

Supplementary Materials: Site Selection of Candidate Locations for New Healthcare Facilities

Genxin Song, Xinxin He, Yunfeng Kong, Ke Li, Hongquan Song, Shiyan Zhai and Jingjing Luo

In this study, we used the CPMP model to determine the best locations for new healthcare facilities. 318 candidate sites were selected according to the site selection standards of the community healthcare service centers (<http://public.zhengzhou.gov.cn/D480401X/300673.jhtml>). The criteria for the selection of candidate sites are considered as follows:

- Convenient transportation, located within 50 meters on both sides of the roads
- The building area is not less than 1,000 square meters
- It is better to have a parking area within 100 meters
- Not within 500 meters of the existing healthcare facilities

1. Select the buildings within the 50-meter buffer zone of road network in study area (Figure S1).



Figure S1. Buildings within the 50-meter buffer zone of road network.

2. Choose buildings with area greater than 1,000 square meters (Figure S2).



Figure S2. Buildings with area greater than 1,000 square meters.

3. Select the buildings within 100-meter buffer zone of parking area (data from <https://geohey.com/>) (Figure S3).

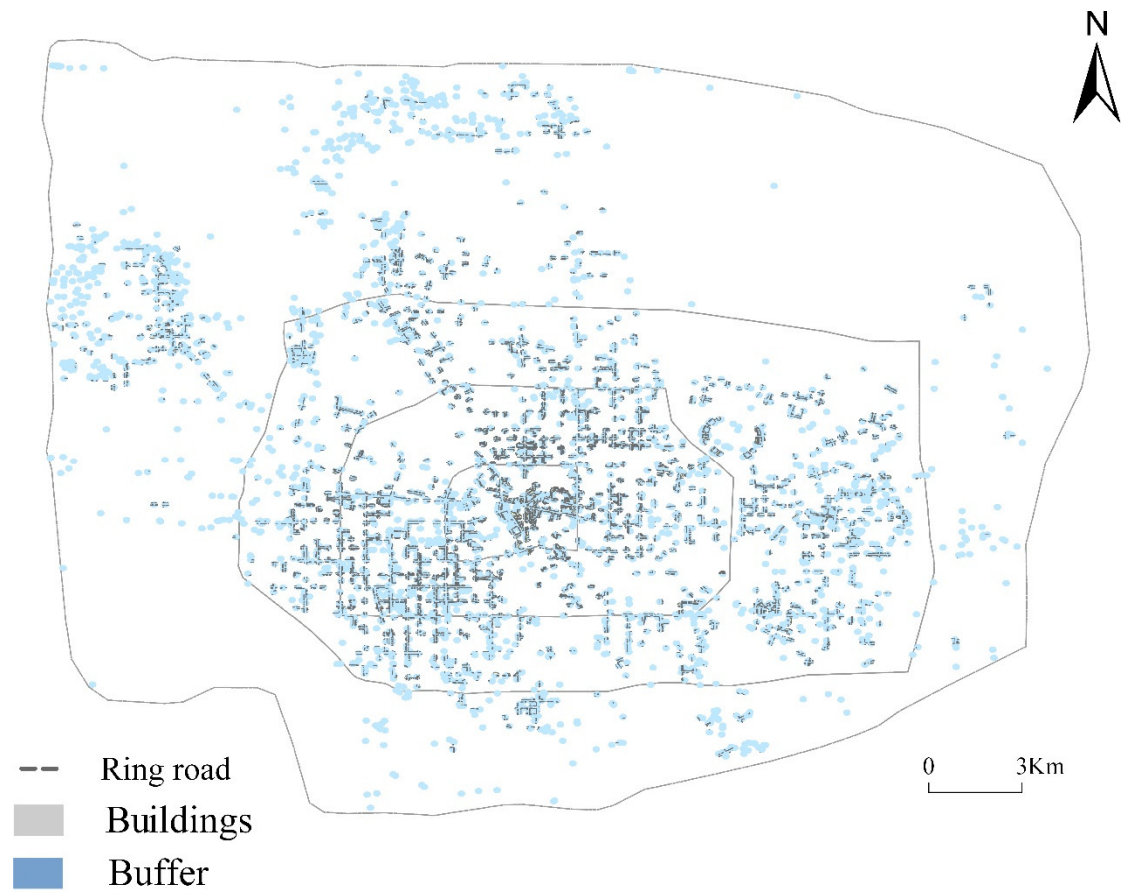


Figure S3. Buildings within 100-meter buffer zone of parking area.

