

**Table S1. Explanation of the top 25 POI categories and related socioeconomic activities in this study**

POI category	Explanation	Socioeconomic activities
House number	A number or number–letter combination that labels a building or apartment.	Housing model
Residential quarter	A contemporary urban multi-story residential building.	Housing model
Company	A legal entity, made up of an association of people, for carrying out a commercial or industrial enterprise.	Non-agriculturalization
Clothing and accessory shop	A retail shop where clothing, footwear, hats, and other accessories are sold.	Non-agriculturalization
Other shop	Unclassified shop.	Non-agriculturalization
Home decoration and building material shop	A shop where windows, doors, cabinets, tiles, concrete, and other home decorating and building materials are sold.	Non-agriculturalization
Exclusive shop	A shop where the products from only one manufacturer are sold.	Non-agriculturalization
Convenience shop	A small retail shop where a range of everyday items are sold.	Non-agriculturalization
Hair and beauty service shop	A shop where hair styling services, other beauty services (e.g., manicure/pedicure, tanning) and spa services (e.g., massage) are provided.	Non-agriculturalization
Shop for everyday services	A shop where an everyday service or services are provided, such as repairs, printing, and car rentals.	Non-agriculturalization
Supermarket	A self-service shop where a wide variety of food, beverages, and household products are offered.	Non-agriculturalization
Home appliance shop	A shop where various household electrical/mechanical machines are sold, such as air conditioners, computers, fans, and washing machines.	Non-agriculturalization

Lottery shop	A licensed shop where lottery tickets are sold.	Non-agriculturalization
Hardware shop	A shop where various types of hardware are sold, such as electrical wire, chains, keys, locks, and generators.	Non-agriculturalization
Training school	An organization that provides training courses, for example in dancing, languages, and computer skills.	Non-agriculturalization
Factory	A building or set of buildings with facilities for manufacturing.	Non-agriculturalization
Chinese restaurant	A restaurant serving Chinese cuisine.	Non-agriculturalization
Other restaurant	An unclassified restaurant.	Non-agriculturalization
Fast-food restaurant	A restaurant where cheap food is served with a short wait-time, regardless of the type of food offered.	Non-agriculturalization
Street name	A name that labels a street or road.	Transportation
Bus station	A designated place where buses stop for passengers to board or disembark from a bus.	Transportation
Bridge name	The name of a bridge that was built for transportation.	Transportation
Intersection name	The name of a junction where two or more roads or streets meet or cross.	Transportation
Township hospital	A public health center that is established at the township level.	Health service
Clinic	A private health facility that covers the primary care needs of populations in local communities.	Health service
Pharmacy	A shop where medications and other health and well-being products are offered.	Health service
Place name at the village level	A name that indicates a particular location or region within a village.	Other
Mountain	A name that labels a mountainous or hilly landform.	Other

River	A name that labels a river landform.	Other
Buddhist and Taoist temple	A place of worship for Buddhists or Taoists.	Other
Public toilet	A public room or small building with toilets and sinks.	Other
Kindergarten	A preschool educational facility.	Other
Government agency below the township level	A governmental agency below the township level.	Other
Government agency at the township level	A governmental agency at the township level.	Other
Other government agency	An unclassified government agency.	Other
Petrol station	A facility where fuel is sold.	Other
Primary school	A state-run school that provides the compulsory basic education.	Other
Other place name	An unclassified place name.	Other