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Public Cleanliness Satisfaction Survey 2022

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Citation

STRAUGHAN, Paulin and MATHEW, Mathews, "Public Cleanliness Satisfaction Survey 2022" (2023).
Research Collection School of Social Sciences. Paper 3748.

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Public Cleanliness Satisfaction Survey 2022 Executive Summary

The Singapore Management University undertook the fifth wave of the Public Cleanliness Satisfaction Survey (PCSS) with 2,020 Singapore residents providing responses to the survey from July to October 2022, amidst the COVID-19 pandemic.

The 2022 wave of the PCSS continued to reflect an overall satisfaction with public cleanliness in Singapore, similar to the last PCSS in 2021. Majority of survey respondents (92%) were satisfied with the cleanliness of public spaces that they had recently visited, with no change from 2021. Satisfaction with the cleanliness of food outlets saw the largest decrease (by 2.1%) among all location types, to 82.7%. Nevertheless, it is still significantly higher than that in 2018 (71.4%) and 2017 (68.9%).

Regarding the cleanliness of public toilets in various establishments, 81% of respondents were satisfied, a 1% decrease from 2021. Coffeeshops were also identified to have attained the lowest satisfaction, with 53% of respondents indicating that they were satisfied (a further decrease from 61% in 2021). The satisfaction with the cleanliness of public toilets in hawker centres decreased from 68% in 2021 to 63% in 2022.

The study also examined public opinion about personal responsibility for public cleanliness. Questions were asked regarding tray return practices at various food outlets, handwashing behaviour, and the maintenance of cleanliness in neighbourhoods.

On average, 95% of respondents would return their trays and crockery all the time, a 46% increase since PCSS 2021. Of the various food establishments, tray and crockery return rates in schools and staff canteens were the lowest (93%). These were largely attributed to cleaners clearing respondents' trays before they had left the table. Ninety-three percent of respondents were supportive of the new tray and crockery return requirement including enforcement against table littering introduced in 2021, with 97% being aware of it overall. In addition, 84% of respondents felt that individual diners using the tables were primarily responsible for tray return, as compared to 58% in 2021.

Handwashing seems to be a prevalent practice for Singaporeans after they have used the public toilet or when their hands are visibly dirty, with 69% of respondents washing their hands all the time, compared to 56% in 2021. In cases where respondents do not wash their hands, most cited alternatives to maintaining hygiene (like using hand sanitisers or anti-bacterial wet wipes).

Majority of survey respondents agreed that residents should take responsibility for the cleanliness of their shared environment, with 76% of respondents stating that they had disposed

of all litter properly in the past 4 weeks. Ninety-five percent of respondents agreed that residents should bring their litter to another disposal area rather than add to the full bins. Respondents also stated personal responsibility for the environment as a top reason for why they would dispose of trash properly, and there being no bin or disposal area nearby as a top reason for why they would not dispose of trash properly. On the other hand, despite 99% of respondents agreeing that residents should be encouraged to be involved in the upkeep of their environment, only 66% indicated a willingness to actually do so (an increase from 55% in 2021).

The results also indicated that reliance on cleaning services remains high, with 90% of respondents acknowledging that Singapore is clean only because of the efficiency of its cleaning services. Nevertheless, 99% of respondents agreed that residents must work together with cleaners to keep the neighbourhood clean.

Lastly, 77% of respondents believe that it is the government's responsibility to keep Singapore clean, an increase from 73% in 2021. Eighty-one percent of respondents are supportive of pausing public cleaning for one day, and 84% support the implementation of a litter-picking exercise in their housing estate though 56% would not participate in such an initiative.

FINDINGS FROM THE PUBLIC CLEANLINESS SATISFACTION SURVEY (2022)

Introduction

The Singapore Management University (SMU) undertook the fifth wave of the Public Cleanliness Satisfaction Survey¹. The study was led by Professor Paulin Tay Straughan, Professor of Sociology (Practice) at SMU and Dr Mathew Mathews, Principal Research Fellow at the Institute of Policy Studies, National University of Singapore. The survey was conducted from July 2022 to October 2022 and sought the views of about 2,000 Singapore Citizens and Permanent Residents² aged 21 years and above. The first wave of this study was conducted between October 2016 to March 2017, the second wave from August 2018 to December 2018, the third wave from December 2019 to April 2020, and the fourth wave from February 2021 to May 2021.

The 2022 wave of the PCSS continues to reflect an overall satisfaction with public cleanliness in Singapore. It showed that satisfaction with cleanliness and cleaning services has generally remained consistent across almost all domains. This wave also examined the attitudes and perceptions towards the new table littering enforcement introduced in 2021, littering behaviour, and usefulness and support for initiatives to maintain public cleanliness.

Satisfaction with the Cleanliness of Public Spaces

Survey results revealed that there was a high level of satisfaction with the cleanliness of public spaces in Singapore. Based on our Public Cleanliness Satisfaction Index (“Index”), 92% of the respondents were satisfied³ with the cleanliness of public spaces that they had recently visited, with satisfaction remaining the same as in 2021⁴ (see [Table 1](#) for details). While the results were similar to those of 2021 where transport and leisure spaces drew the greatest satisfaction, food outlets saw a comparatively lower level of satisfaction. Details of the results can be found in [Annex A](#).

There was an overall decrease of 2% in cleanliness satisfaction in food outlets, with a 5% drop in hawker centres.

Coffeeshops, hawker centres and wet markets had the lowest proportion of respondents who were satisfied, at 76%, 78% and 81% respectively. Although there was a 5% decrease in satisfaction with cleanliness of hawker centres from 83% compared to 2021, the proportion of respondents who were satisfied was still significantly higher than the 62% in 2018 and 60% in 2017. Overall, there has been a small downward trend in satisfaction levels for hawker centres since 2019 (87%).

¹ This study was made possible through funds from the Ministry of Sustainability and the Environment (MSE).

² We refer to Singapore citizens and permanent residents in this report as Singaporeans.

³ This includes respondents who indicated that they are “satisfied” or “very satisfied”.

⁴ We use only responses of those who had visited a place recently (i.e., not more than two weeks before responding to the survey). This is to counter recall biases and ensure that responses accurately reflected the opinions of only those who had used particular spaces. Those who had visited a place a long time ago may not be able to accurately rate the level of cleanliness in that space. This was our practice in the previous versions of PCSS.

Table 1: Public Cleanliness Satisfaction Index

Domains / Spaces	Proportion Satisfied (%)	Overall Satisfaction (%) [Public Cleanliness Satisfaction Index]
Transport (roads, bus stops, bus interchanges, MRT/LRT stations)	<p>Slight increase</p> <ul style="list-style-type: none"> • 2022: 96.9% ↑ • 2021: 96.3% • 2019: 98.4% • 2018: 94.9% • 2017: 93.4% <p>Most significant change from roads (+2.7% to 96.7%)</p>	<p>2022: 92% 2021: 92% 2019: 93% 2018: 84% 2017: 82%</p>
Leisure (parks/park connectors, shopping malls in housing estates, playgrounds)	<p>Slight decrease</p> <ul style="list-style-type: none"> • 2022: 95.4% ↓ • 2021: 97.3% • 2019: 97.1% • 2018: 89.4% • 2017: 88.9% <p>Most significant change from playgrounds (-3.7% to 92.8%).</p>	
Food Outlets (coffeeshops, air-conditioned food courts, hawker centres, wet markets)	<p>Slight decrease</p> <ul style="list-style-type: none"> • 2022: 82.7% ↓ • 2021: 84.8% • 2019: 88.5% • 2018: 71.4% • 2017: 68.9% <p>Most significant change from hawker centres (-5.4% to 77.9%).</p>	
Neighbourhood (HDB town centres, void decks, corridors, lifts and lift lobbies)	<p>Slight increase</p> <ul style="list-style-type: none"> • 2021: 91.2% ↑ • 2021: 89.7% • 2019: 89.5% • 2018: 79.3% • 2017: 78.8% <p>Most significant change from void decks, corridors, lifts and lift lobbies (+2.1% to 88.5%).</p>	

<p>Commuter Paths (pavements, walkways, overhead bridges, foot bridges, underpasses, roadside drains, grass patches next to pavements)</p>	<p>Slight increase</p> <ul style="list-style-type: none"> • 2022: 93.6% ↑ • 2021: 91.7% • 2019: 92.8% • 2018: 84.8% • 2017: 82.6% <p>Most significant changes from overhead bridges/foot bridges (+3.6% to 95.0%) and roadside drains (+3.7% to 93.0%).</p>	
<p>After Public Events (public spaces after events such as National Day Parade (NDP), concerts, marathons etc)</p>	<p>No change⁵</p> <ul style="list-style-type: none"> • 2022: 94.1% • 2021: 94.1% • 2019: 87.9% • 2018: 74.3% • 2017: 62.6% 	

Respondents were asked to rate their satisfaction with the cleanliness of 21 public spaces they frequented in their everyday lives, on a scale of “1” (not satisfied at all) to “4” (very satisfied). To construct the Index, we used a weighted average⁶ of our respondents’ responses regarding the satisfaction with cleanliness in the 20 public spaces. The satisfaction level for shopping malls in downtown/CBD areas was excluded from the overall leisure satisfaction and Index, as it was a newly added location in PCSS 2022.