4. Select the buildings outside 500-meter buffer zone of the existing healthcare facilities (Figure S4).

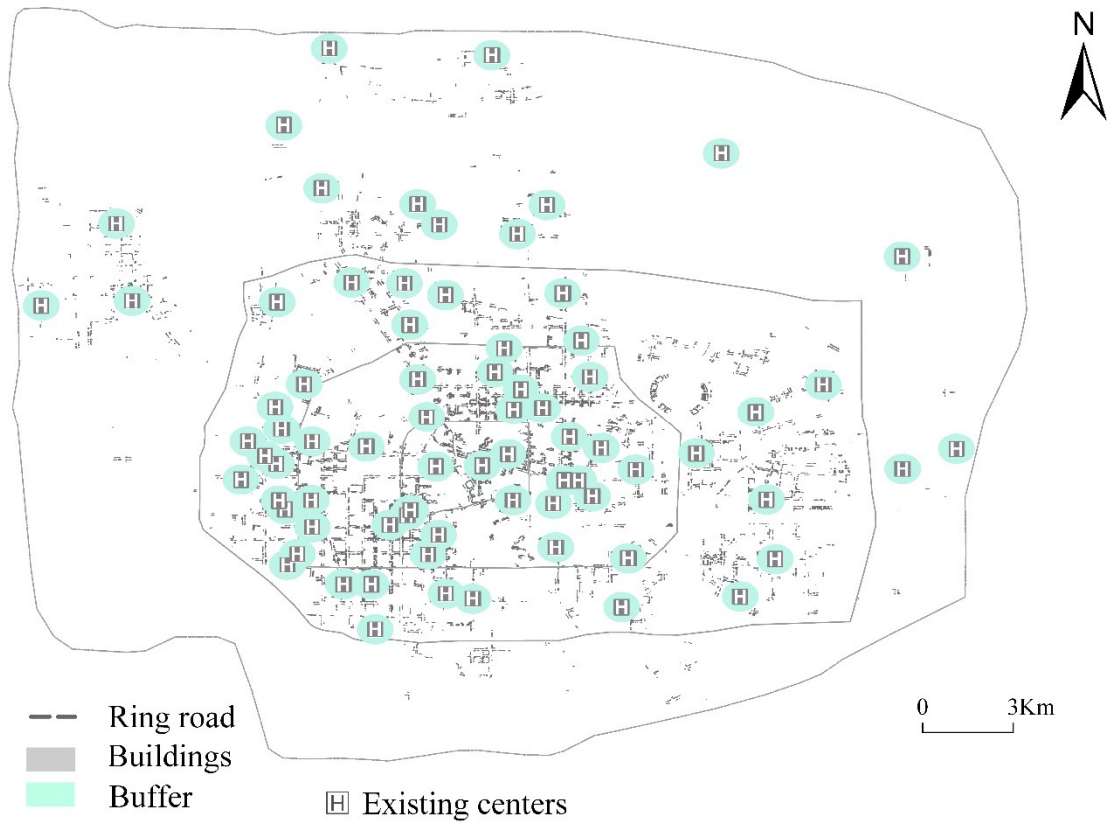


Figure S4. Buildings outside 500-meter buffer zone of the existing community health service center.

5. Combining high-resolution remote sensing images in Google Earth and field surveys, 318 candidate healthcare facilities were initially selected (Figure S5).

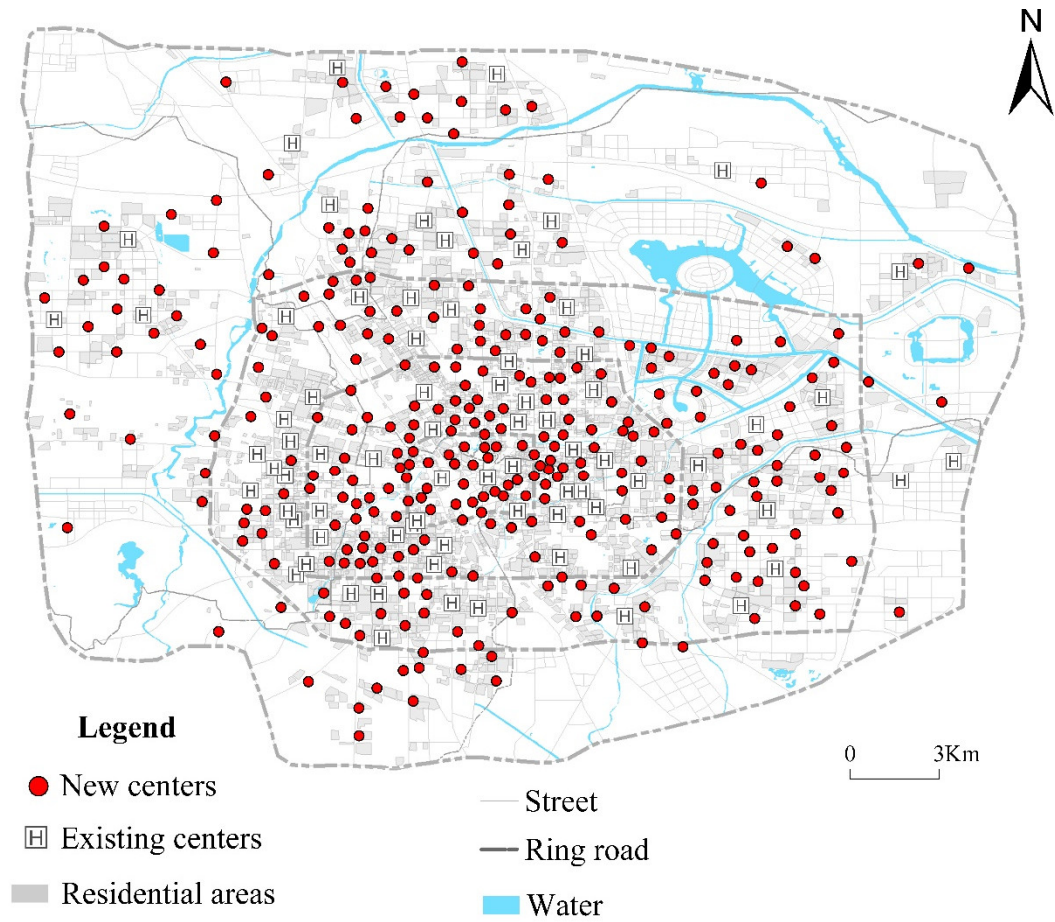


Figure S5. Spatial distribution of candidate healthcare facilities.