

REVIEW OF REGULATIONS FOR CARGO BICYCLES, CARGO TRICYCLES, RIDER-ONLY TRICYCLES AND RECUMBENTS ON PATHS AND ROADS

Recommendations by the Active Mobility Advisory Panel

Submitted to:
Minister for Transport Mr S Iswaran
on 20 February 2023

Contents

1. Executive Summary.....	3
2. Background	5
3. Stakeholder Engagement.....	9
4. Panel’s Recommendations.....	13
5. Conclusion.....	17
6. Appendix	18

1. Executive Summary

- 1.1. The Active Mobility Advisory Panel (AMAP) was set up in 2015 to guide the safe use of active mobility devices. These include bicycles, power-assisted bicycles (PABs), personal mobility devices (PMDs) and personal mobility aids (PMAs). Over the years, the Panel has recommended various rules and guidelines to support the safe and sustainable growth of active mobility in Singapore.
- 1.2. The growth in popularity of cycling in recent years has not been limited to conventional bicycles. Other types of active mobility devices such as cargo bicycles, cargo tricycles, rider-only tricycles and recumbents have grown in popularity in European and North American cities and provide additional benefits to some users. While such devices are only starting to enter the local market, **it is important they are used in a safe and responsible manner in Singapore, alongside existing path and road users.**
- 1.3. As part of its review, the Panel studied the practices of overseas jurisdictions and drew findings from a series of public consultations, including several Focus Group Discussions (FGDs). **Participants recognised the value of these devices, as sustainable and healthy forms of commutes.** For example, cargo bicycles could substitute cars for short-distance journeys for both personal and commercial uses, cargo and rider-only tricycles were more stable active mobility options for seniors, and recumbents catered to riders with medical needs. **At the same time, participants raised concerns that these devices generally tended to be larger than conventional bicycles and could lead to congestion on paths or added difficulty for vehicles overtaking them on roads,** and that recumbents with lower profiles may not always be visible on the roads, especially if they are in motorists' blind spots.
- 1.4. Considering the effectiveness of and trade-offs for various measures, **the Panel recommends regulating the devices by introducing the following set of new rules and guidelines. The Panel believes that the recommendations strike a balance between facilitating more types of devices to be used on paths and roads, with accompanying new rules to ensure the safety of all path and road users:**

Device¹ usage on paths

- a. Allow cargo bicycles, cargo tricycles, rider-only tricycles and recumbents on footpaths and cycling paths subject to existing requirements for devices, i.e. ≤ 70 cm in width and ≤ 20 kg in unladen weight.

Device usage on roads

- b. Allow cargo bicycles, cargo tricycles, rider-only tricycles, and recumbents on roads subject to a width and/or length device criteria deemed allowable by the Government, to mitigate concerns about their larger sizes, such as the difficulty for other vehicles to overtake them. For consistency, the device criteria should be extended to all active mobility devices permitted for use on roads, such as conventional bicycles and PABs.

¹ Unless otherwise specified, device(s) refer to non-motorised devices.

- c. Introduce a rule for recumbents to be installed with a bright-coloured flag on a pole of a reasonable height when used on roads, to improve visibility to motorists.

Motorised devices

- d. Motorised cargo bicycles, cargo tricycles, rider-only tricycles, and recumbents to be disallowed on paths and roads, which can be reviewed again when recognised international standards are available.

Additional recommendations: Use of bicycle trailers and carrying of passengers

- e. Continue to allow bicycle trailers on footpaths and cycling paths provided the device and the trailer meet the $\leq 20\text{kg}$ unladen weight and $\leq 70\text{cm}$ width criteria. Bicycle trailers should continue to be disallowed on roads.
- f. Allow cargo bicycles, cargo tricycles and rider-only tricycles to carry passenger(s) on paths and roads, provided they comply with the current rules on carrying of passengers on conventional bicycles and PABs (i.e. being equipped with a properly constructed seat or carrier for passenger(s) under the age of 12 years, or a seat designed for passenger(s) aged 12 years or above). This includes a seat designed for a passenger or a properly constructed seat or carrier located within the cargo compartment of cargo bicycles and cargo tricycles.