Transport

Respondents were mostly satisfied with the level of cleanliness at transport spaces such as roads, bus stops, bus interchanges and MRT/LRT stations. An average of 97% of respondents reported that they were satisfied or very satisfied with the levels of cleanliness in transport spaces, an increase from 96% in 2021, still lower than 98% in 2019 but higher than in 2018 (95%) and 2017 (93%). The largest change in satisfaction was found for roads, with more respondents (97% in 2022 compared to 94% in 2021, 98% in 2019, 95% in 2018 and 95% in 2017) who were satisfied or very satisfied with cleanliness on roads.

Commuter Paths

More respondents were satisfied with the cleanliness of commuter paths such as pavements/walkways, overhead bridges/foot bridges, underpasses, roadside drains and grass patches next to pavements. An average of 94% of respondents reported that they were satisfied or very satisfied with the levels of cleanliness of commuter paths, an increase from 92% in 2021 and highest among all other years since 2017 (93% in 2019, 85% in 2018, and 83% in 2017). Satisfaction levels rose for all domains of commuter paths. The largest increases in satisfaction

⁵ Note that the sample size for public events is small, potentially due to fewer public events held during the COVID-19 situation.

⁶ A weighted average takes into account that some indicators may not have the same weight. In the case of the PCSS, a substantial portion of respondents have no experience of some public spaces. We did not include a respondent’s opinion about a public space if s(he) stated that s(he) had never been to that space.

seen for overhead bridges/ footbridges, rising to 95% from 91% in 2021, the second highest since 2017 (highest satisfaction was 97% in 2019), as well as in satisfaction levels for roadside drains which increased from 89% in 2021 to 93% in 2022, the highest satisfaction since 2017.

Neighbourhoods

Satisfaction with cleanliness of neighbourhood spaces such as HDB Town Centres, void decks/corridors/lift lobbies and lifts to homes increased slightly to 91% from 90% in 2021 and 2019, reaching the highest satisfaction since 2017 (79% in 2017 and 2018). Fewer respondents were satisfied with the cleanliness in HDB Town Centres, a decrease from 97% in 2021 to 95% in 2022, same as in 2019 but higher than 2018 (90%) and 2017 (89%). Eighty-nine percent of respondents were satisfied with the cleanliness of void decks/corridors/lift lobbies, an increase from 86% in 2021.

Public Events and Leisure

Ninety-four percent of respondents reported satisfaction with the level of cleanliness after public events (e.g. National Day Parade, Concerts, Sporting events etc.), this remaining consistent since 2021, as compared to 88% in 2019, 74% in 2018 and 63% in 2017. Due to COVID-19 restrictions, there have been comparatively fewer of these larger events in recent years compared to what was common before the pandemic.

Levels of satisfaction with the cleanliness of leisure spaces such as parks, playgrounds and shopping malls in housing estates remained high - an average of 95% of the respondents reported that they were satisfied or very satisfied with the cleanliness of such spaces, a decrease from 97% in 2021, similar to 2019 and higher than 2018 (89%) and 2017 (89%). Similar to trends observed in previous waves, there were more respondents who reported that they were satisfied with the cleanliness of shopping malls in housing estates (98%) compared to cleanliness at playgrounds (93%). There was a significant decrease in satisfaction of cleanliness at playgrounds by 4%, from 97% in 2021 to 93% in 2022, lower than satisfaction levels in 2019 (95%) but higher than in 2018 (83%) and 2017 (82%).

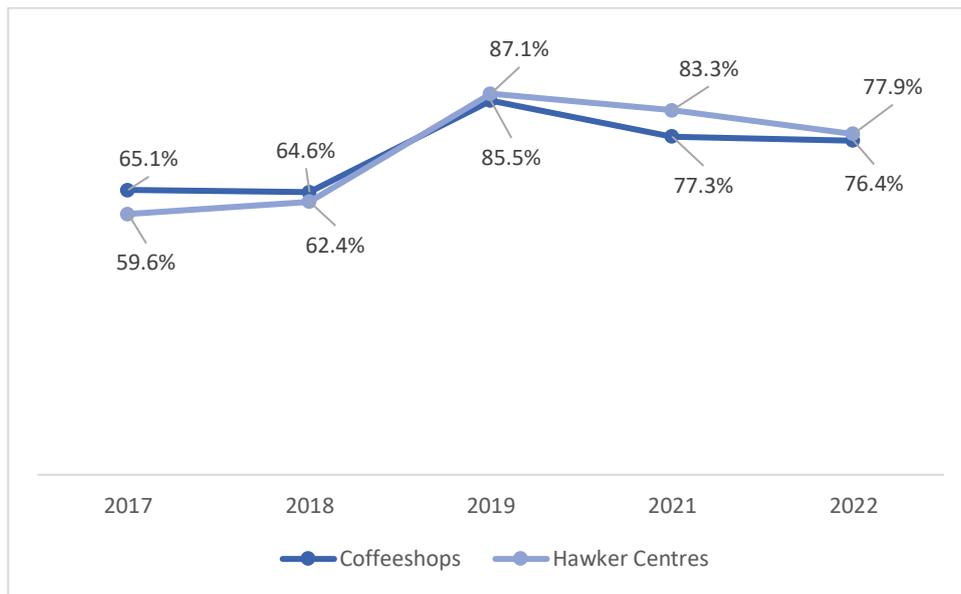
Satisfaction of cleanliness in shopping malls in downtown/CBD areas was a new area measured in 2022. It recorded the highest satisfaction among other leisure locations, at 99%. This has however been left out in the calculation of the index as it was not part of the items measured in previous waves of the survey.

Food Outlets

On average about 83% of respondents reported that they were satisfied or very satisfied with levels of cleanliness of food outlets, lower than 85% in 2021 and 89% in 2019, but higher than 2018 (71%) and 2017 (69%). This includes coffeeshops, hawker centres, food courts (air-conditioned) and wet markets.

There has been a decline in satisfaction of cleanliness of coffeeshops and hawker centres since 2019, though still significantly higher than that in 2018 and 2017. The high levels of satisfaction in PCSS 2019, which coincided with the start of COVID-19 (Figure 1), could be attributed to fewer diners due to the prevailing social distancing measures then, which resulted in lower utilisation and cleaner facilities.

Figure 1: PCSS comparisons for hawker centres and coffeeshops (2017-2022)



Satisfaction of the Cleanliness of Toilets

In the 2022 wave, respondents were asked about their satisfaction of the cleanliness of toilets in various establishments. Overall, 81% of Singaporeans reported feeling satisfied or very satisfied with public toilets in various establishments⁷ (see [Table 2](#) for details).

Of all the establishment types, public toilets in shopping malls in downtown/CBD areas yielded the highest satisfaction rates from respondents (98%). On the other hand, the lowest proportion of respondents was satisfied with the cleanliness of public toilets in coffeeshops (53%) and hawker centres (63%).

Fewer respondents were satisfied with the cleanliness of public toilets in coffeeshops and hawker centres as compared to other establishments. The top two issues observed most frequently in these two locations were a bad smell or odour, as well as the toilet floor in common areas being wet or stained.

When asked who respondents thought was primarily responsible for the cleanliness of public toilets, 60% responded that individual users were responsible. This was a 12% increase from 48% in 2021. The remaining respondents were split between citing that either cleaners (13%), operators of public toilets (18%) or operators of premises where public toilets are located (9%) were responsible. Only 1% of respondents felt that the government was responsible for the cleanliness of public toilets.

⁷ We use only responses of those who had visited a place recently (i.e., not more than two weeks before responding to the survey). This is to counter recall biases and ensure that responses accurately reflected the opinions of only those who had used particular spaces. Those who had visited a place a long time ago may not be able to accurately rate the level of cleanliness in that space.

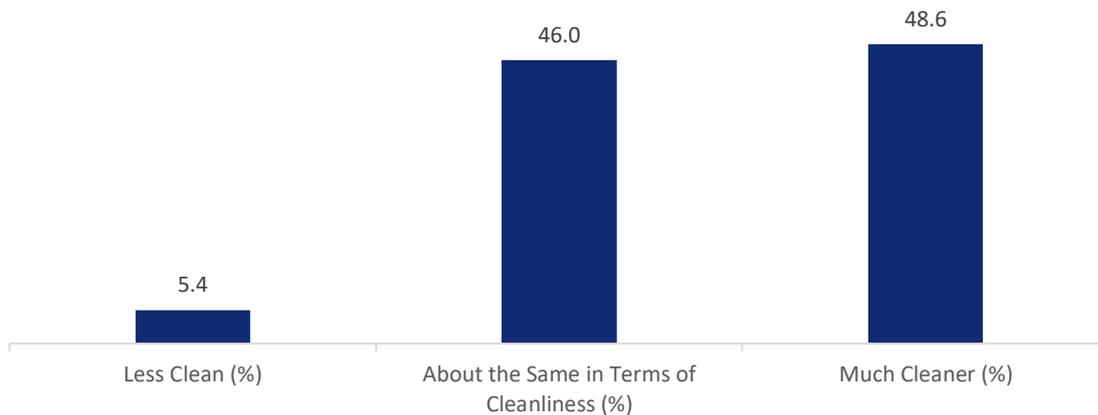
Table 2: Satisfaction of Cleanliness of Toilets, and Top 3 Issues Observed

