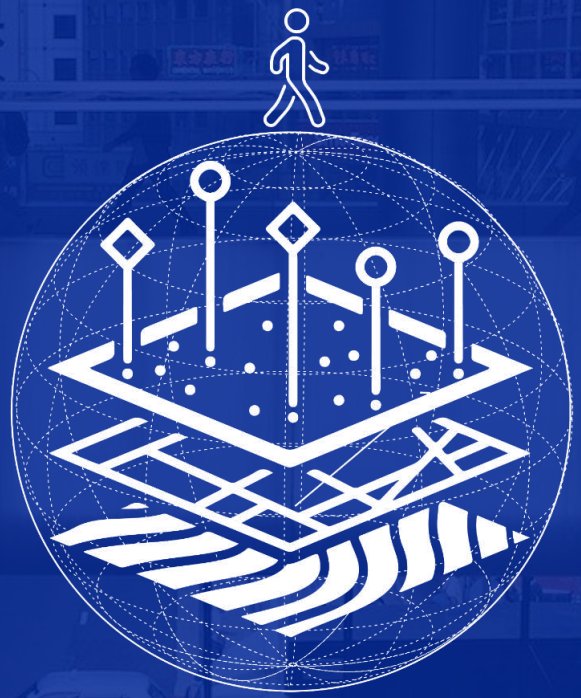
www.morphomatrix.com.hk



MorphoMatrix

Leveraging Applied Research to connect UN SDGs, Built-Environment, & 3D spatial Analytics in Hong Kong

In collaboration with..

THE UNIVERSITY OF HONG KONG faculty of architecture
Department of Urban Planning and Design
Centre of Urban Studies and Urban Planning

Place Matrix
Behavioural Placemaking | Network Science of Cities

TONGJI UNIVERSITY CAUP 同济大学建筑与城市规划学院
COLLEGE OF ARCHITECTURE AND URBAN PLANNING TONGJI UNIVERSITY

Data Lake to Impact Intelligence & Actionable Knowledge.

What if siloed data was turned into curated thematic datasets providing critical insights to empower your decision-making?

Freeing data usage from encumbrances.

What if we embrace the power of geospatial data analytics and deploy it on the web-browser, at your finger-tips?

Spatial data the way you experience it. In 3D.

What if we relate data to the scale at which you walk; 5, 10,15 mins? Visualising your life circle.

https://www.morphomatrix.com.hk/

Diversity

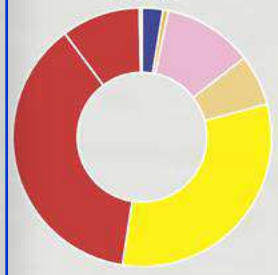
Landuse entropy

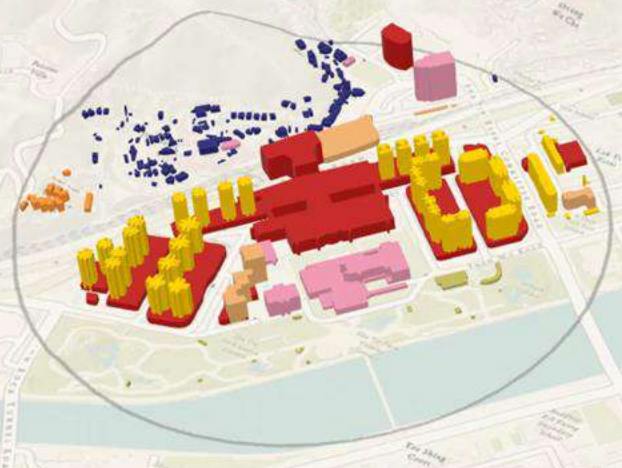
POIs

GFA of each landuse type

Entropy: 0.6

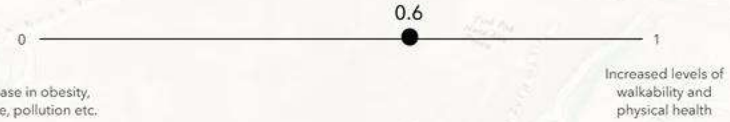
Land Usage





Impact-based scoring

Landuse entropy within the pedestrian buffer



MorphoMatrix serves curated health, social, environmental, and economics data to urban practitioners and equips them with the analytic capabilities to plan and improve communities faster, better, and at lower cost.