2. Background

- 2.1. Several types of active mobility devices such as cargo bicycles, cargo tricycles, rider-only tricycles and recumbents have grown in popularity in European and North American cities. While these devices are not widely used locally, the use of such devices has been observed in Singapore, with several social groups advocating these devices as an alternative form of commute that is green and healthy. The Panel has studied these devices, recognising that given our space constraints, it is important that they are used in a safe and responsible manner in Singapore, alongside existing path and road users.
- 2.2. Table 1 below summarises the existing device criteria for cargo bicycles, cargo tricycles, rider-only tricycles, and recumbents, and whether they are currently allowed for use on footpaths, cycling paths and roads in Singapore. The existing regulations were introduced for active mobility devices that were commonly available at that point in time, and their definitions may not neatly extend to novel devices. For instance, while cargo bicycles and two-wheeled recumbents currently meet the definition of conventional bicycles and are thus allowed on paths and roads (provided they meet the respective device criteria), rider-only tricycles and three-wheeled recumbents are only allowed on paths but not on roads, even though they are similar in construct.
- 2.3. Given that such novel devices may become more common, the Panel has thus undertaken a review. In doing so, the Panel has taken a calibrated approach, allowing the devices to be used so that more people can benefit from them while prioritising the safety of all path and road users. The review also aims to ensure that rules are clear and relevant so that the public can more easily remember and follow them, even as we develop Singapore's active mobility landscape in a safe and sustainable manner.

Table 1: Existing device criteria of the devices under review and where they are allowed for use today. Current device criteria listed is based on the devices' definitions under the relevant legislation.

S/N	Device under review	Sub-category	Examples (not exhaustive)	Where the device is allowed for use		
				Footpaths <i>Device Criteria:</i> (a) $\leq 70\text{cm}$ width; and (b) $\leq 20\text{kg}$ unladen weight	Cycling Paths <i>Device Criteria:</i> (a) $\leq 70\text{cm}$ width; and (b) $\leq 20\text{kg}$ unladen weight	Roads
1	Bicycle - 2-wheeled device built to carry the rider in an upright position	Cargo²	 <i>Front-load cargo bicycle Image: Larry vs Harry</i>	Allowed	Allowed	Allowed
2	Tricycle³ - 3-wheeled device built to carry the rider in an upright position	Cargo	 <i>Rear-load (left) and front-load (right) cargo tricycles Image: LTA (left) and Christiania Bikes (right)</i>	Unspecified	Unspecified	Allowed

² Cargo refers to a type of bicycle or tricycle built to carry loads, typically with a compartment installed at the front and/or rear of the device.

³ The term "tricycle", for the purposes of this report, refers to a 3-wheeled device built to carry the rider in an upright position, and is not to be confused with the same term defined under the Road Traffic Act 1961, which refers to a 3-wheeled pedal vehicle constructed or adapted for the carriage of goods only.

		Rider-only⁴	 <p><i>Rider-only tricycle Image: Pashley Cycles</i></p>	Allowed	Allowed	Not allowed
3	Recumbent <i>- Device built to carry the rider, typically in a reclined position. They also include reclined manual hand-cycles.</i>	2 wheels	 <p><i>2-wheeled recumbent Image: HP Velotechnik</i></p>	Allowed	Allowed	Allowed
		3 wheels	 <p><i>"Tadpole" design 3-wheeled recumbent Image: ICE Recumbent Trikes</i></p>	Allowed	Allowed	Not allowed
4	Motorised bicycle	Cargo	Visually similar to non-motorised cargo bicycles (refer to S/N 1)	Not allowed	Not allowed	Not allowed
5	Motorised tricycle	Cargo	Visually similar to non-motorised cargo tricycles (refer to S/N 2)	Not allowed	Not allowed	Not allowed

⁴ Rider-only refers to a type of device built to carry the rider only, and without a cargo compartment for loads.

		Rider-only	Visually similar to non-motorised rider-only tricycles (refer to S/N 2)	Not allowed	Not allowed	Not allowed
6	Motorised recumbent	2 wheels	Visually similar to non-motorised 2-wheeled recumbents (refer to S/N 3)	Not allowed	Not allowed	Not allowed
		3 wheels	Visually similar to non-motorised 3-wheeled recumbents (refer to S/N 3)	Not allowed	Not allowed	Not allowed

3. Stakeholder Engagement

- 3.1. The Panel members tried out cargo bicycles and 3-wheeled recumbents, as well as held a series of FGDs with various stakeholders to gather their views and concerns on the use of these devices on paths and roads.