Establishment Toilets are located in	Proportion Satisfied (%)	Overall Satisfaction (%)	Top 3 Most Common Issues
Shopping Malls in Housing Estates	94.5%	81.3%	<ul style="list-style-type: none"> • Toilet seats or urinals are dirty/stained (24.8%) • Toilet floor in cubicles or at urinal is wet/stained (23.0%) • Toilet floor in common areas is wet/stained (20.6%)
Shopping Malls in Downtown/ CBD Areas	98.2%		<ul style="list-style-type: none"> • Toilet seats or urinals are dirty/stained (17.3%) • Toilet floor in cubicles or at urinal is wet/stained (13.8%) • Toilet bowls or urinals are unflushed/choked (13.4%)
Hawker Centres	62.8%		<ul style="list-style-type: none"> • Bad smell or odour (45.1%) • Toilet floor in common areas is wet/stained (43.7%) • Toilet floor in cubicles or at urinal is wet/stained (40.8%)
Coffeeshops	52.9%		<ul style="list-style-type: none"> • Bad smell or odour (54.0%) • Toilet floor in common areas is wet/stained (47.4%) • No toilet paper (47.4%)
MRT Stations	84.0%		<ul style="list-style-type: none"> • Toilet floor in cubicles or at urinal is wet/stained (32.1%) • Toilet floor in common areas is wet/stained (30.8%) • Toilet seats or urinals are dirty/stained (29.9%)
Bus Interchanges	83.8%		<ul style="list-style-type: none"> • Toilet floor in cubicles or at urinal is wet/stained (32.7%) • Toilet floor in common areas is wet/stained (32.6%) • Toilet seats or urinals are dirty/stained (32.2%)
Outdoor Parks	83.2%		<ul style="list-style-type: none"> • No toilet paper (33.8%) • Toilet seats or urinals are dirty/stained (33.3%) • Toilet bowls or urinals are unflushed/choked (31.8%)

Perceptions of Cleanliness Now as Compared to 1 year ago

When respondents were asked to compare the cleanliness levels now to those of a year ago, 46% reported that cleanliness levels had not changed much while 49% responded that Singapore was much cleaner. Only 5% of respondents reported that Singapore was less clean (refer to Figure 2).

Figure 2: Perceptions of cleanliness now as compared to 1 year ago



Public's Satisfaction Regarding Public Cleaning Services

The 2022 wave of survey sought respondents' feedback on the efficiency of public cleaning efforts across various public spaces such as common areas in their neighbourhood, hawker centres and coffeeshops, and along public pavements/walkways (see [Figure 3](#) for details).

For each of these public spaces, respondents were allowed to report on the thoroughness and frequency of cleaning as well as the sufficiency of trash bins. Respondents were asked whether cleaning efforts were insufficient, adequate or excessive for each of these areas (see [Table 3](#) for details). Respondents reported that the thoroughness of cleaning was mostly adequate with the highest proportion reporting this for shopping malls in housing estates (94%), and the lowest for coffeeshops (67%).

Overall, we see a lower number of respondents indicating that cleaning efforts were insufficient compared to that reported in 2021. The proportion indicating 'insufficient' decreased by 1% for thoroughness of cleaning, increased by 1% for number of trash bins, and remained the same for frequency of cleaning.

For thoroughness of cleaning, 14% of respondents reported that this was insufficient, especially at coffeeshops (31%) and hawker centres (28%). Few people reported that thoroughness of cleaning was insufficient at shopping malls in downtown/CBD areas (1%), shopping malls in housing estates (2%), and MRT/LRT station (2%).

On average, 13% reported that the number of trash bins was insufficient. The highest proportion reported that the number of trash bins was insufficient at air-conditioned food courts where 22% reported so, even though in 2021, only 6% reported that there were insufficient trash bins at air-conditioned food courts (the lowest proportion among all other locations). This

could be due to the table littering enforcement introduced in food courts in 2022 where expectations for designated trash bins increased as diners at these food outlets began to clear their own tables. Only 2% reported that there were insufficient trash bins at hawker centres.

The great majority found the frequency of cleaning in most places adequate, with just 12% reporting that it was insufficient. Higher proportions indicated that frequency of cleaning at coffeeshops (26%), hawker centres (23%) and wet markets (19%) was insufficient, while fewer reported this within shopping malls in housing estates (2%) and shopping malls in downtown/CBD areas (1%).

Figure 3: Thoroughness of Cleaning Services across Public Spaces

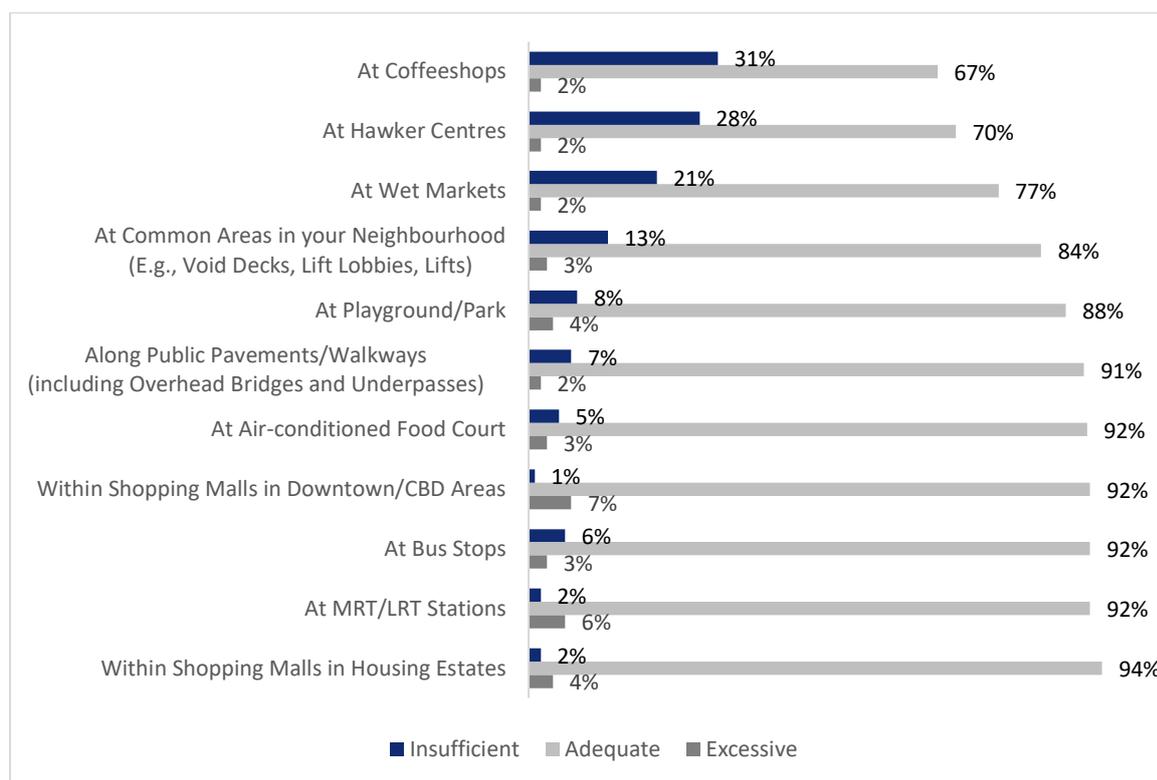


Table 3: Adequacy of Cleaning Services across Public Spaces

Domain	Average proportion indicating insufficient	Component deemed most insufficient	Component deemed least insufficient
Thoroughness of cleaning	11.3% ↑ (13.5%) (14.6%)	At Coffeeshops 30.8%	Within Shopping Malls in Downtown/CBD Areas 1.0%
Number of trash bins	11.9% ↑ (13.1%) (12.4%)	At Air-conditioned Food Courts 22.1%	At Hawker Centres 2.4%

The frequency of cleaning	10.3% ↑ <i>(12.2%)</i> (11.8%)	At Coffeeshops 25.5%	Within Shopping Malls in Downtown/CBD Areas 1.1%
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Figures in parenthesis refer to proportions from the 2021 wave of PCSS.

Figures bolded and italicised in parenthesis refer to the comparable average proportions from 2022 – this excludes new locations added in PCSS 2022 which were not present in 2021.

Figures in bold refer to proportions from the 2022 wave of PCSS which includes the new locations not present in 2021.

Sufficiency of Cleaning and Sanitising Tables at Food Establishments

Given the fact that diners increasingly return their own trays following the tray and crockery return requirement including enforcement against table littering introduced in 2021, cleaners are now expected to focus more on cleaning and sanitising tables at food establishments.

Eighty-five percent of respondents observed cleaners cleaning and sanitising empty tables at air-conditioned food courts half the time or more, as compared to 77% at hawker centres and 73% at coffeeshops (see [Figure 4](#)). Thirty-one percent felt that the efficiency of cleaners cleaning and sanitising empty tables at food establishments was insufficient in general. Eighteen percent of respondents felt that the efficiency of cleaners cleaning and sanitising empty tables at air-conditioned food courts was insufficient, as compared to 36% in hawker centres and 40% in coffeeshops (see [Table 4](#)).

