



Spatial-Temporal Trends in Usage & Perception of Parks and Green Spaces

RCO-NPARKS-2024-02

5 September 2024
10:00am - 11:30am

Hybrid Meeting
Botany Centre Function Room
Microsoft Teams



agenda

BACKGROUND

1

RESEARCH OBJECTIVES

2

DELIVERABLES

3

ADMIN

4

Q&A

5

background

The National Parks Board is a public agency that manages nature conservation, greenery and recreation, and veterinary care in Singapore

Parks, playgrounds, open spaces, fitness corners and park connectors	3,235.62 ha
– 84 regional parks	
– 320 neighbourhood parks	
<hr/>	
Nature reserves (Gazetted)	3,347 ha
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background

Regular parks usage & satisfaction surveys on residents' retrospective usage patterns & perceptions of greenery

- cross-sectional; once every two years; random sample; household door-to-door; n \approx 1200 each
- field work by different survey companies
- quantitative survey instrument (\approx 50 questions including a few open-ended ones); questions not identical between waves
- data variables include % park usage, satisfaction level profile of users and non-users, postal codes
- datasets (SPSS/ excel) from 2008 available

background

Examples of survey questions

Please rate your overall satisfaction level of parks in Singapore, on a 5-point scale where '5' is 'Very Satisfied' and '1' is 'Very Dissatisfied'.

1. Very Dissatisfied
2. Dissatisfied
3. Neutral
4. Satisfied
5. Very Satisfied

Which park did you visit most often?

How often do you visit this park within the last 12 months? 1. Daily

1. 2 – 3 times a week
2. Once a week
3. 2 – 3 times a month
4. Once a month
5. Once in 3 months
6. Once in 6 months
7. Once in a year

Sia, A., Tan, P. Y., Kim, Y. J., & Er, K. B. (2023). Use and non-use of parks are dictated by nature orientation, perceived accessibility and social norm which manifest in a continuum. *Landscape and Urban Planning*, 235, 104758.

<https://www.sciencedirect.com/science/article/pii/S0169204623000774>

research objectives

Merge the datasets

- Perform in-depth analysis for the merged data
- Perform analysis in conjunction with relevant geospatial datasets

Determine factors affecting park usage behaviour & perceptions of greenery at & and neighbourhood levels

Identify factors that predict park usage in a statistical model

Finetune survey instrument

Proposals may to further build on and propose additional objectives

deliverables

1. Merged dataset with coding and labels
 - spatial-temporal insights on park usage derived from geo-spatial analysis
 - insights at national & neighbourhood levels
2. Statistical predictive models on park usage
3. Refined survey instrument
4. Scientific publications and sharing

admin - funding

- Grant call open to researchers from all Singapore-based research institutions or companies

IHL/ Public RI	Non-Singapore entities based in Singapore (including not-for-profits)	Singapore-based Large Local Enterprises	Singapore-based Small, Medium Enterprises and start-ups
100%	30%	30%	50%

admin - funding

- Up to \$0.15 million (direct and indirect costs)
 - Supportable Direct Costs
 1. Expenditure on manpower
 2. Equipment
 3. Other Operating Expenses
 4. Overseas Travel
 - Please refer to Annex B on Non-Fundable Direct Costs
 - Indirect Costs - Only applicable to IHLs / public RIs (30%)
- Lead PI should ensure that the proposed budget is correct
- Proposals that exceed \$0.15 million will NOT be considered

admin – project duration

- Up to 1.5 years
- Proposed project duration may be shorter depending on the proposed workplan

admin – submission

- Notes for submission:
 - Use the Project Proposal Template (word format)
 - You may describe how your proposal builds upon outcomes of published or ongoing research, which geospatial datasets you plan to use and how you are planning to obtain them
- Email to Angelia_SIA@nparks.gov.sg
- By 8-Nov-2024, 2:00pm

Q&A

Questions on the research proposal

1. Are all the surveys conducted door-to-door, or are there data that were derived from on-site surveys or other data sources?
NParks will provide datasets derived from national door-to-door household surveys for this proposal. On-site data will not be included.

Questions on TPRM

1. Can research institutions without the stated certification on information security and data management be eligible to participate in the RCO?
The research team may still apply for the RCO. If your team is shortlisted in the RCO, NParks will assess the risk level based on your submitted proposal. Depending on the findings from the risk assessment, you may be asked to acquire the listed set of certifications or share your current data security and management standards for further assessment.