Reverse Service Area Analysis based on OSM data

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INFORMATION

Motivation



- Service area analysis reverse direction
 - "service area" vs. "closest facility"
 - multiple origins multiple destinations
- feasibility study: accessibility of hospitals in Styria
- people in need of medical care
- find the best facility for medical treatment
 - municipality
 - raster
- work with open data, open-source software
- provide results in a Location-Based Service







PostgreSQL/PostGIS

Study area





Algorithm





Travel time to hospital





Allocation to hospital





Allocation to hospital





Results





Conclusion & outlook



- feasibility study: done!
 - LBS application yet to come
- specialization on medical condition
- take all hospitals (private ,...) into account
- physician on duty
- implementation terrain model





Thank you!

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