Figure 4: Frequency of cleaning and sanitising tables observed

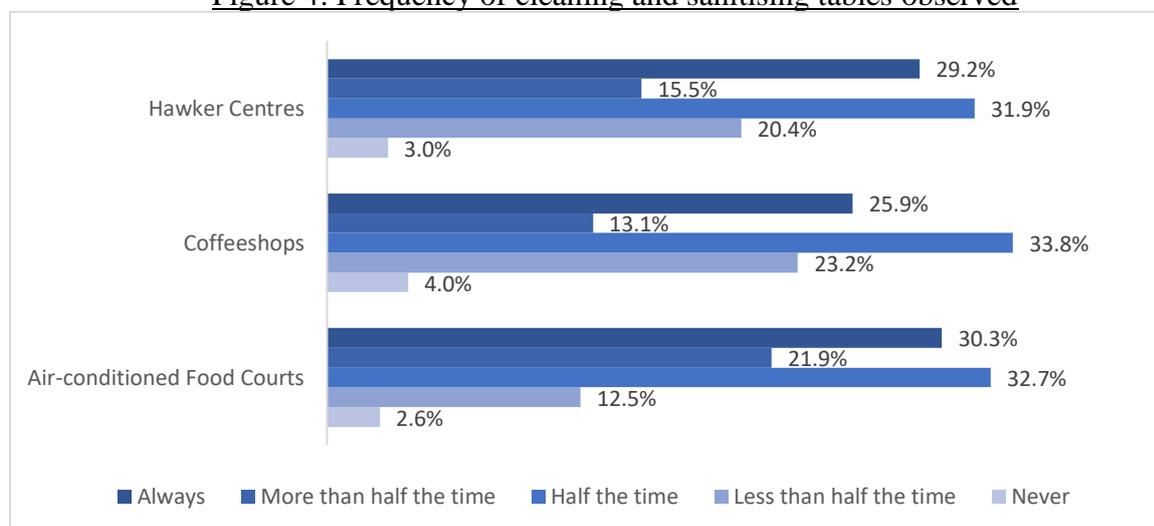


Table 4: Efficiency of Sanitising Tables

Location	Insufficient (%)	Adequate (%)	Excessive (%)
Hawker Centres	36.3	59.4	4.3
Coffeeshops	40.2	55.0	4.8
Air-conditioned Food Courts	17.8	77.0	5.2

Opinion on the State of Cleanliness in Singapore

Similar to results in the 2021 wave of the PCSS, most respondents (99%) held the opinion that Singapore is a clean city (see [Table 5](#)). Sentiments that Singapore is a clean city because of the efficiency of its cleaning services remained consistently high with 90% of respondents reporting so, remaining constant from 2021⁸.

Table 5: Proportion of respondents agreeing to statements on Singapore cleanliness identity⁹

	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Agree/ Strongly Agree (%)
I take pride in doing my part to keep Singapore clean	0.2 <i>0.2</i> 0.1 (0.5) <i>(0.6)</i>	0.5 <i>0.6</i> 0.7 (2.3) <i>(1.1)</i>	77.7 <i>60.2</i> 73.2 (52.6) <i>(58.0)</i>	21.7 <i>38.9</i> 26.0 (44.6) <i>(40.2)</i>	99.4 <i>99.1</i> 99.2 (97.2) <i>(98.2)</i>
Singapore is a clean city	0.1 <i>0.1</i> 0.2 (0.9) <i>(1.0)</i>	1.3 <i>1.9</i> 1.3 (4.7) <i>(5.1)</i>	75.8 <i>57.2</i> 60.7 (54.7) <i>(62.4)</i>	22.7 <i>40.7</i> 37.8 (39.7) <i>(31.5)</i>	98.5 <i>97.9</i> 98.5 (94.4) <i>(93.9)</i>
Other Singaporeans take pride in doing their part to keep Singapore clean	0.5 <i>0.4</i> 0.5 (1.3) <i>(1.5)</i>	3.9 <i>2.9</i> 4.3 (10.0) <i>(11.0)</i>	78.4 <i>61.1</i> 65.6 (55.1) <i>(59.4)</i>	17.2 <i>35.6</i> 29.6 (33.6) <i>(28.1)</i>	95.6 <i>96.7</i> 95.2 (88.7) <i>(87.5)</i>
Singapore is clean only because of the efficiency of its cleaning services	0.1 <i>1.7</i> 0.2 (1.6) <i>(1.5)</i>	9.7 <i>8.7</i> 12.9 (10.9) <i>(13.3)</i>	76.7 <i>70.4</i> 69.5 (54.8) <i>(54.5)</i>	13.5 <i>19.1</i> 17.5 (32.6) <i>(30.7)</i>	90.2 <i>89.6</i> 87.0 (87.4) <i>(85.2)</i>
I regularly interact (e.g., greet, talk) with the cleaners in my neighbourhood	1.0 <i>2.5</i> 1.3	19.1 <i>30.9</i> 31.1	70.3 <i>55.5</i> 59.0	9.6 <i>11.1</i> 8.5	79.9 <i>66.6</i> 67.5
I know how to provide feedback on the quality of cleaning services	1.2 <i>2.8</i> 1.3	10.5 <i>24.9</i> 20.3	78.5 <i>59.6</i> 68.3	9.8 <i>12.7</i> 10.0	88.3 <i>72.4</i> 78.3

Figures italicised in parenthesis refer to proportions from the 2017 wave of PCSS. Figures in parenthesis refer to proportions from the 2018 wave of PCSS. Figures in black ink refer to proportions from the 2019 wave of PCSS. Figures in red ink refer to proportions from 2021 wave of PCSS. Figures in black ink and bold refer to the proportions from 2022 wave of PCSS.

In addition, a large proportion of respondents felt that Singaporeans in general took pride in keeping Singapore clean. A great majority of respondents took pride in doing their part to keep

⁸ This includes respondents who indicated that they “agree” or “strongly agree”.

⁹ Figures in tables may not always add up to 100% because of rounding of numbers.

Singapore clean (99%), with 96% agreeing that other Singaporeans also took pride in doing their part to keep Singapore clean.

Not only did respondents in this wave take pride in the image of a clean Singapore and keeping it clean, they also had better engagement with cleaners. Eighty percent of respondents reported regularly interacting with cleaners, a 13% increase from 2021. Additionally, 88% agreed that they knew how to provide feedback on quality of cleaning services, an increase of 16% from 2021.

Opinion on Personal Responsibility for Public Cleanliness

In this wave, specific questions were asked regarding personal responsibility for public cleanliness.

The survey sought to understand (a) Singaporeans’ tray return habits in hawker centres, coffeeshops, air-conditioned food courts and school/ staff canteens, (b) what the reasons were for not returning their trays, and (c) who Singaporeans think should be responsible for tray return.

Furthermore, given that the 2022 wave of the PCSS took place during the COVID-19 pandemic, questions were asked to understand (a) Singaporeans’ handwashing behaviour in six different scenarios, and (b) what the reasons were for not washing their hands.

In addition, the survey sought to understand the littering behaviours of Singaporeans and determine if respondents believed that cleanliness in their neighbourhood was something that they should take responsibility for and not merely leave to cleaning services.

Attitude and Perception on Table Littering Enforcement

Given the table littering enforcement introduced in 2021, we asked respondents about their awareness and perception of the new measure. Overall, 97% of respondents were aware that it is now mandatory for diners at hawker centres, coffeeshops and air-conditioned food courts to clear their tables of dirty trays, crockery and litter after their meals (see [Table 6](#)).

Table 6: Awareness of Table Littering Enforcement Measure

Locations	Aware (%)	Not Aware (%)
Hawker Centres	97.0	3.0
Coffeeshops	96.4	3.6
Air-conditioned food courts	96.5	3.5

Ninety-three percent of respondents are supportive of the tray and crockery return requirement including enforcement against table littering (see [Table 7](#)). More than 90% of respondents think that the table littering enforcement is useful¹⁰ for ensuring quick turnover of tables for the next diner, establishing social norms to return dirty trays and crockery, improving bird nuisance

¹⁰ This includes respondents who indicated that the measures were “quite useful” or “very useful”.

issues at food establishments, encouraging diners to be more appreciative of cleaners' roles, and preventing the spread of diseases such as COVID-19 (see [Table 8](#)).

Table 7: Support for Table Littering Enforcement Measure

Not supportive at all (%)	Only slightly supportive (%)	Quite supportive (%)	Very supportive (%)	Quite supportive/ very supportive (%)
0.7	3.5	43.7	49.6	93.3

Table 8: Usefulness of Table Littering Enforcement Measure

Statements	Not useful at all (%)	Only slightly useful (%)	Quite useful (%)	Very useful (%)	Quite useful/ very useful (%)
Ensure quick turnover of tables for the next diner(s), especially during peak dining hours	1.2	3.8	42.1	52.8	95.0
Establish social norms to return dirty trays, crockery and dispose of litter after dining at hawker centres, coffeeshops and air-conditioned food courts	0.8	4.4	43.8	51.0	94.8
Improve bird nuisance issues at hawker centres, coffeeshops and air-conditioned food courts (e.g. birds feeding on leftover food on uncleared tables)	2.2	5.6	48.2	44.1	92.3
Encourage diners to be more appreciative of cleaners' roles at hawker centres, coffeeshops and air-conditioned food courts	1.3	8.0	49.9	40.9	90.8
Prevent the spread of diseases such as COVID-19	2.2	7.1	47.5	43.2	90.7

Furthermore, when asked about their views on returning dirty trays and crockery, 78% of respondents reported doing so because it was the socially responsible thing to do, while 22% did so because it is the law and they did not want to be fined (see [Table 9](#)).

