

TOMORROW FUELED BY YESTERDAY

Reconsideration of human-based
communities in the Northern Metropolis

Presented by Spatial Pioneers (1102F)



Challenges of existing new towns in NM



Insufficient open sapce and leisure facilities to meet the residents' needs

- In 2024, open space provision per person in the Northern District and Yeun Long District is **2.51m²** and **2.10m²** respectively
- 2030+: expected open space provision per person increased from 2.5m² to 3.5 m²

天秀公園在2008年開始啟用，此前，天水圍北的休憩空間及康樂設施常被斥不足。至天秀公園落成後，整個天水圍區的休憩空間仍然低於《香港規劃標準與準則》內對休憩用地的標準，即平均每人應有2平方米休憩用地。現時天水圍人口290 000，休憩用地總面積只有42.69公頃，即每人只有1.47平方米，比一副棺材還小。

2024年 各區人均休憩用地面積：

分區	鄰舍休憩用地面積 (公頃)	地區休憩用地面積 (公頃)	人均休憩用地面積 (平方米)
離島	53.42	38.4	4.64
大埔	59.98	47.74	3.25
灣仔	14.19	38.02	3.18
黃大仙	81.34	47.78	3.14
南區	42.45	39.98	3.14
沙田	143.28	73.28	3.08
屯門	104.23	61.91	3.08
油尖旺	30.48	55.92	2.84
葵青	108.05	32.73	2.81
九龍城	43.58	72.91	2.78
觀塘	122.6	61.84	2.76
深水埗	61.7	54.61	2.65
荃灣	45.22	34.41	2.57
北區	63.87	22.29	2.51
中西區	18.34	40.05	2.51
西貢	75.39	37.06	2.24
元朗	112.05	30.18	2.10
東區	61.71	45.09	2.06

全港人均休憩用地面積：2.76

Area of Open Space per Person in 2024
(Liber Research Community, 2025)

Challenges of existing new towns in NM



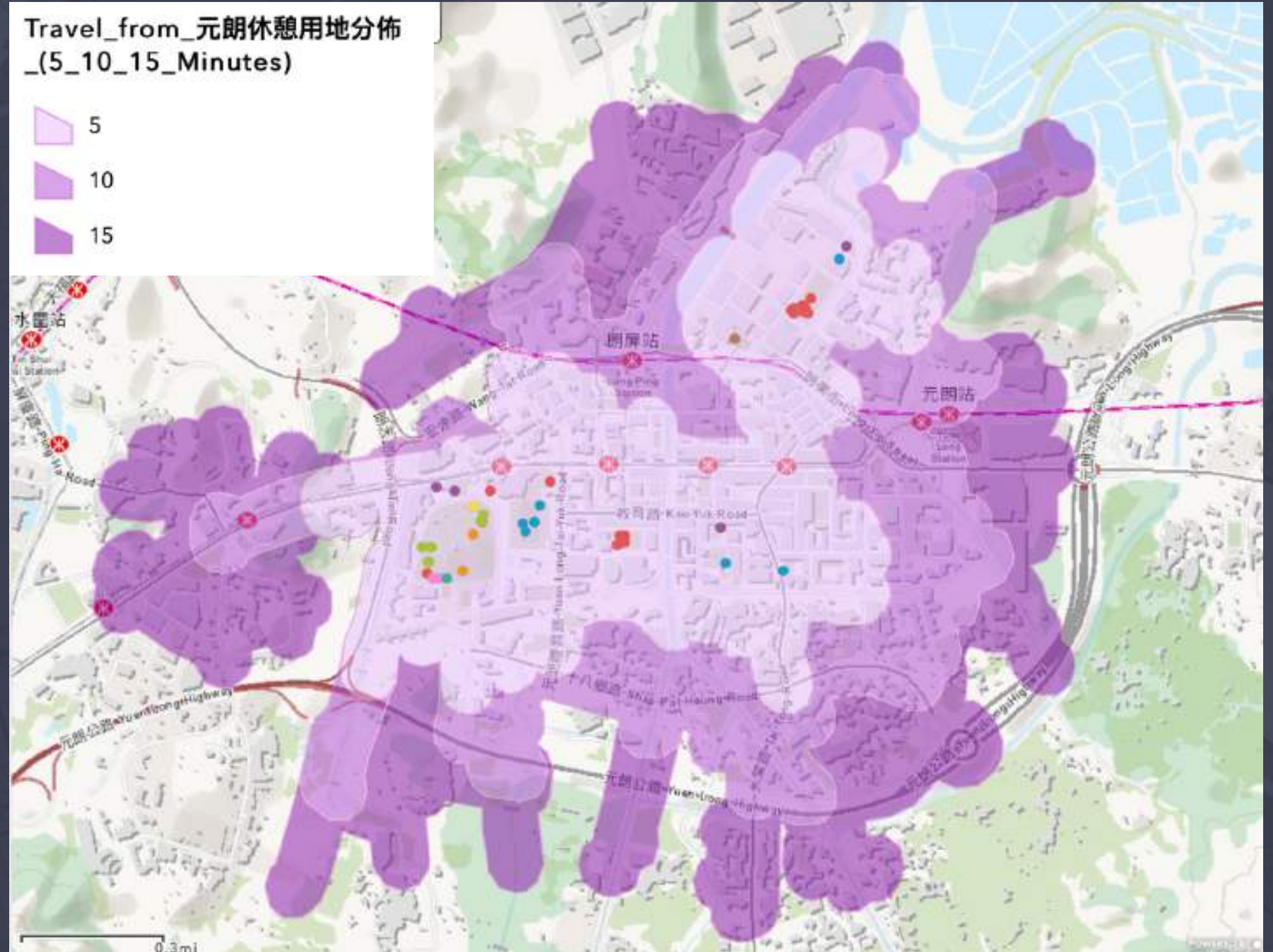
Number-driven standard of open space and leisure facilities

