## **Supplementary materials**

# Maps of factors that affect travel to healthcare and comparison of travel time estimates derived from AccessMod and Google Maps Directions API

### Kano

Figure S1. Health facilities in Kano.

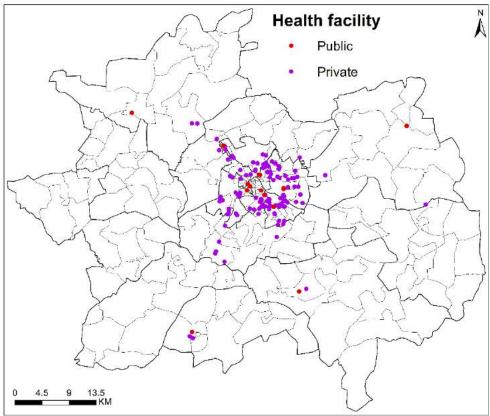


Figure S2. Land cover in Kano.

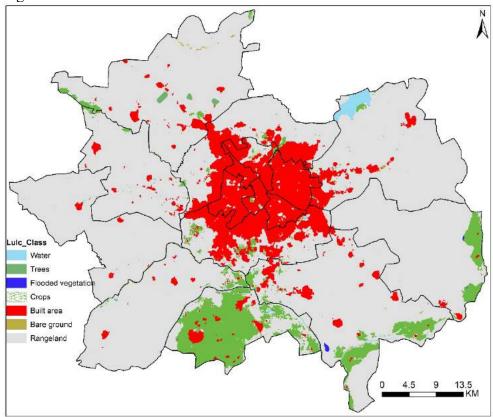


Figure S3. Digital elevation model in Kano.

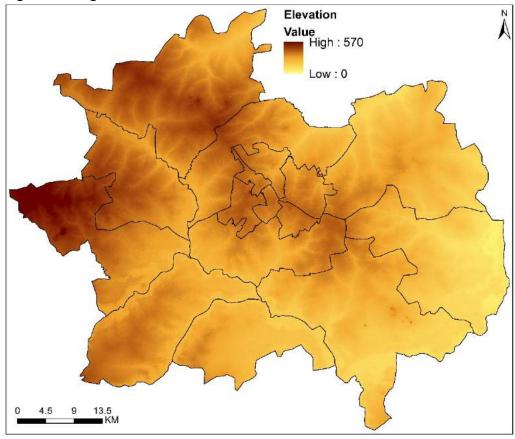


Figure S4. Road network in Kano.

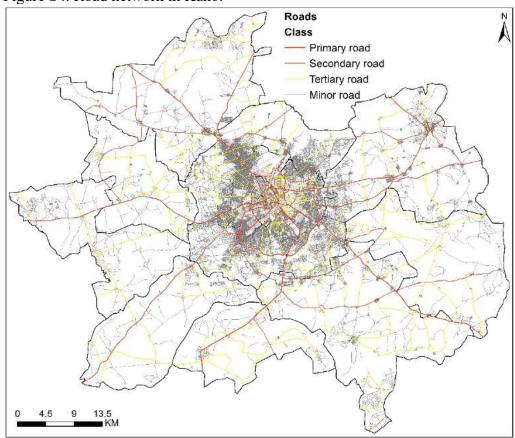


Figure S5. Population density in Kano.

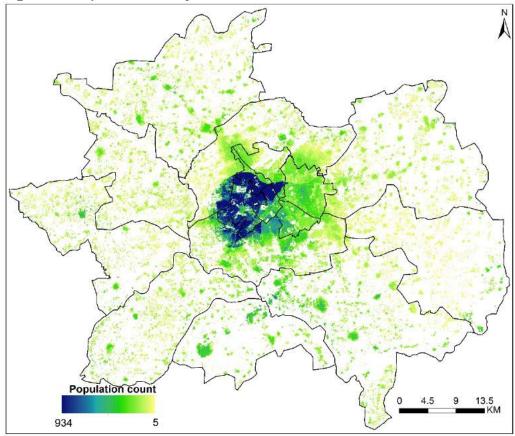
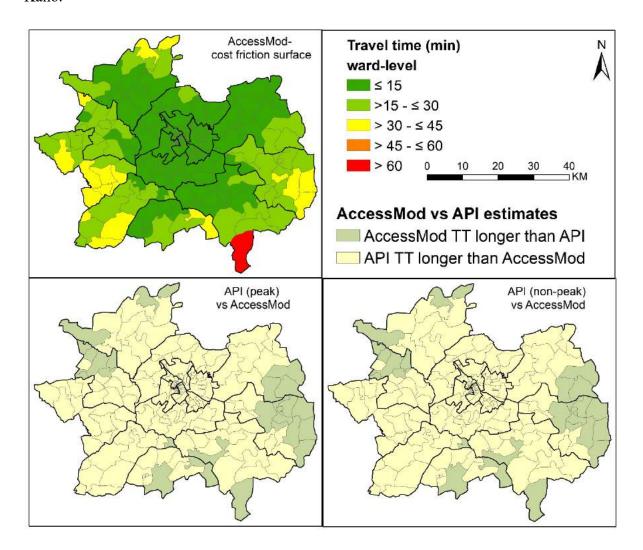


Figure S6. Comparison of travel time estimates generated from AccessMod (least-cost Path algorithm) and Google Maps internal direction Application Programming Interface (API) in Kano.



### **Port Harcourt**

Figure S7. Health facilities in Port Harcourt.