Table 9: Views about returning dirty trays and crockery

Statements	%
I return dirty trays and crockery because it is the socially responsible thing to do.	78.4
I return dirty trays and crockery because it is the law and I do not want to be fined.	21.6

A majority of respondents (95%) are of the view that the measure is effective¹¹ (see [Table 10](#)). Among the small number of respondents who claimed that there was limited effectiveness of the measure, a top reason cited was that the table littering measures were not actively enforced.

Table 10: Effectiveness of Table Littering Enforcement Measure

Not effective at all (%)	Only slightly effective (%)	Quite effective (%)	Very effective (%)	Quite effective/very effective (%)
0.7	4.3	52.5	42.6	95.1

Attitude and Perception on Tray Return

In the 2022 wave, we examined personal responsibility for tray return in various food establishments (see [Figure 5](#)). On average, majority of respondents (95%) return their tray all the time. For those who did not return their tray all the time, we asked for the top three reasons for not returning the trays (see [Table 11](#)). About 50% reported that the cleaners cleared their tray/crockery during or after their meal, before they left the table.

Overall, 84% of respondents think that the primary responsibility of returning trays should belong to the individual diner using the tables, an increase from 58% in 2021. On the other hand, 6% of respondents felt that cleaners should be responsible for tray return while 8% of respondents put this responsibility on the operators of premises. Only 2% reported that it should be the responsibility of the diner who used the table after they did.

¹¹ This includes respondents who indicated that the measures were “quite effective” or “very effective”.

Figure 5: Proportion of Singaporeans Returning Trays

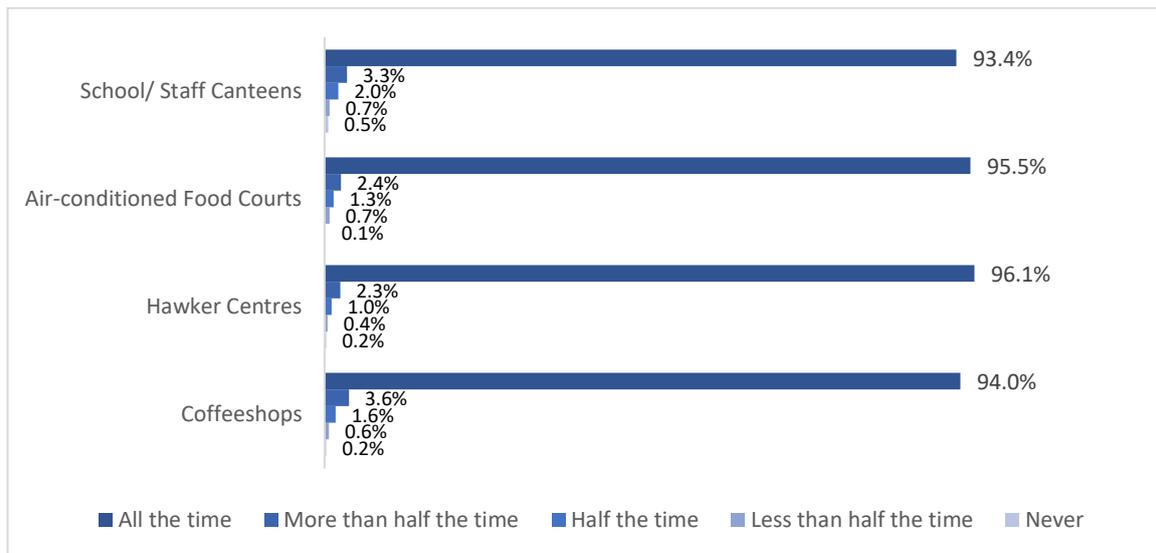


Table 11: Reasons for Not Returning Trays

Establishments	Top 3 Most Common Reasons for Not Returning Trays
Hawker Centres	<ul style="list-style-type: none"> The cleaner clears my tray/crockery during or after my meal, before I leave my table. (51.2%) The trays/crockery are too heavy for me. (31.8%) The tray return point is either not within visible sight or unavailable. (31.2%)
Coffeeshops	<ul style="list-style-type: none"> The cleaner clears my tray/crockery during or after my meal, before I leave my table. (56.7%) The tray return point is either not within visible sight or unavailable. (30.6%) The tray return racks/stations are full. (27.5%)
Air-conditioned Food Courts	<ul style="list-style-type: none"> The cleaner clears my tray/crockery during or after my meal, before I leave my table. (50.0%) The tray return point is within visible sight, but too far from my seat. (39.5%) The tray return point is either not within visible sight or unavailable. (27.6%)
School/ Staff Canteen	<ul style="list-style-type: none"> The tray return point is either not within visible sight or unavailable. (46.7%) There is no visible signage on where to return dirty trays/crockery. (39.0%) The cleaner clears my tray/crockery during or after my meal, before I leave my table. (33.8%)

Attitude and Perception on Handwashing Behaviour

In the survey, respondents were asked about the frequency of their handwashing behaviour in the following 6 different scenarios: (1) before eating at food outlets, (2) after eating at food outlets, (3) after using a public toilet, (4) after blowing your nose in a public area, (5) after sneezing or coughing in a public area, and (6) when your hands are visibly dirty while you are in a public area. In cases where respondents did not wash their hands all the time, they were asked to share the top 3 reasons for not doing so.

Overall, 69% of respondents wash their hands all the time, an increase from 56% in 2021. (See [Table 12](#)).

Table 12: Handwashing Behaviour in Various Scenarios

Scenarios	Never	Less than half the time	Half the time	More than half the time	All the time	Top Reason for Not Washing Hands
	(%)	(%)	(%)	(%)	(%)	
Before eating at food outlets	4.3 4.4	6.8 14.1	10.2 21.8	17.7 15.1	61.0 44.7	I clean my hands with hand sanitisers or antibacterial wet wipes. (64.3%)
After eating at food outlets	3.4 3.5	6.6 12.5	9.9 18.8	20.1 17.1	60.0 48.1	I clean my hands with hand sanitisers or antibacterial wet wipes. (71.0%)
After using a public toilet	1.1 0.1	1.5 2.2	2.5 6.4	3.8 7.7	91.1 83.6	I clean my hands with hand sanitisers or antibacterial wet wipes. (53.7%)
After blowing your nose in a public area	4.5 4.8	6.7 21.3	9.3 16.4	14.6 18.6	64.9 38.8	I clean my hands with hand sanitisers or antibacterial wet wipes. (69.2%)
After sneezing or coughing in a public place	4.1 5.1	8.2 22.8	10.0 16.4	14.4 17.5	63.2 38.2	I clean my hands with hand sanitisers or antibacterial wet wipes. (74.7%)
When your hands are visibly dirty while you are in public a public area	1.2 0.8	1.8 1.9	4.0 5.3	9.6 12.6	83.5 79.4	I clean my hands with hand sanitisers or antibacterial wet wipes. (73.9%)

Figures in black ink refer to proportions from the 2021 wave of PCSS. Figures in bold refer to proportions from the 2022 wave of PCSS.

Results favouring handwashing were more amplified in the other scenarios. Ninety-one percent of respondents reported washing their hands all the time after using a public toilet, and 84% reported washing their hands all the time when their hands were visibly dirty while they were in a public area. In cases where there was less handwashing behaviour, it was because there were alternatives like hand sanitisers or anti-bacterial wet wipes (70%), or tissue or cloth (57%) which may be perceived as being more convenient, considering 37% of respondents reported that handwashing basins were not always within sight.

Attitude and Perception on Littering

In the 2022 wave of PCSS, respondents were asked about any unwanted items they did not or were not able to dispose of properly in a trash bin or another container meant for trash disposal in the past 4 weeks. Seventy-six percent of respondents stated that they had disposed of all litter properly in the past 4 weeks, with 65% of respondents stating personal responsibility for keeping the environment clean as their reason for proper trash disposal (see [Table 13](#)). The most common item that was not properly disposed was used tissue paper or wet wipes (see [Table 14](#)). The top reason given by respondents for such actions was that there was no nearby bin or disposal area (see [Table 15](#)).

Table 13: Top 3 reasons for proper trash disposal

Reasons	%
I am responsible for keeping the environment clean.	65.2
I care for the environment.	48.1
It only takes up a little bit of my time.	37.9
It is not troublesome to do so.	28.4
I want to do my part to keep Singapore’s status as a clean city.	26.0
If I don’t do so, I could be fined S\$300 for littering and I don’t like the pain of losing money.	21.6
It would be embarrassing if I were caught by members of the public for littering.	15.5
If I don’t do so, the chances of me being caught for littering by authorities is high.	12.9
It is a behaviour that my family expects of me.	11.6
If I don’t do so, cleaners will have to clean up after me and they will have more work to do.	9.1
It is a behaviour that my friends expect of me.	7.3

Table 14: Items not properly disposed of among respondents who reported being unable to dispose properly in a trash bin/container

Items	%
Used tissue paper/wet wipes	10.5
Leftover food and drinks	8.2
Food packaging/wrappers	6.9
Pieces of paper (e.g., leaflets, junk mail, receipts, etc.)	6.4
Any containers, bottles, cups, or drink cans	5.7
Plastic bags	5.2
Cigarette butts	4.3
Face masks	4.2
Broken glass and bottles	3.9
Bodily material/fluid (e.g., snot, spit, vomit, etc.)	3.6

This table reflects the responses of those who had not disposed of all litter properly in the past 4 weeks. As most respondents (76%) had reported that they disposed of all litter properly in the past 4 weeks, this table constitutes a smaller proportion of the survey sample.