Experiential Try-outs

- 3.2. From the try-outs, the Panel gained a first-hand understanding of the dimensions of the devices, the handling and steering capabilities of the devices, and the challenges with their usage on paths and roads. Retailers and users also shared their views on existing rules and guidelines, as well as their observations of the device demand in Singapore. The Panel noted that, given the unique construct of the devices, prices in the market tended to be high and hence deterred the take-up of such devices. For example, recumbents were typically used by people with specific needs, such as those with mobility challenges or who are unable to sit upright due to medical conditions.



AMAP's engagement with Laidback-HPV (a recumbent interest group) in June 2022 | Image: LTA



AMAP Chairman, Senior Parliamentary Secretary Baey Yam Keng trying out a recumbent in June 2022 | Image: LTA



AMAP members trying out a Bullitt cargo bicycle in June 2022 | Image: LTA

Focus Group Discussions

3.3. The Panel also conducted FGDs with stakeholders of different profiles with the following objectives:

- Understand the needs of cyclists and companies who use or intend to use cargo bicycles, cargo tricycles, rider-only tricycles, and recumbents; and
- Understand the concerns and views surrounding the use of these devices on paths and roads.

3.4. The participants included pedestrians, motorists, bus captains, cycling enthusiasts, food delivery riders, cargo bicycle and cargo tricycle riders from cleaning companies, recumbent riders (including para-cyclist representatives), and PMA users.

FGD sessions led by AMAP Chairman, Senior Parliamentary Secretary Baey Yam Keng



Group photo of the attendees in the FGD for Cargo Bicycles and Cargo Tricycles on 17 June 2022 | Image: LTA



Group photo of the attendees in the FGD for Recumbents on 21 June 2022 | Image: LTA



AMAP Chairman, Senior Parliamentary Secretary Baey Yam Keng (in white) sitting in at a breakout session during the FGD on 21 June 2022 | Image: LTA

3.5. Findings from the FGDs include:

Finding 1: Cargo bicycles, cargo tricycles, rider-only tricycles and recumbents have value for device users and society

- 3.6. Most participants recognised that cargo bicycles, cargo tricycles and rider-only tricycles were useful for short-distance commutes to nearby amenities (e.g. supermarket for grocery shopping) and first-mile/last-mile connections. They added that cargo bicycles and cargo tricycles are used commercially such as for rubbish collection, postal services, and food delivery. Participants were also of the view that cargo and rider-only tricycles are safer for seniors compared to conventional bicycles due to their greater stability. In addition, cargo bicycles, cargo tricycles and rider-only tricycles can serve as effective substitutes to cars, ease traffic congestion on the roads, reduce carbon emissions, and provide exercise and health benefits.
- 3.7. Participants recognised that recumbents put less physical strain on riders' neck, wrists, and back during cycling. Enabling their adoption would promote inclusiveness through empowering people with mobility challenges to continue leading active lifestyles.

Finding 2: There were some concerns on potential congestion on paths and co-existence of the devices with motor vehicles on roads

- 3.8. Some participants said that cargo bicycles, cargo tricycles, rider-only tricycles and recumbents could pose some danger when used on paths and roads as they had a larger turning radius and were typically wider and heavier than conventional bicycles. Their wider profile may also result in some congestion on paths that have significant foot traffic.
- 3.9. Participants also shared that the devices' wider profiles might make it difficult for vehicles to overtake them on roads, especially along single-lane roads.
- 3.10. Participants, including bus captains and motorists, thought that recumbents were generally visible on roads, although motorists could potentially miss them at close proximity if they were in their blind spots.

Finding 3: Need for greater public education to raise awareness of the devices, promote gracious sharing and mutual understanding

- 3.11. Participants suggested having more dedicated cycling paths for device users to help mitigate conflicts among different groups, but recognised that it would take time to develop the infrastructure. Given Singapore's land constraints, there would also always be a need for users to share our paths and roads. Hence, participants suggested promoting greater public education to raise awareness of these devices and promote mutual understanding across groups.

Finding 4: Need for specific rules

- 3.12. Many participants also suggested that the Government should stipulate clear use conditions or technical specifications for these devices. For instance, for use on roads, recumbents, which are typically lower than conventional bicycles, should be made more visible to other road users. Some suggestions were for such devices to be installed with a flag on a pole of a reasonable height for increased visibility.

4. Panel's Recommendations

4.1. The Panel considered the views from the communities represented by Panel members and findings from the stakeholder engagements. After deliberation, the Panel has made several recommendations, as elaborated in the sections below. The Panel believes that the recommendations strike a balance between facilitating more types of devices to be used on paths and roads, with accompanying new rules to ensure the safety of these device users, and other path and road users.