Pathway to Impact *(West based literature)*

Land use mix/Diversity

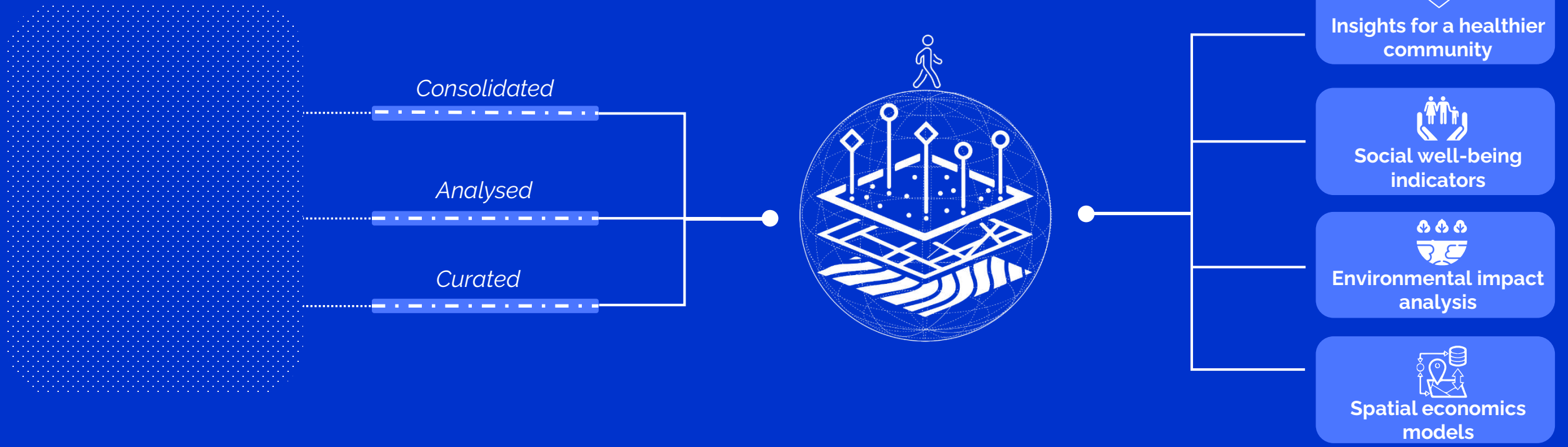
- Land-use mix had the strongest association with obesity (BMI30 kg/m2), with each quartile increase being associated with a 12.2% reduction in the likelihood of obesity across gender and ethnicity. Each additional hour spent in a car per day was associated with a 6% increase in the likelihood of obesity. Conversely, each additional kilometer walked per day was associated with a 4.8% reduction in the likelihood of obesity. Frank, Andresen, and Schmid (2004)
- In Korea, The results show that neighborhoods with a relatively higher land-use mix and relatively greater access to public transportation have a significantly positive association with walking activity for destinations that are within a 500m radius of residences.

Learn more...

Links to SDGs

MorphoMatrix

Fragmented raw data landscape



Sourcing best-quality raw data at granular scales.

Through our rigorous data sourcing methods, we ensure the procurement of best-quality raw data at the most granular scales, empowering businesses to uncover hidden patterns and make data-driven decisions with confidence.

Dissecting and compiling to create an effective data library

Utilizing advanced techniques, we dissect and compile data from diverse sources, constructing a robust data library that enables efficient access to information and facilitates informed decision-making.

Curated data insights to design purpose-driven solutions

We combine advanced algorithms and processes with our extensive scientific knowledge in urbanism and technology to ensure the accuracy and currency of our data library is validated to empower your decisions.

We provide comprehensive, precise, and contextually rich data on urban and natural landscapes to **district level government bodies, NGOs, developers, and stakeholders.** By combining this with validated scientific research, our impactful intelligence **enables prioritization of investments and resources** where most needed. Our **solutions empower data-driven decisions**, leveraging the best data and latest technology.

Find the right intelligence to your spatial inquiries.

- District minor works monitoring & identification
- Intersect health, social, economics, and environmental data to analyse a place at multiple scales.
- Elderly centric spatial distribution of amenities and services – Social innovations
- Evaluate existing conditions down to building level with granular built-environment data.
- Create data-driven insights to make informed decisions about urban planning, real estate, infrastructure investments, and mobility.
- Measure the impact of additional park investments and new development around parks and open space.

規劃署 Planning Department

市區重建局 URBAN RENEWAL AUTHORITY

CEDD

地政總署 Lands Department

ARUP AECOM

www.morphomatrix.com.hk

User-feedback survey (~6mins)

https://forms.gle/eSCB8t92RWqqKk6E6

Get in touch!

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