Table 15: Reasons for improper trash disposal among respondents who were not able to dispose of unwanted items

Reasons	%
There was no nearby trash bin/disposal area.	53.0
I accidentally dropped the item/The item flew away, and I could not retrieve it.	22.7
There was at least 1 trash bin/disposal area nearby, but they were full.	22.6
The item was small enough to be unnoticeable when discarded.	12.9
I accidentally dropped the item/The item flew away, and I did not want to pick it up for various reasons.	12.3
I accidentally left the item behind when leaving the location.	9.9
No cleaner was nearby, but I expected one to pick up/clean up the item eventually.	9.9
A cleaner was nearby to pick up/clean up the item.	9.6
No one or few people were nearby to notice.	9.5
The item was dirty and I did not want to touch it.	6.9

It was troublesome to dispose of the item in a trash bin.	5.2
I was driving\riding in/travelling in a vehicle, and throwing it out of the vehicle was convenient.	2.1

Ninety-one percent of respondents reported that they would never throw litter in public spaces while 3% shared that they would do so only if there was no litter bin nearby (See [Table 16](#)). The proportion of respondents reporting that they would only litter when there was no nearby litter bin was lower than in 2021 (6%) and comparable to that in 2019 (3%).

Table 16: Proportion of Singaporeans who would litter

	Never (%)	Only when there is no nearby litter bin (%)	Only when there is no one around (%)	Sometimes (%)	Most of the time (%)
Do you throw litter in public spaces?	91.1 89.9 (96.1) <i>80.4</i>	2.5 5.6 (2.6) <i>9.3</i>	1.0 1.1 (0.5) <i>1.7</i>	3.9 2.9 (0.6) <i>8.1</i>	1.5 0.5 (0.2) <i>0.6</i>

Figures in italics refer to proportions from the 2018 wave of PCSS. Figures in parenthesis refer to proportions from the 2019 wave of PCSS. Figures in black ink refer to proportions from the 2021 wave of PCSS. Figures in bold refer to proportions from the 2022 wave of PCSS.

Personal Responsibility for Cleanliness in the Neighbourhood

Similar to the last two waves, we further examined personal responsibility for the cleanliness of the neighbourhood by presenting respondents with a scenario. Respondents were shown a picture of trash bins which were overflowing and given the following statement:

It is 6.30pm. You see overflowing trash bins in your neighbourhood as you return from work. It was clean in the morning when you left for work. There is a central bin centre 50 metres away.

When asked to imagine what they would do if they were holding an empty drink bottle they were intending to discard, 84% of respondents said that they would find another bin that was not full to discard their used drink bottle, with 70% doing so because there was no more space to discard the bottle in the bin (see [Table 17](#)). Fifteen percent said they would leave their used drink bottle around a full bin (see [Table 18](#)), with 71% doing so because they trusted that cleaners would clean up the overflowing trash sooner or later (see [Table 19](#)).

Table 17: Reasons for finding another trash bin

Reasons	%
There is no more space to discard the bottle into these bins.	69.9

Leaving the bottle around these bins is considered littering.	57.3
Leaving the bottle around these bins may attract unwanted pests.	49.0
It is not troublesome to find another bin that is not full since there is adequate provision of trash bins around.	32.7
If I left the bottle around these bins, it may scatter away (e.g. due to wind) and dirty other areas in the neighbourhood.	26.4
The overflowing trash around these bins does not look pleasant, and I do not want to add on to the pile.	25.2
I do not want to make it inconvenient/difficult for cleaners to pick up the litter from the floor.	20.9

Table 18: Respondents' reactions to discarding a bottle at a full bin

Statements	%
Find another bin that is not full to discard your used drink bottle.	84.4
Leave your used drink bottle around these bins	15.2

Table 19: Top 3 reasons to leave bottle around full bins

Reasons	%
I trust that cleaners will clean up the overflowing trash sooner or later	70.5
Since these bins are already full, leaving the bottle around them is not considered littering	56.2
Finding another bin to dispose of the bottle is too troublesome.	39.6
Even if these bins are not full, I think that leaving the bottle around them is not considered littering.	36.8
I want to make it convenient for cleaners to clean up the whole pile of trash at one go.	34.2
If the residents in my neighbourhood are doing the same thing, it should be fine.	5.4

Respondents were then asked their views on a number of statements.

Most respondents believed that residents in this scenario should have been responsible for the upkeep of their surroundings, with 95% of respondents agreeing that residents should bring their litter to another disposal area rather than add to the full bins (see [Table 20](#)). The majority of respondents expected residents who saw overflowing trash bins to contact the relevant

parties (e.g., town council) so cleaners could clear the bins promptly (95%), an increase of 8% from 2021.

In addition, a decreased proportion of respondents (82%) felt that the situation reflected that a number of inconsiderate people lived in the neighbourhood, down from 87% in 2021, but still comparatively higher than in 2019 (77%).

The results also seem to indicate an increase in reliance on cleaning services to ensure cleanliness of the surroundings. Nearly all respondents (97%) expected that the authorities should demand higher standards of cleaning contractors to make sure the trash bins were always cleared promptly, an increase of 2% from 2021. Almost all respondents (92%) also expected that cleaners should clear trash throughout the day so that bins would not overflow, a decrease of 2% from 2021. There has also been a large increase in the proportion of people who agree that cleaners are not efficient in their work, from 46% in 2021 to 59% in 2022. This is the second consecutive large increase, considering that the figure was 35% in 2019.

Along with an increase in reliance on cleaning services, 81% of respondents agreed that more money should be spent on cleaning services, up from 60% in 2021, and surpassing 2019 levels of 71%.

Table 20: Responses to scenario with overflowing trash bins

Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)
The cleaners should clear trash throughout the day so that bins do not overflow.	1.8 1.2 (0.6)	6.6 4.8 (13.8)	69.5 61.0 (72.1)	22.2 33.0 (13.6)
A number of inconsiderate people live in this neighbourhood.	2.5 2.3 (4.1)	15.4 10.7 (19.2)	69.4 46.5 (41.3)	12.8 40.4 (35.5)
The cleaners are not efficient in their work.	3.8 6.4 (12.3)	37.8 47.2 (52.8)	51.6 36.6 (32.6)	6.9 9.8 (2.3)
Residents should bring their litter to another disposal area rather than add to the full bins.	0.9 0.5 (0.1)	4.2 8.4 (5.9)	74.3 65.1 (78.3)	20.7 26.0 (15.7)
The authorities should demand higher standards of cleaning contractors to make sure the trash bins are always cleared promptly.	0.4 0.7 (0.3)	2.9 4.6 (5.3)	73.7 63.2 (64.1)	23.0 31.5 (30.2)
Residents who see overflowing trash bins should contact the relevant parties (e.g., town council) so cleaners can clear the bins promptly.	0.5 1.0 (0.2)	4.5 11.4 (3.2)	78.7 72.1 (84.4)	16.3 15.4 (12.3)

More money should be spent on cleaning services.	1.8 4.9 (1.5)	17.0 35.5 (27.3)	70.8 47.8 (57.2)	10.4 11.8 (13.9)
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Figures in parenthesis refer to proportions from the 2019 wave of PCSS. Figures in black ink refer to proportions from the 2021 wave of PCSS. Figures in bold refer to proportions from the 2022 wave of PCSS.

In order to further probe respondents' beliefs about whether they could be personally involved in the maintenance of cleanliness in their neighbourhood, a series of questions was posed. In addition, the scenario below was presented as a follow-up to the one regarding the overflowing trash bins:

Following this incident, some residents decide to form a group to ensure the cleanliness of the neighbourhood. They regularly encourage residents to pick up the trash they see, explain to litterbugs why littering is bad for the environment, and work with the cleaning crew to ensure that the neighbourhood is kept clean.

Similar to 2021, there was near unanimous support (99%) that residents should be encouraged to help maintain the cleanliness of the neighbourhood (see [Table 21](#)). However, only 66% of respondents surveyed in 2022 would volunteer with such a group, although this is an increase from 55% in 2021.

On the other hand, there was a greater proportion of respondents (51%) who felt that residents should not have to work to keep the neighbourhood clean as they already pay for cleaning services. This is an increase from 48% of respondents in 2021. Compared to 48% of respondents in 2021, 52% of respondents agreed that it is the job of the cleaners to keep neighbourhoods clean.

Notwithstanding, 99% of respondents agreed that residents must work together with cleaners to keep the neighbourhood clean.