- i. Cargo bicycles, cargo tricycles and rider-only tricycles
- ii. Recumbents
- iii. Motorised cargo bicycles, cargo tricycles, rider-only tricycles, and recumbents
- iv. Device criteria of active mobility devices
- v. Bicycle trailers
- vi. Carrying of passengers

i. Cargo bicycles, cargo tricycles and rider-only tricycles



Cargo bicycle | Image: [Larry vs Harry](#)



Cargo tricycles | Image: LTA (left) and [Christiania Bikes](#) (right)



Rider-only tricycle | Image: [Pashley Cycles](#)

- 4.2. The Panel recognises that there are various use cases for cargo bicycles and cargo tricycles. Courier and mail services typically use cargo tricycles for close-proximity deliveries, while cleaning and maintenance companies use both cargo bicycles and cargo tricycles to ferry equipment or collect refuse in areas such as parks where motor vehicles may have difficulty accessing. Individuals may also find cargo bicycles and cargo tricycles convenient for use in their daily commutes where they may have to carry loads (e.g. groceries). They are currently allowed on roads today.
- 4.3. Rider-only tricycles have a similar construct as cargo tricycles but are not designed to carry loads. They are more stable than conventional bicycles and hence users who struggle with balance may prefer using them. They are currently allowed only on footpaths and cycling paths, provided they comply with the device criteria for use on these paths.
- 4.4. Given that both cargo bicycles and cargo tricycles are already allowed on roads, the Panel recommends that rider-only tricycles, which are more stable than conventional bicycles, also be allowed on roads. To mitigate concerns about their larger sizes, such as the difficulty for other vehicles to overtake them, the Government should assess and impose width and/or length requirements for cargo bicycles, cargo tricycles and rider-only tricycles on roads (see paragraph 4.14).
- 4.5. Cargo bicycles and rider-only tricycles are currently allowed on footpaths and cycling paths, provided they comply with the existing device criteria for use on these paths. For consistency, cargo tricycles should similarly be allowed on footpaths and cycling paths, and subjected to the device criteria as described in paragraph 4.12.
- 4.6. The Panel is aware of and monitoring the development of standards for cargo bicycles and cargo tricycles, such as the DIN 79010:2020-02 standard which has been adopted by Germany. However, there is currently no equivalent international standard.

ii. Recumbents



Recumbents | Image: [HP Velotechnik](#) (left) and [ICE Recumbent Trikes](#) (right)

- 4.7. The Panel recognises that recumbents are typically used by para-cyclists and users with neck or back injuries/conditions, who find recumbents more suitable for their use compared to conventional upright bicycles.
- 4.8. Recumbents tend to be low in height, which reduces their visibility, especially if they are in the blind spots of motor vehicles on roads. The Panel recommends that the Government mandate a rule for recumbents to be installed with a bright-coloured flag

on a pole of a reasonable height, should they be used on roads, to increase their visibility to other road users.

- 4.9. The Panel recommends that recumbents be allowed on footpaths and cycling paths, subject to paragraph 4.12. On roads, apart from the requirement in paragraph 4.8, to mitigate concerns about their larger sizes, such as the difficulty for other vehicles to overtake them, the Government should assess and impose width and/or length requirements for their use on roads (see paragraph 4.14).

iii. Motorised cargo bicycles, cargo tricycles, rider-only tricycles, and recumbents

- 4.10. To ensure device and path safety, the Panel recommends that motorised cargo bicycles, cargo tricycles, rider-only tricycles and recumbents should remain disallowed on paths and roads until recognised international standards are available.

iv. Device criteria pertaining to width and weight; and rules governing active mobility devices