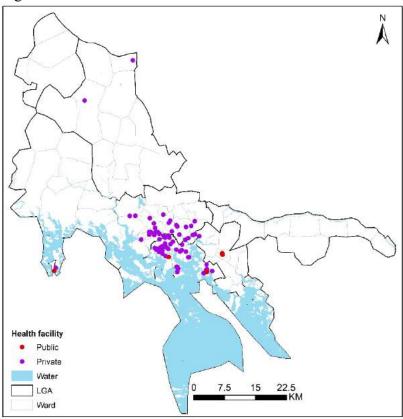


Figure S8. Land cover in Port Harcourt.

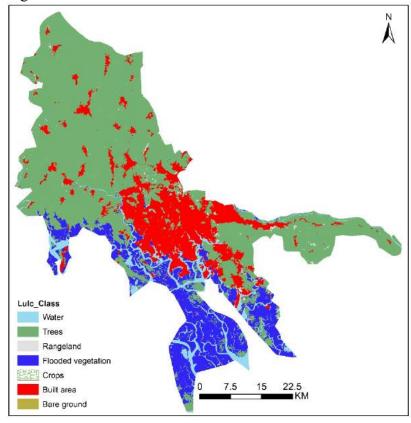


Figure S9. Digital elevation model in Port Harcourt.

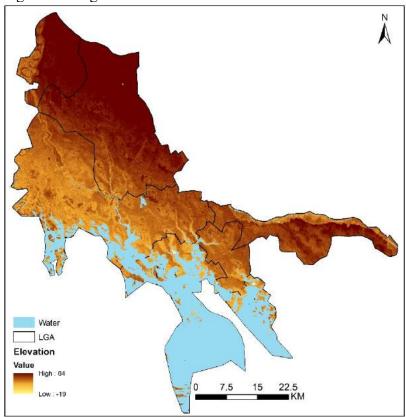


Figure S10. Road network in Port Harcourt.

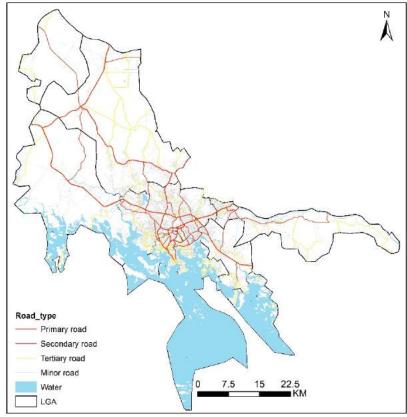


Figure S11. Population density in Port Harcourt.

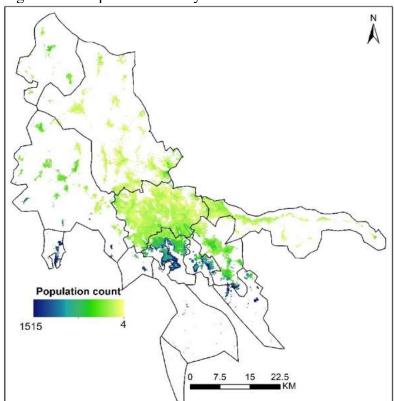
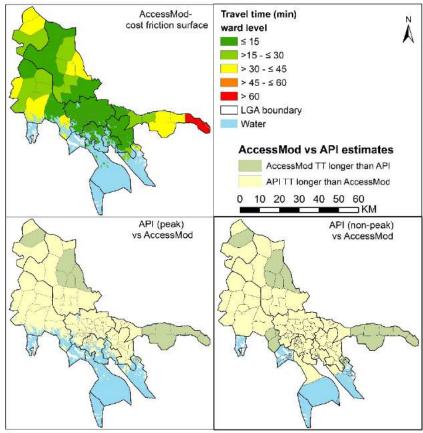


Figure S12. Comparison of travel time estimates generated from AccessMod (least-cost Path algorithm) and Google Maps internal direction Application Programming Interface (API) in Port Harcourt.



#### Lagos

Figure S13. Health facilities in Lagos.

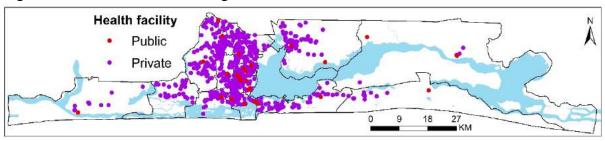


Figure S14. Land cover in Lagos.

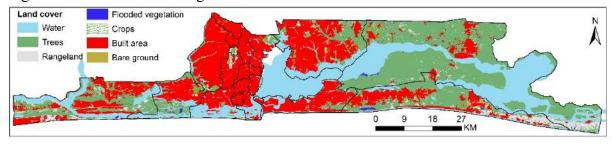


Figure S15. Digital elevation model in Lagos.

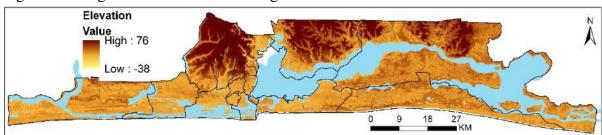


Figure S16. Road network in Lagos.

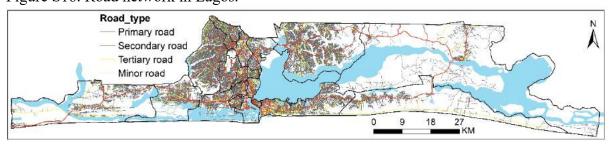


Figure S17. Population density in Lagos.

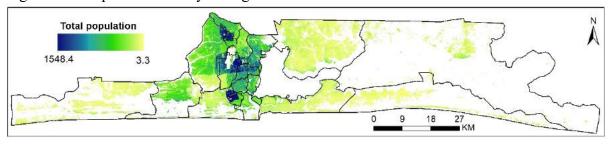


Figure S18. Comparison of travel time estimates generated from AccessMod (least-cost Path algorithm) and Google Maps internal direction Application Programming Interface (API) in Lagos.