Table 21: Responses to resident activism regarding public cleanliness

Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)
I would volunteer with such a group.	2.9 4.0 (0.8)	31.5 41.2 (52.8)	59.2 49.2 (44.4)	6.3 5.6 (1.9)
Residents should not be doing this - it is the job of the cleaners to keep neighbourhoods clean.	4.1 12.9 (17.3)	44.3 39.2 (54.1)	47.0 44.0 (28.2)	4.6 3.9 (0.5)
Residents should be encouraged to help maintain the cleanliness of the neighbourhood.	0.5 0.6 (0.1)	0.8 1.6 (1.0)	81.8 75.7 (81.9)	17.0 22.1 (16.9)
Residents already pay for cleaning services and should not have to work to keep their neighbourhood clean.	4.6 13.6 (16.9)	44.1 38.9 (51.0)	47.6 43.2 (29.1)	3.8 4.3 (3.0)

Residents must work together with the cleaners to keep the neighbourhood clean.	0.1 0.3 (0.4)	1.3 3.1 (3.8)	81.1 77.3 (76.9)	17.5 19.4 (18.9)
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Figures in parenthesis refer to proportions from the 2019 wave of PCSS. Figures in black ink refer to proportions from the 2021 wave of PCSS. Figures in bold refer to proportions from the 2022 wave of PCSS.

Public Hygiene

We continued in this wave to pose respondents questions about *public hygiene*, questions we started asking since the onset of COVID-19 given the heightened attention to not just cleanliness but the removal of germs. Respondents were informed that while maintaining *public cleanliness* involves removing dirt/litter from public spaces, maintaining *public hygiene* is stricter; it also involves disinfecting public spaces to kill germs and minimise the spread of infectious diseases.

Respondents were asked to indicate their opinion on the level of importance and satisfaction of the current level of public hygiene in fifteen places: preschools, public schools, youth facilities, eldercare facilities, hawker centres, coffeeshops, air-conditioned food courts, canteens, restaurants, wet markets, hotels, shopping malls in housing estates, shopping malls in downtown/CBD areas, bus interchanges and MRT/LRT Stations.

Overall, 99% of respondents indicated that public hygiene was important or very important across all the domains (see [Table 22](#)). In addition, a larger proportion felt that it was very important in domains like preschools, public schools and eldercare facilities.

Table 22: Importance of level of hygiene across public spaces

Domains / Spaces	Not Important at all (%)	Slightly Important (%)	Important (%)	Very Important (%)
Preschools	0.1 0.0	0.8 0.2	56.8 34.4	42.3 65.4
Public Schools (e.g. Primary and Secondary Schools)	0.0 0.0	0.6 0.3	58.4 36.1	41.1 63.6
Youth Facilities (e.g., student care centres)	0.0	0.9	59.6	39.5
Eldercare facilities (e.g., nursing homes, hospices)	0.1 0.0	0.7 0.2	55.7 34.2	43.6 65.6
Hawker Centres	0.2 0.0	0.7 0.3	60.6 47.1	38.5 52.6
Coffeeshops	0.0 0.0	0.7 0.4	61.6 46.9	37.7 52.8
Air-conditioned Food Courts	0.0 0.0	0.9 0.2	60.9 47.0	38.2 52.8

Canteens (e.g., school canteens, staff canteens)	0.0	0.4	60.9	38.7
Restaurants	0.0	0.7	60.6	38.7
Wet Markets	0.1	0.8	61.3	37.8
Hotels	0.0 0.0	0.8 0.5	58.8 42.7	40.4 56.8
Shopping Malls in Housing Estates	0.0 0.0	0.6 0.6	60.6 46.2	38.7 53.2
Shopping Malls in Downtown/CBD Areas	0.0	0.3	60.7	38.9
Bus Interchanges	0.0 0.0	1.3 0.8	60.7 47.8	37.9 51.4
MRT/LRT Stations	0.0 0.0	0.8 0.5	60.8 46.5	38.4 53.0

Figures in black ink refer to proportions from the 2021 wave of PCSS. Figures in bold refer to proportions from the 2022 wave of PCSS. Locations with only proportions from PCSS 2022 were newly added in this wave. Note that “Shopping Malls” in PCSS 2021 has been replaced with “Shopping Malls in Housing Estates” in PCSS 2022.

Over 90% of respondents indicated that they were satisfied or very satisfied with the level of public hygiene in all spaces except hawker centres (67%), coffeeshops (63%), air-conditioned food courts (87%) and wet markets (73%) (see [Table 23](#)).

Table 23: Satisfaction of current level of hygiene across public spaces

Domains / Spaces	Not Satisfied at all (%)	Slightly Satisfied (%)	Satisfied (%)	Very Satisfied (%)
Preschools	0.0 0.2	3.0 1.2	77.3 73.5	19.6 25.0
Public Schools (e.g., Primary and Secondary Schools)	0.2 0.2	3.0 2.8	78.0 72.7	18.7 24.3
Youth Facilities (e.g., student care centres)	0.1	2.1	79.5	18.3
Eldercare facilities (e.g., nursing homes, hospices)	0.2 0.1	3.6 3.9	78.7 73.8	17.5 22.3
Hawker Centres	7.1 5.5	26.1 25.3	60.9 59.7	5.9 9.5
Coffeeshops	7.5 5.9	30.0 26.7	58.4 57.6	4.1 9.9
Air-conditioned Food Courts	1.6 0.6	11.6 8.0	76.0 77.6	10.8 13.9
Canteens (e.g., school canteens, staff canteens)	0.7	6.1	81.9	11.3

Restaurants	0.4	3.4	79.5	16.7
Wet Markets	6.5	20.2	67.9	5.4
Hotels	0.0 0.0	2.1 1.5	73.9 73.3	23.9 25.3
Shopping Malls in Housing Estates	0.4 0.1	3.7 2.2	78.4 77.3	17.5 20.4
Shopping Malls in Downtown/CBD Areas	0.0	2.2	76.9	20.9
Bus Interchanges	1.1 0.6	6.9 6.9	81.7 80.7	10.4 11.8
MRT/LRT Stations	0.8 0.5	5.8 4.9	80.5 79.8	12.9 14.9

Figures in black ink refer to proportions from the 2021 wave of PCSS. Figures in bold refer to proportions from the 2022 wave of PCSS. Locations with only proportions from PCSS 2022 were newly added in this wave. Note that “Shopping Malls” in PCSS 2021 has been replaced with “Shopping Malls in Housing Estates” in PCSS 2022.

Public Perception of Government Efforts

Overall, 77% of Singaporeans agreed with the statement, “It is the government’s responsibility to keep Singapore clean.” This was an increase from 73% in 2021.

The respondents were also asked about the usefulness¹² of two initiatives to promote keeping Singapore clean and green – pausing public cleaning and a litter-picking exercise – and whether they would be supportive¹³ of them being implemented in their housing estates. Overall, over 80% of respondents thought that both initiatives were useful for demonstrating how much litter is generated by the community, increasing appreciation of the importance of cleaners to keep public spaces clean, and nudging the community to do their part to keep public spaces clean (see Tables 24 & 25).

For pausing public cleaning, the following scenario was presented to respondents as an initiative to promote keeping Singapore clean and green:

A public campaign is launched to pause public cleaning at all public parks, park connectors, open areas and ground levels of housing estates for one day every 3 months of the year.

Eighty-one percent of respondents were supportive of pausing public cleaning for one day in their housing estate. Nineteen percent would not support or were only slightly supportive, especially respondents below the age of 50 and those in private housing (see [Table 26](#)).

¹² This includes respondents who indicated that the measures were “quite useful” or “very useful”.

¹³ This includes respondents who indicated that the measures were “quite supportive” or “very supportive”.

Table 24: Usefulness of initiative to pause public cleaning

Pause Public Cleaning	Not useful at all (%)	Only slightly useful (%)	Quite useful (%)	Very useful (%)
Demonstrate how much litter is generated by the community in these public spaces	4.9	13.6	59.6	21.8
Increase the community's appreciation of the importance of cleaners to keep public spaces clean	5.6	14.1	57.8	22.4
Nudge the community to do their part to keep public spaces clean and dispose of their litter properly	6.0	13.8	57.8	22.4

For a litter-picking exercise, the following scenario was presented to respondents as an initiative to promote keeping Singapore clean and green:

A public campaign is launched to rally the community to conduct a mass litter-picking exercise at various public spaces every 3 months of the year.

Eighty-four percent were supportive of a litter-picking exercise being implemented in their housing estate. Sixteen percent would not support or were only slightly supportive, especially adults aged 35-49 and those in private housing (See Table 26). However, 56% would not participate in the mass litter-picking exercise campaign, especially elderly respondents above the age of 65 years and those in private housing.

Table 25: Usefulness of litter-picking exercise

Litter-picking exercise	Not useful at all (%)	Only slightly useful (%)	Quite useful (%)	Very useful (%)
Demonstrate how much litter is generated by the community in these public spaces	1.8	14.5	60.8	22.9
Increase the community's appreciation of the importance of cleaners to keep public spaces clean	1.6	14.0	60.9	23.5
Nudge the community to do their part to keep public spaces clean and dispose of their litter properly	1.8	13.9	60.5	23.9

Table 26: Support for initiatives

Initiatives	Not supportive at all (%)	Only slightly supportive (%)	Quite supportive (%)	Very supportive (%)
Pause public cleaning	6.0	13.2	53.8	27.0
Litter-picking exercise	1.7	14.5	56.5	27.3

Conclusion

The survey findings reveal that while the overall satisfaction level has dipped slightly compared to the 2019 survey findings which coincided with the start of COVID-19, there remains a widespread satisfaction in public cleanliness in Singapore with no change in overall satisfaction from 2021. Nevertheless, some reduction in satisfaction was found for the cleanliness of food outlets, namely, air-conditioned food courts, coffeeshops, hawker centres and wet markets. This could be linked to the more prevalent perception that the thoroughness and frequency of cleaning are insufficient at food outlets, compared to other location types. Lower satisfaction was also reflected in the cleanliness of public toilets in coffeeshops and hawker centres as compared to in other establishments, suggesting that there is more that can be done to improve the cleanliness of these two areas.