- 4.11. The Panel recommends that rules pertaining to the device criteria of active mobility devices should as far as possible be consistent across all devices.
- 4.12. Under prevailing regulations, all active mobility devices used on paths are required to comply with the $\leq 70\text{cm}$ width and $\leq 20\text{kg}$ unladen weight criteria. These are to respectively ensure that there is sufficient space between path users for safe passing or overtaking, and a lower risk of serious injuries in the event of a collision. The Panel recommends that the width and weight⁵ criteria for usage on footpaths and cycling paths be extended to cargo bicycles, cargo tricycles, rider-only tricycles, and recumbents for consistency.
- 4.13. The Panel notes that in the current market, most cargo tricycles and recumbents exceed the 70cm width criterion, and thus cannot be used on paths.
- 4.14. For usage on roads, the Panel recognises that overly wide devices may cause obstructions as these devices tend to be slower moving. In addition, other road users may find it more difficult to overtake them. Similarly, overly long devices may cause obstructions as they tend to be less manoeuvrable and slower moving. Hence, to prevent the proliferation of overly wide or long active mobility devices on roads, the Panel recommends that the Government assess and impose a safe allowable width and/or length criteria for cargo bicycles, cargo tricycles and rider-only tricycles (see paragraph 4.4), as well as recumbents (see paragraph 4.9); and extend these criteria to all active mobility devices that can be ridden on roads.

v. Bicycle trailers

⁵ Notwithstanding paragraph 4.12, the Panel noted that some cargo bicycles, cargo tricycles, rider-only tricycles and recumbents in the market today do not meet the current $\leq 20\text{kg}$ unladen weight criterion, and will therefore be non-compliant for use on footpaths and cycling paths. Hence, the Panel suggests that the Government can consider reviewing the weight criterion for use on paths across active mobility devices.

- 4.15. As bicycle trailers may serve the same purpose as cargo bicycles and cargo tricycles, which is to carry loads, the Panel has also looked into the use of bicycle trailers on paths and roads. Bicycle trailers are currently allowed on footpaths and cycling paths provided they meet the $\leq 20\text{kg}$ unladen weight and $\leq 70\text{cm}$ width criteria. This refers to the weight and width of the bicycle, including the body and all equipment and accessories (if any) attached to the bicycle, but excluding any person or carry-on baggage on the bicycle.
- 4.16. Under the Road Traffic Act 1961, towing a vehicle using conventional bicycles, PABs, cargo bicycles and cargo tricycles is currently not allowed on the roads, and this includes trailers attached to, and towed by, the said devices.
- 4.17. The Panel recommends that the rule on prohibiting the towing of bicycle trailers on roads be kept unchanged. Unlike cargo bicycles and cargo tricycles, bicycle trailers have a possibility of tipping over when towed and may pose significant risk to the rider and other road users when used on roads.

vi. Carrying of passengers

- 4.18. The Panel has also looked into the carrying of passengers by cargo bicycles, cargo tricycles and rider-only tricycles. Current rules for conventional bicycles used on footpaths, cycling paths and roads permit carriage of passenger(s) provided the passenger is in a properly constructed seat or carrier for a child below 12 years of age, and in all other cases, the passenger is in a seat designed for such a passenger. The Panel recommends to similarly allow cargo bicycles, cargo tricycles and rider-only tricycles to carry passenger(s), provided they are equipped with a properly constructed seat or carrier (if the passenger is a child below 12 years of age) or a seat designed for such a passenger, for consistency. This would include a seat designed for a passenger or a properly constructed seat or carrier located within the cargo compartment of cargo bicycles and cargo tricycles.

5. Conclusion

- 5.1. The Panel's recommendations in this report are focused on regulating new active mobility devices to ensure path and road safety, and ensuring that rules are consistent across devices, while recognising that they can serve a wide range of uses including supporting people with mobility challenges. The recommendations, if accepted by the Government, should be introduced as soon as possible, while also catering for a transition period to raise public awareness of the rules and guidelines.
- 5.2. Safety is a shared responsibility amongst all road and path users. As the public may not yet be familiar with some of these devices, the Panel urges all users to look out for one another, adhere to rules and guidelines, and share our spaces graciously and safely. The Panel also encourages stakeholders, such as cargo bicycle and cargo tricycle interest groups, recumbent interest groups and motoring communities, to help with public education and outreach efforts.

6. Appendix

Table 2: Summary of proposed device criteria and where they could be allowed

S/N	Device	Sub-category	Examples	Proposed locations where the device should be allowed for use		
				Footpaths <i>Device Criteria:</i> (a) $\leq 70\text{cm}$ width; and (b) $\leq 20\text{kg}$ unladen weight	Cycling Paths <i>Device Criteria:</i> (a) $\leq 70\text{cm}$ width; and (b) $\leq 20\text{kg}$ unladen weight	Roads <i>Device Criteria:</i> Subject to width and/or length requirement assessed and imposed by the Government
1	Bicycle - 2-wheeled device built to carry the rider in an upright position	Cargo	 <i>Front-load cargo bicycle Image: Larry vs Harry</i>	Allowed	Allowed	Allowed
2	Tricycle - 3-wheeled device built to carry the rider in an upright position	Cargo	 <i>Rear-load (left) and front-load (right) cargo tricycles Image: LTA (left) and Christiania Bikes (right)</i>	Allowed	Allowed	Allowed