- Hong Kong Planning Standards and Guidelines (HKPSG) stated mainly the **numerical standard**
- Lack of consideration of users' experience e.g. **accessibility, distribution**
- Promotion of **15-minutes city**

→ Do the new towns design match the genuine needs of the residents?

元朗休憩用地類型

- | | |
|----------|------------|
| ● 球場,遊樂場 | ● 公園 |
| ● 球場 | ● 公園,空地 |
| ● 公園,遊樂場 | ● 球場,公園 |
| ● 遊樂場 | ● 其它 |
| | ● 球場,空地,公園 |



Solution

Tomorrow Fueled by Yesterday (TFY)

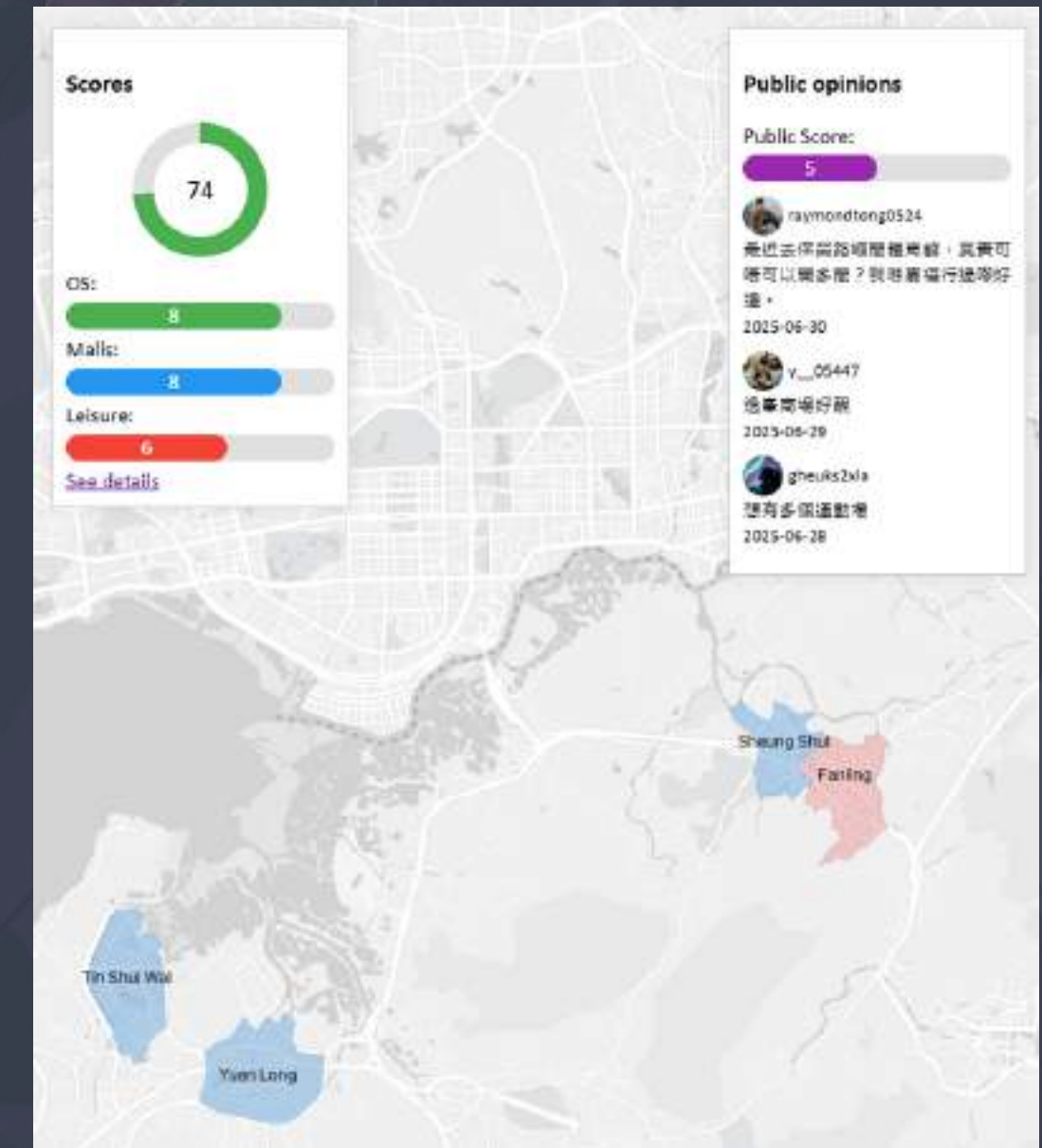
An application that generates insights in **urban planning** from the **perspective of users**, focusing on reflecting **public opinion** and **accessibility** in the existing new towns, presented with an isochrone map, by:

Re-evaluation of existing new towns

— **Accessibility** of 3 aspects of facilities and land uses and the **overall accessibility score** for each new town

- Open Space
- Leisure Facilities
- Shopping Centres

— Collection of **public opinion** from comments on social media and press media, along with **AI-generated summary** for each district and specific facilities



Solution

Tomorrow Fueled by Yesterday (TFY)

Site selection:

New Towns that share proximity to the developing Northern Metropolis

- Tin Shui Wai
- Yuen Long
- Sheung Shui
- Fanling

Technology used:

Public opinion gathering and analysis

- Web scraping (Beautiful Soup)
- Generative AI (Google Gemini)
- Sentiment analysis (NLTK)

Adopted Spatial data:

- CSDI
- Esri China (HK)
- Google Maps

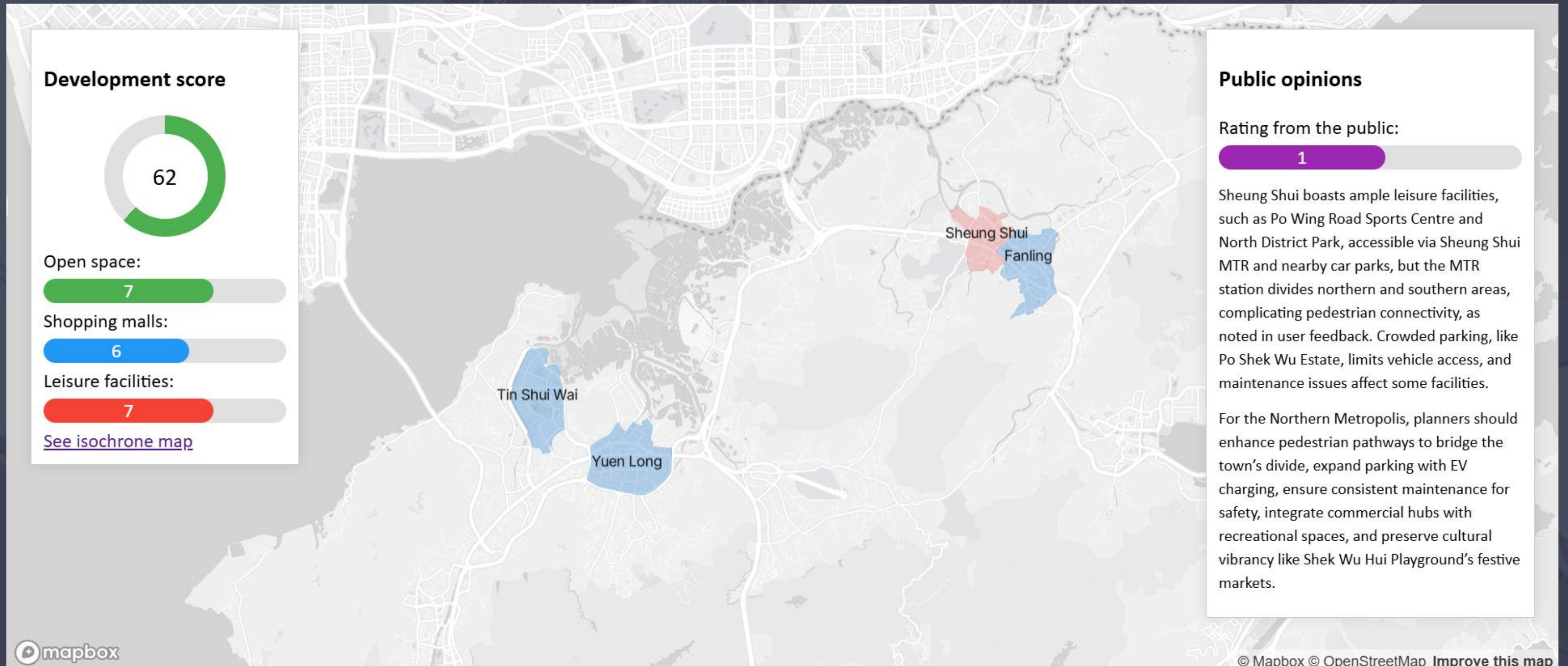
Sheung Shui
Fanling

Parks	Open Space (OS) in Existing Public Housing Estates / Courts, Parks, Zoos and Gardens
Leisure facilities	Libraries, Holiday Camps, Archery Ranges, Recreational Grounds, Sports Grounds, Swimming Pools, Badminton Courts, Table Tennis Tables, Grass Pitches, Tennis Courts, Hard-surface Pitches, Sports Centres, Basketball Courts, Stadiums, Museums
Shopping malls	**manually inputted data**

See Appendix I for detailed information

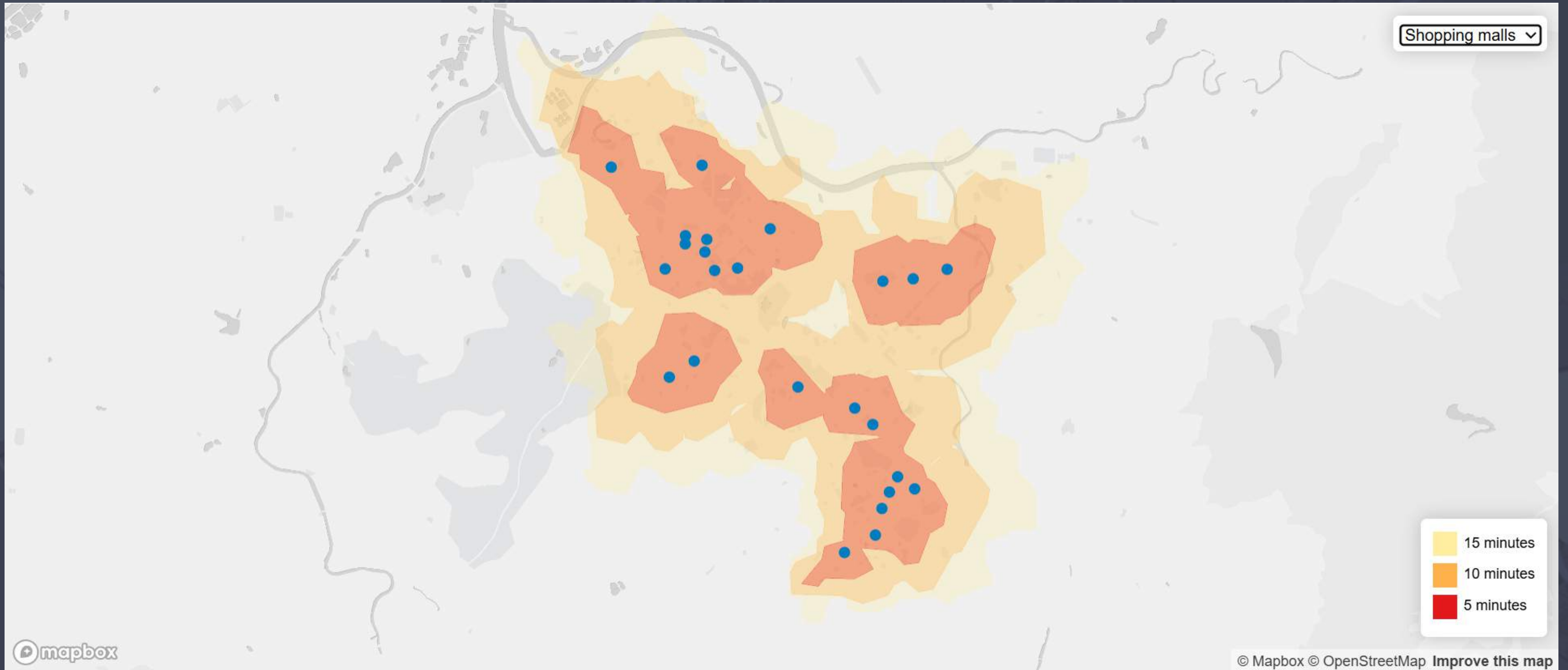
Prototype

Main page: <https://ipetyourmouse.github.io/csdihome>
Introduction video: <https://youtu.be/nZekm4w4HYc>