Most respondents recognise that the community/individual should be encouraged to keep public spaces clean. However, there seems to be an entrenched reliance on cleaning services, with fewer respondents being willing to take personal responsibility to keep public areas clean especially if they are able to outsource these tasks to cleaners. When presented with a scenario of overflowing trash bins, more respondents feel that cleaners are not efficient in their work (46% in 2021 vs 59% in 2022), and that more money should be spent on cleaning services (60% in 2021 vs 81% in 2022). More respondents also hold the opinion that residents who see overflowing trash bins should contact the relevant parties (e.g., town council) so cleaners can clear the bins promptly.

Respondents were also asked about the usefulness of two initiatives to promote keeping Singapore clean and green – pausing public cleaning and a litter-picking exercise – and whether they would be supportive of these being implemented in their housing estates. Overall, over 80% of respondents thought that both initiatives are useful for demonstrating how much litter is generated by the community, increasing appreciation of the importance of cleaners to keep public spaces clean, and nudging the community to similarly do their part. However, slightly more than half of the respondents said that they would not participate in such exercises despite indicating support for it. Some of the hesitation to taking personal action for neighbourhood cleanliness may stem from respondents' beliefs that others were not fulfilling their part – (a) that there were inconsiderate people living in the neighbourhood (who should perhaps then be penalised for their lack of pro-cleanliness behaviour) and (b) that cleaners were not efficient and should clear the bins more often.

Regarding the concerns about cleaning efficiency, most respondents (97%) agreed that the government should ensure higher cleaning standards for cleaning contractors. More respondents agreed that more money should be spent on cleaning services (60% in 2021 vs 81% in 2022). We are unsure whether respondents would hold similar views on public spending for cleaning services if they had to consider this against other national spending priorities or if they were asked whether they would agree to higher estate maintenance charges.

Respondents were also unanimous that residents and cleaners must work together to keep Singapore clean. While more than half of respondents were amenable to volunteering to help with cleanliness efforts in their neighbourhood, 51% of respondents felt that residents already pay for cleaning services and should not have to work to keep neighbourhoods clean, a 4% increase from 2021.

On their part, respondents indicated that they were mindful of pro-social public cleanliness behaviours such as returning trays and handwashing. Majority of respondents reported that they returned their trays, and most of those who did not attributed it to the cleaners doing so before they left the tables, with most people finding the new tray and crockery return requirement and table littering enforcement measure to be useful and effective. Singaporeans also washed their hands often or used alternatives like hand sanitisers or anti-bacterial wet wipes. The COVID-19 pandemic has underscored the importance of maintaining high public hygiene, including personal hygiene standards. It is important that Singaporeans continue to practise these pro-social behaviours to safeguard and strengthen Singapore's public health.

Given the results of this wave of the survey, some interventions could be adopted by the general public, cleaning contractors and the government.

Even as cleaners do their job, the general public should take more ownership in keeping our shared environment clean. Instead of perpetuating the attitude that there will always be cleaners around to clean up after us, it is important for the public to exercise social responsibility and do their part to keep our shared spaces clean. Small but impactful actions such as returning our trays and crockery, and finding the next available bin to throw one's litter would go a long way in keeping Singapore clean. It is also a form of appreciation to our cleaners.

Other pro-social cleanliness practices such as hand washing practices are equally important. On a community level, Singaporeans can volunteer to help maintain neighbourhood cleanliness (e.g. litter-picking) and encourage collective action to keep the neighbourhood and other shared spaces such as hawker centres clean. Providing common sanitising equipment in food establishments might encourage and enable the public to take greater initiative in maintaining the cleanliness of tables. Collective responsibility is still important for diners to clear their trays and crockery and maintain a clean environment.

While citizens should cooperate with cleaners and display prosocial behaviour in public cleanliness, cleaning contractors should also continue to ensure optimal service delivery. In addition to proper training and sufficient allocation of manpower, cleaning companies should ensure that cleaners are aware of their tasks and responsibilities. For example, cleaners in food outlets could focus less on clearing trays and crockery to allow diners to do their part. Instead, they could focus more on ensuring that tray return points are cleared promptly, and that tables are wiped and sanitised in a timely manner.

Lastly, it is important for the government to continue its public education role to emphasise the importance of safeguarding public cleanliness and hygiene. This narrative should call on both personal responsibility and community spirit to ensure the cleanliness of shared spaces.

Methodology

This study received clearance from the Singapore Management University Institutional Review Board (IRB). The survey sample was obtained using a Department of Statistics (DOS) listing of households. The identified households were approached by interviewers from a market research company, Nexus Link Pte. Ltd. with a tablet containing the survey. The survey carried a Singapore Management University Participant Information Sheet, which assured prospective participants of the confidentiality and anonymity of their responses.

Those who agreed to participate in the study completed the survey on their own except for those who were illiterate in any official language. Upon completion, interviewers would retrieve the tablet from the respondents. In total, there were 2,020 completed responses. This provided an overall response rate of approximately 67% of eligible households. The survey sample is representative of the demographics of the Singapore resident population. Details are provided in Table 1A.

Table 1A: Profile of Respondents

Sample Characteristics	2017 (%)	2018 (%)	2019 (%)	2021 (%)	2022 (%)
<i>Age</i>					
21-34 years old	27	25	26	26	25
35-49 years old	30	29	29	28	27
50-64 years old	28	28	28	27	27
65 > years old	16	17	17	19	21
<i>Gender</i>					
Male	49	50	48	45	47
Female	52	50	52	55	53
<i>Ethnicity/Race</i>					
Chinese	76	76	76	76	76
Malay	12	13	12	13	13
Indian	9	9	9	9	9
Others	3	3	3	3	3
<i>Educational Attainment</i>					
Secondary and below	43	41	39	38	39
Diploma/'A'-Levels/post sec	33	32	26	29	28
Degree & Prof qualification	23	25	35	34	33
<i>Housing Type</i>					
3 room or smaller HDB	27	23	26	26	26
4 room or bigger HDB	66	59	57	58	62
Private	7	19	17	17	12

Details of Public Cleanliness Satisfaction index

Table 2A: Public Cleanliness Satisfaction Index

Domains / Spaces		Proportion Satisfied (%)	Proportion Satisfied with Domain (%)	Overall Proportion Satisfied across all Spaces (%) [Public Cleanliness Satisfaction Index]
Transport	Roads	97 <i>94</i> 98 (95) 95	2022: 97	2022: 92 <i>2021: 92</i> 2019: 93 2018: 84 2017: 82
	Bus Stop	95 <i>95</i> 98 (92) 88	2021: 96	
	Bus Interchange	98 <i>98</i> 99 (95) 94	2019: 98	
	MRT/LRT Station	98 <i>99</i> 99 (98) 97	2018: 95 2017: 93	
Leisure	Parks/Park Connectors	94 <i>96</i> 97 (88) 89	2022: 95 <i>2021: 97</i> 2019: 97 2018: 89 2017: 89	
	Shopping Malls in Housing Estates	98 <i>99</i> 99 (95) 93		
	Shopping Malls in Downtown/CBD Areas*	99		
	Playgrounds	93 <i>97</i> 95 (83) 82		
Food Outlets	Coffeeshops	76 <i>77</i> 86 (65) 65	2022: 83 <i>2021: 85</i> 2019: 89 2018: 71 2017: 69	
	Hawker Centres	78 <i>83</i> 87 (62) 60		
	Food Courts (Air-Conditioned)	93 <i>96</i> 95 (87) 86		
	Wet Markets	81 <i>84</i> 85 (73) 65		
Neighbourhood	HDB Town Centre	95 <i>97</i> 95 (90) 89	2022: 91 <i>2021: 90</i> 2019: 90 2018: 79 2017: 79	
	Void decks /Corridors /Lift lobbies	89 <i>86</i> 86 (74) 73		
	Lift to your home	92 <i>90</i> 90 (79) 79		
Commuter Paths	Pavements / Walkways	93 <i>93</i> 94 (87) 87	2022: 94 <i>2021: 92</i> 2019: 93 2018: 85 2017: 83	
	Overhead Bridges /Foot Bridges	95 <i>91</i> 97 (91) 90		
	Underpasses	95 <i>92</i> 94 (88) 84		
	Roadside Drains	93 <i>89</i> 89 (78) 71		
	Grass Patches next to Pavements	93 <i>93</i> 91 (82) 81		
Public Events	After Public Events (e.g. NDP, Concerts, Sporting events, etc.)	94 <i>94</i> 88 (74) 63	N.A.	

Figures in italics refer to proportions from the 2017 wave of PCSS. Figures in parenthesis refer to proportions from the 2018 wave of PCSS. Figures in black ink not bolded refer to

proportions from 2019 wave of PCSS. Figures in red ink refer to proportions from 2021 wave of PCSS. Figures in black ink and bolded refer to proportions from 2022 wave of PCSS.

**'Shopping Malls in CBD Areas' was newly added for PCSS 2022, and excluded from the calculation of the PCSI for 2022.*