		Rider-only	 <p><i>Rider-only tricycle Image: Pashley Cycles</i></p>	Allowed	Allowed	Allowed
3	Recumbent <i>- Devices built to carry the rider, typically in a reclined position. They also include reclined manual hand-cycles.</i>	2 wheels	 <p><i>2-wheeled recumbent Image: HP Velotechnik</i></p>	Allowed	Allowed	Allowed but must be installed with a bright-coloured flag on a pole of a reasonable height for increased visibility to other road users
		3 wheels	 <p><i>"Tadpole" design 3-wheeled recumbent Image: ICE Recumbent Trikes</i></p>	Allowed	Allowed	Allowed but must be installed with a bright-coloured flag on a pole of a reasonable height for increased visibility to other road users
4	Motorised bicycle	Cargo	Visually similar to non-motorised cargo bicycles (refer to S/N 1)	Not allowed	Not allowed	Not allowed
5	Motorised tricycle	Cargo	Visually similar to non-motorised cargo tricycles (refer to S/N 2)	Not allowed	Not allowed	Not allowed
		Rider-only	Visually similar to non-motorised rider-only tricycles (refer to S/N 2)	Not allowed	Not allowed	Not allowed
6	Motorised recumbent	2 wheels	Visually similar to non-motorised 2-wheeled recumbents (refer to S/N 3)	Not allowed	Not allowed	Not allowed
		3 wheels	Visually similar to non-motorised 3-wheeled recumbents (refer to S/N 3)	Not allowed	Not allowed	Not allowed

Composition of Term 4 of the Active Mobility Advisory Panel (AMAP)

S/N	Photo	Profile
1.		<p>Mr Baey Yam Keng Senior Parliamentary Secretary, Ministry of Transport & Ministry of Sustainability and the Environment</p> <p>Appointed in January 2022, Mr Baey is the Chairman of the Active Mobility Advisory Panel (AMAP). Prior to that, he was the Deputy Chairman of AMAP, since October 2020.</p> <p>He entered the Singapore Parliament in 2006 and was appointed as Parliamentary Secretary for Ministry of Culture, Community and Youth in October 2015. Mr Baey was appointed as Senior Parliamentary Secretary for the Ministry of Transport in May 2018, holding a concurrent role in Ministry of Culture, Community and Youth till July 2020. On 13 June 2022, Mr Baey was appointed Senior Parliamentary Secretary for the Ministry of Sustainability and the Environment.</p> <p>He is also the elected Member of Parliament for Tampines GRC, and a Director of Chinese Development Assistance Council.</p>
2.		<p>Ms Florence Cheong World Federation of Occupational Therapists Delegate, Singapore Association of Occupational Therapists</p> <p>Ms Florence Cheong is the Delegate to the World Federation of Occupational Therapists, representing the Singapore Association of Occupational Therapists. Occupational therapists assist seniors and persons with disabilities to perform day-to-day tasks and roles essential to productive living. She is also Head of the Occupational Therapy Department at Tan Tock Seng Hospital. She has been a member of the Active Mobility Advisory Panel since July 2015.</p>
3.		<p>Mr Justin Foo, BBM Member, Clementi Citizens' Consultative Committee</p> <p>Mr Justin Foo has served as a Grassroots Leader in Clementi Citizens' Consultative Committee for 24 years. He has been actively championing for better pedestrian facilities and initiatives, such as improving the conditions of footpaths, and the installation of Green Man+ traffic signals. He is also a Councillor in the Jurong-Clementi Town Council. He has been a member of the Active Mobility Advisory Panel since July 2015.</p>