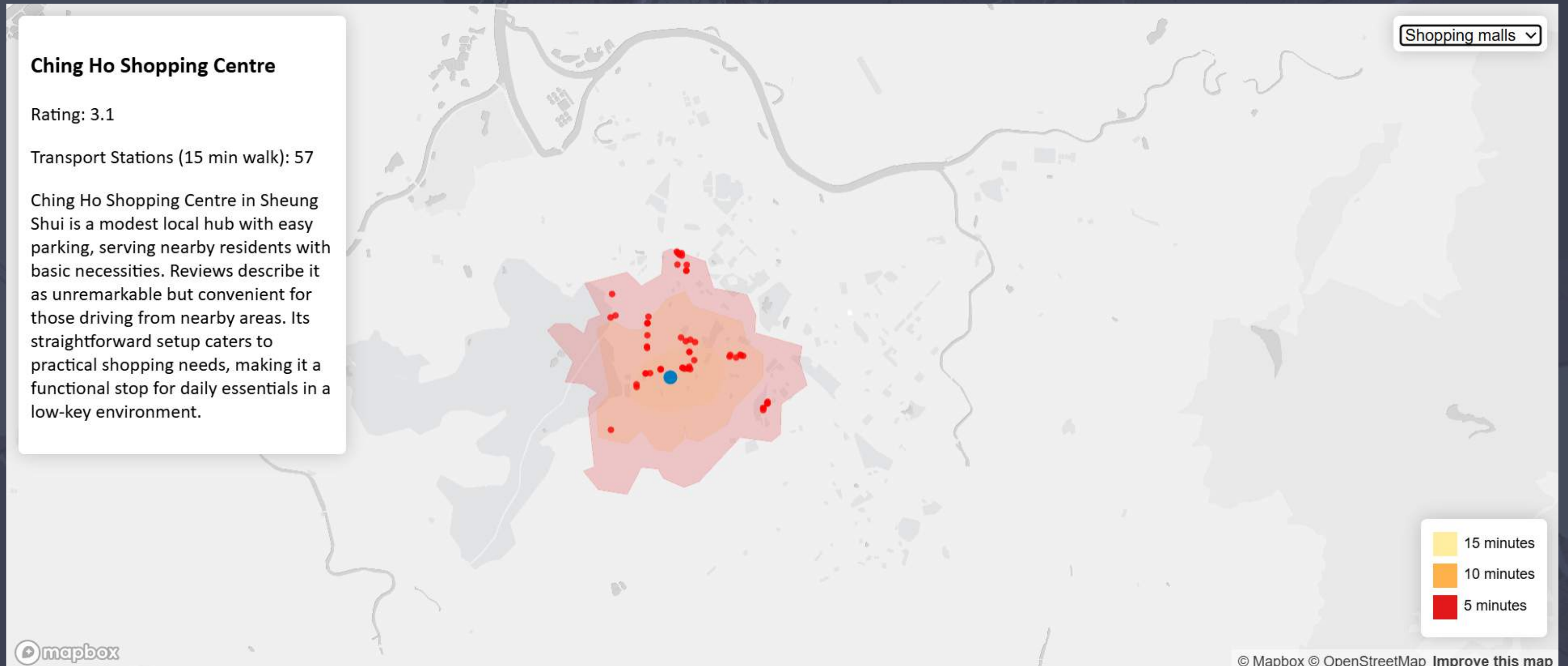
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Expected Benefits



Understand the deficiency of the existing new towns

- Indicate the shortcomings of new town for future improvement
- Provide suggestions for NDA to supplement the needs of the existing new towns



Provide insights for NDA development

- Learn from the experience of the existing new towns to ensure the self-sufficiency of the NDA
- Create community that embrace 15-minutes city



Encourage alternative evaluation other than number-based method

- Human-oriented planning
- Understand the genuine needs of the people rather than meeting the required numbers

Beneficiaries



Urban Planners

- Support the strategic planning decision of Northern Metropolis



Community organizations

- Understand the community deficiency and promote initiatives that enhance the livability



Researchers & Academic institutions

- Provide alternative and updated data for study analysis



Future residents

- Enjoy a more comprehensive planning that meet their needs