ageing population, the National Council of Social Service<sup>11</sup> also reported that, "with medical advancements, many persons with disabilities will outlive their parents. Considerations have to be made to enable them to live independently. There is also a growing number of persons diagnosed with autism. For many who suffer from less visible or 'hidden' disabilities, being less able to use the public transport system with confidence and ease can affect the quality of life." Innovative services that are personalised to the needs of commuters with hidden disabilities like Meet and Assist services can be offered as options on a MaaS platform. Several cities in the world<sup>12</sup> are already conducting trials on such innovative services or have implemented MaaS schemes.



Although most of these schemes currently do not offer customised door-to-door solutions for commuters with accessibility challenges, some features can be incorporated to benefit such commuters. For instance, TransitApp can show routes with options that minimise the amount of walking required. This will help seniors with mobility challenges or visually impaired commuters. In Spain, a pilot project called MobiPalma employs an app that incorporates an accessibility map for people with special needs and is accessible for the visually impaired.

MaaS may hold potential benefits for Singapore commuters as it can fill the gaps in the current public transport offerings, particularly for commuters with mobility and other challenges.

- The public transport space can be enlarged to include partners that provide transportation services, or special services that facilitate the door-to-door journey needs of these commuters.
- MaaS could partner wheelchair transport providers like SMRT London Taxi, Limo Maxi Wheelchair Transfer, and the Handicaps Welfare Association's wheelchair minibus as well as uberASSIST to meet the door-to-door journey needs of wheelchair users.
- For the elderly and the visually impaired who may have difficulty navigating train stations during transfers, or finding their way to their destinations, MaaS could include providers that offer assistance services.
- Having one platform for booking and payments is helpful for commuters who are less technology savvy. It allows others to book and pay on their behalf, so an elderly commuter who may be less comfortable with technology can still benefit from the services offered through MaaS.

<sup>8</sup> Source: SG Enable presentation at Future Mobility Symposium 2015: Solutioning for Sustainable Mobility, 18 November 2015, LTA.

<sup>9</sup> E.g., Dial-a-Ride, Taxicard and Capital Call.

<sup>10</sup> Source: Burt Rea, Stephanie Stachura, Laurin Wallace and Derek M. Pankratz (2017), "Making the future of mobility work – How the transportation ecosystem could reshape jobs and employment," Deloitte Review, Issue 21, p 181-199.

<sup>11</sup> Source: "Who Cares?: Transforming the Caregiving Experience in Singapore" (2016), p 14.

<sup>12</sup> E.g., Mobility Shop (Hannover, Germany); Moovel (Germany); My Cicero (Italy); Optymod (Lyon, France); TransitApp (USA, UK, Canada, Europe, Australia); Tuup (Turku Region, Finland); Whim (Helsinki, Finland), and WienMobil Lab (Vienna, Austria). Source: Peraphan Jittrapirom, Valeria Caiati, Anna-Maria Feneri, Shima Ebrahimigharehbaghi, Maria J. Alonso-Gonzalez and Jishnu Narayan (2017), "Mobility as a Service: A Critical Review of Definitions, Assessments of Schemes, and Key Challenges," Urban Planning, Vol. 2, Issue 2, p 13-25.



PTC can conduct focus group discussion sessions with commuters to deepen our understanding of their door-to-door needs, and test potential ideas that could arise. For example, MaaS offerings can be customised through co-created solutions that cater more effectively to the needs of seniors and persons with disabilities.

MaaS is a nascent innovation that holds great potential. As part of long-term planning, PTC/LTA can explore the possibility and implementation of MaaS by private sector providers to see if it can be a viable transport solution to Singaporeans' door-to-door travel needs.

PTC will continue to remain close to the ground and engage commuters to take in their views and suggestions.

Finally, besides the specific recommendations in the chapter, SG Commuters' Rail Experiences, pertaining to commuters' personal rail experiences, PTC's strategic, thematic recommendations are as follows:

#### Growing Co-creation in Public Transport

- Our SG Commuters agree that they too can play a part by taking ownership of their public transport experience.

They suggested visible platforms so that commuters who need help could have access to help, and those who are ready to help, could offer assistance. They also want a form of recognition to elevate the contributions of caring commuters and raise the prominence of such behaviour.

- Co-creation allows the development of more flexible and tailored approaches rather than relying on simple 'one-size-fits-all' solutions for mass transit systems. There is room to grow platforms and opportunities for commuters to help one another. Volunteers in the trials enjoyed the opportunity to do good and to make a difference to someone's day. They felt this could transform Singapore's public transport culture into a more caring one.
- Our commuters' voices indicate that there is a positive case for co-creation to be developed as a deliberate part of the public transport landscape. LTA and PTOs should grow co-creation efforts with our commuters to make the journey experience more convenient and comfortable.

#### Making Public Transport More Inclusive

(for our Deaf and Hard-of-hearing, and visually impaired commuters)

- Our Deaf and Hard-of-hearing and visually impaired commuters want public transport to be more inclusive through good customer service, access to information, more acceptance from other commuters and better design. The needs of these two groups to improve their journey experience should be addressed.

#### Enhancing the door-to-door needs of commuters through innovative options such as Mobility as a Service (MaaS)

- MaaS is a nascent innovation that holds great potential. As part of long-term planning, PTC/LTA can explore the possibility and implementation of MaaS by private sector providers to see if it can be a viable transport solution to Singaporeans' door-to-door travel needs.
- PTC can engage commuters to deepen our understanding of their door-to-door needs and test potential ideas. For example, MaaS offerings can potentially be customised through co-created solutions to cater more effectively to the needs of general commuters, seniors and persons with disabilities.

# Conclusion

2017 was an eventful year for the rail industry. It provided a significant opportunity for PTC to truly understand the views and sentiments of SG Commuters. PTC engaged commuters extensively and found a promising and positive picture of SG Commuters. The majority continue to be satisfied with and have confidence in our public transport. They have a sense of ownership and are willing to help shape their public transport experience.

SG Commuters are resilient. When faced with disruptions, because of the expansion of the rail network, they are able to look for alternative routes to reach their destinations. What they have requested for is faster and clearer information to aid them in making alternative plans.

Our SG Commuters care. On their daily journeys, many have extended a helping hand to fellow commuters who needed help, from giving directions, to walking with a lost commuter, to guiding a visually impaired commuter to his destination. Their efforts help make public transport more inclusive for seniors and persons with disabilities. The solutions do not come from the Government alone and commuters have, and can continue to play a part in improving their public transport journey experience. Besides commuters, PTOs have been deeply supportive in carrying out the co-creation initiatives and their efforts are commendable.

It is important for PTC to continue to obtain views from the ground through various channels. These include extensive face-to-face discussions and long-term continual engagement with a wide spectrum of commuters from different demographic groups and across geographical areas in Singapore. We believe this is the best way to obtain an authentic understanding of our commuters - not just of their needs, but their thoughts, ideas, capacity to contribute and even aspirations. This is essential in order for PTC to continue to be their voice to improve public transport in Singapore.



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