S/N	Photo	Profile
4.		<p>Dr James Goh Jia Hao, PBM Immediate Past Chairperson, People's Association Youth Movement Central Youth Council</p> <p>Dr James Goh Jia Hao is the immediate past Chairperson of the People's Association Youth Movement Central Youth Council, serving as its Chairperson since 2015. An active member in the youth scene in Singapore, he serves as Organisation Development Lead in youth development charity Halogen Foundation Singapore. Concurrently, he serves as a grassroots leader in multiple committees within People's Association, and is a council member with the National Youth Council, helping engage and empower youth groups across Singapore. He has been a member of the Active Mobility Advisory Panel since December 2016.</p>
5.		<p>Mr Han Jok Kwang Friends of Park Connector Network</p> <p>Mr Han Jok Kwang works for Schneider Electric as a Business Development Advisor. Prior to this appointment, he was the Chief Information Officer for Venture Corporation from January 2006 to early 2019.</p> <p>Mr Han is a member of the National Cycling Plan Steering Committee. For his valuable feedback on improving safety in the Park Connector Network, Mr Han was awarded the Star Customer Award by the National Parks Board. He has been a member of the Active Mobility Advisory Panel since July 2015.</p>
6.		<p>Dr Hing Siong Chen President, Singapore Cycling Federation</p> <p>Dr Hing Siong Chen is the President of the Singapore Cycling Federation (SCF) since 2017. Prior to that, he served as the Honorary Secretary for SCF since 2015. As a National Sports Association (NSA), SCF is the national governing body that encourages, promotes, organises and develops cycling in Singapore.</p> <p>Dr Hing is also a general practitioner at Healthway Medical Group. He is also the first Singaporean to be elected to the management committee of the Asian Cycling Confederation (ACC) in March 2021 and thereafter elected as Treasurer of ACC in April 2021. The ACC is the sport's governing body in Asia and is a member of the global body, International Cycling Union. Dr Hing was also elected in September 2021 as one of the three NSA representatives of the Singapore National Olympic Council (SNOC).</p>

S/N	Photo	Profile
7.		<p>Mr Koh Juay Meng, PBM Chairman, RSVP Singapore The Organisation of Senior Volunteers</p> <p>As Chairman of RSVP Singapore, Mr Koh Juay Meng advocates senior volunteerism and harnessing the full potential of seniors. An entrepreneur with over 30 years' experience in IT and supply chain logistics, he is actively involved in the community, serving on various committees, such as the Active Mobility Advisory Panel, Merdeka Generation Communications and Engagement Taskforce, SG Cares Steering Committee and Singapore Business Federation Sub-Committee on Aged Workforce. He was also formerly on MOH's Eldershield/Careshield Review Committee and the NCSS Volunteer Resource Committee.</p> <p>Mr Koh is also adviser to the Sengkang Central grassroots organisations (GROs) and Treasurer of Thye Hua Kwan Moral Charities. He has been a member of the Active Mobility Advisory Panel since December 2016.</p>
8.		<p>Mr Ganesan s/o Kulandai, PBM Team Leader, Tanjong Pagar-Tiong Bahru Active Mobility Community Ambassadors</p> <p>Mr Ganesan is a dedicated grassroots leader in the Tanjong Pagar-Tiong Bahru (TPTB) Constituency. He is actively involved in many grassroots committees, including the Citizen's Consultative Committee, Active Ageing Committee, Indian Activity Executive Committee (IAEC), Inter-Racial and Religious Confidence Circle (IRCC) and the Tanjong Pagar Everton Park Residents' Committee. He is also an Integration and Naturalisation Champion (INC), a Citizens on Patrol volunteer, and regularly organizes recycling activities with the NEA to promote sustainable practices to residents in the area.</p> <p>Mr Ganesan joined the TPTB Active Mobility Community Ambassadors (AMCA) in June 2017. He regularly engages residents near shopping centres and marketplaces to share good safety practices in using active mobility devices as well as the rules and regulations.</p>

S/N	Photo	Profile
9.		<p>Senior Assistant Commissioner Gerald Lim Commander, Traffic Police</p> <p>Senior Assistant Commissioner (SAC) Gerald Lim has served with the Singapore Police Force since 1990. He has previously held several key appointments, including Commander of Clementi Police Division, Commander of Public Transport Security Command, Deputy Commander of Tanglin Police Division, Assistant Director of the Major Crime Division at the Criminal Investigation Department (CID) and Assistant Director of the Bomb & Explosive Investigation Division.</p> <p>He joined the Active Mobility Advisory Panel in June 2018 when he assumed command of the Traffic Police.</p>
10.		<p>Mr Steven Lim President, Safe Cycling Task Force</p> <p>Mr Steven Lim is the President of the Safe Cycling Task Force (SCTF). SCTF works with authorities and the community to promote safe cycling through education, infrastructure and legislation changes. They also conduct school talks regularly and train cycling safety marshals to support community events. He also has been volunteering as a Road Safety Champion with the Traffic Police since 2010.</p> <p>Mr Lim is currently also the Vice President (Safety/Education) of the Singapore Cycling Federation, a National Sports Association. He is also the Chairman of Friends of PCN, a group of volunteers who promote stewardship and responsible use of parks and the Park Connector Network (PCN). He has been a member of the Active Mobility Advisory Panel since July 2015.</p>
11.		<p>Mr Ng Lang Chief Executive, Land Transport Authority</p> <p>Mr Ng Lang is the Chief Executive of the Land Transport Authority (LTA) since September 2020 and joined the Active Mobility Advisory Panel when he assumed this position.</p> <p>Mr Ng was the Chief Executive of JTC from Sep 2017 to August 2020, CEO of the Urban Redevelopment Board from 2010 to 2017, and CEO of the National Parks Board from 2006 to 2010. Mr Ng has also served in various capacities in the Singapore Public Service, including the Singapore Foreign Service and the public healthcare sector.</p>

S/N	Photo	Profile
12.		<p>Ms Kartini Omar-Hor Group Director, Parks Development and Jurong Lake Gardens, NParks</p> <p>Ms Kartini is Group Director of Park Development and Jurong Lake Gardens at the National Parks Board. Her work includes the development and redevelopment of new and existing parks. These include the park connector network and island-wide recreational routes such as the Round Island Route and Coast-to-Coast trails to provide Singaporeans with more opportunities for nature-based recreation that would bring them closer to greenery to experience its benefits on health and well-being.</p> <p>Prior to her present role, Ms Kartini was involved in the management and operations of parks and park connectors. As part of her work to manage and develop park connectors and recreational routes, she has been actively involved in discussions on the national cycling plan as well as active and urban mobility with agencies and stakeholders.</p>
13.		<p>Ms Jean See Director, Freelancers and Self-Employed Unit, National Trades Union Congress (NTUC)</p> <p>Ms Jean See is Director of the NTUC Freelancers and Self-Employed Unit (NTUC U FSE). NTUC U FSE is the Labour Movement's initiative to represent the growing pool of freelancers and self-employed persons in Singapore in strengthening income security, skills mastery and collective interests.</p> <p>She is the Executive Secretary for the National Taxi Association, National Instructors and Coaches Association, the Visual, Audio and Creative Content Professionals Association (Singapore), and the National Delivery Champions Association (NDCA) that represent self-employed persons, including freelance delivery personnel.</p>

S/N	Photo	Profile
14.		<p>Mr Bernard Tay, JP, BBM(L), BBM, PBM Chairman, Singapore Road Safety Council; President, Automobile Association of Singapore</p> <p>Mr Bernard Tay is the Founder and Chairman of the Singapore Road Safety Council and President of the Automobile Association of Singapore. He also serves as the Vice-President of Region II (Asia Pacific) of the Federation Internationale De l'Automobile (FIA) and a member of the World Council for Automobile Mobility & Tourism, concurrently also as a member of the FIA Audit Committee.</p> <p>He is also a Trustee/Director of FIA Foundation. He is the Chairman of RHT Capital Pte Ltd and Crowe Horwath First Trust LLP, which is a Singapore Public Accountants/Chartered Accountants firm. He is also a Director of ONERHT Foundation Ltd and a Council Member of RHT GRACE Institute. Mr Tay has been a member of the Active Mobility Advisory Panel since July 2015.</p>
15.		<p>Ms Joyce Wong Director, Resource & Impact, SPD</p> <p>Ms Joyce Wong is the Director for Resource and Impact at SPD, a non-profit organisation that has served people with disabilities since 1964. SPD provides services to people with disabilities, promotes inclusion and uses technology to help them improve their quality of life and reach their potential.</p>
16.		<p>Associate Professor Yap Fook Fah Associate Professor, Nanyang Technological University</p> <p>Dr Yap Fook Fah is an Associate Professor at the School of Mechanical and Aerospace Engineering in Nanyang Technological University (NTU), Singapore. He is also the Co-Director of the Transport Research Centre at NTU. He teaches courses in dynamics, vibration, and noise control and his research interests include safety of personal mobility devices, dynamics and vibration control of vehicles, railways, and trains. Dr Yap's views on the safety performance of transport vehicles have often been sought after by the industry, the press, and the legal profession.</p>