Directions for mobility investments

DO EXACTLY WHAT IS NEEDED, WHERE IT IS NEEDED.

Efficiency is intelligent laziness.

- DAVID DUNHAM

Summary

This project aims to help identifying those areas that are relatively poor of mobility services and infrastructures, considering their relatively high attractiveness, within the boundaries of a city.

Exploiting Open Street Map and FourSquare data, the project allows assign a rate (good, quite good, poor) to different areas in the city, as for their mobility services, and attractiveness.

Observing the gap between the two rates, it is possible to identify those areas within the boundaries of the city where it makes the more sense to make some more investment in mobility.

The one presented here, is a demo analysis conducted for the town of Montelupo Fiorentino, in the nearby of Florence, Italy, that is where I live. The Jupiter notebook that is the main artifact of the project, is anyway though to be easily customizable to analyze any territory of your interest.

Assessing Mobility

Open Street Map provides:

- Public Transport

- Highways

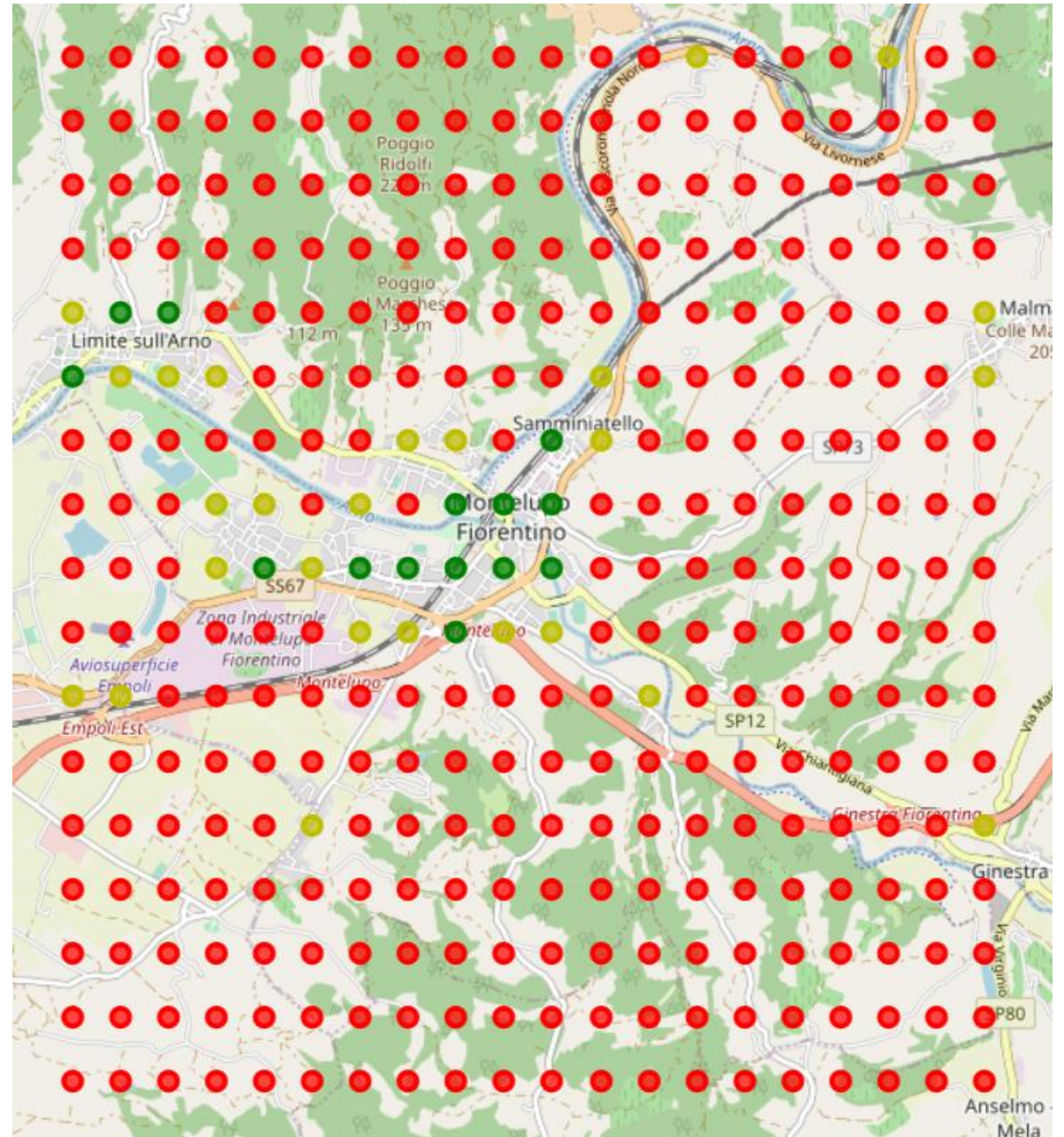- Parking

- Rental services
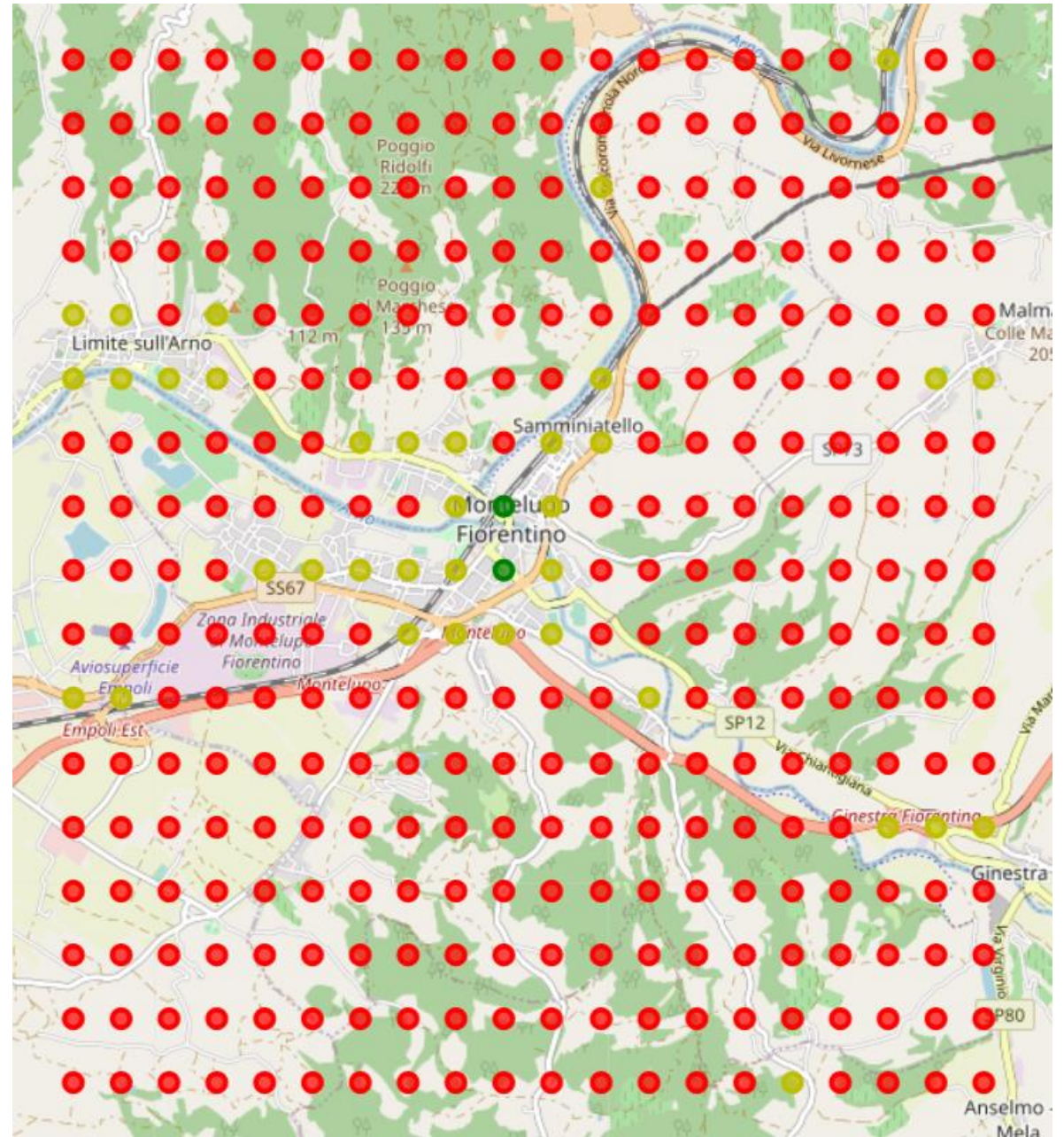
Assessing Attractiveness

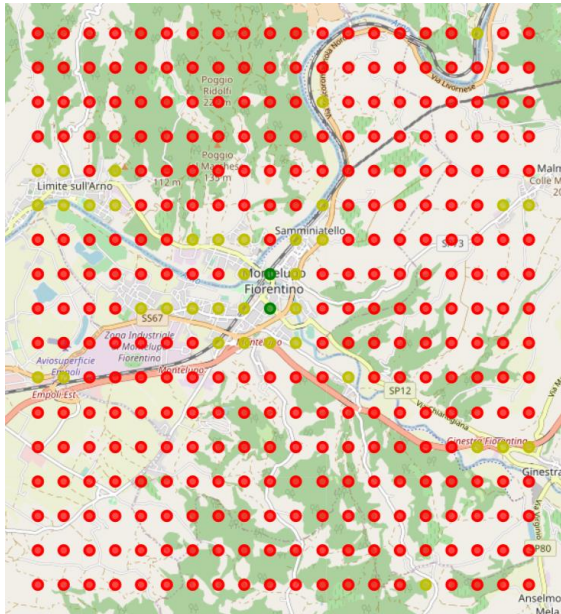Open Street Map provides:

- Map density (# of OSM nodes)

FourSquare provides:

- Venues

- Likes per venue

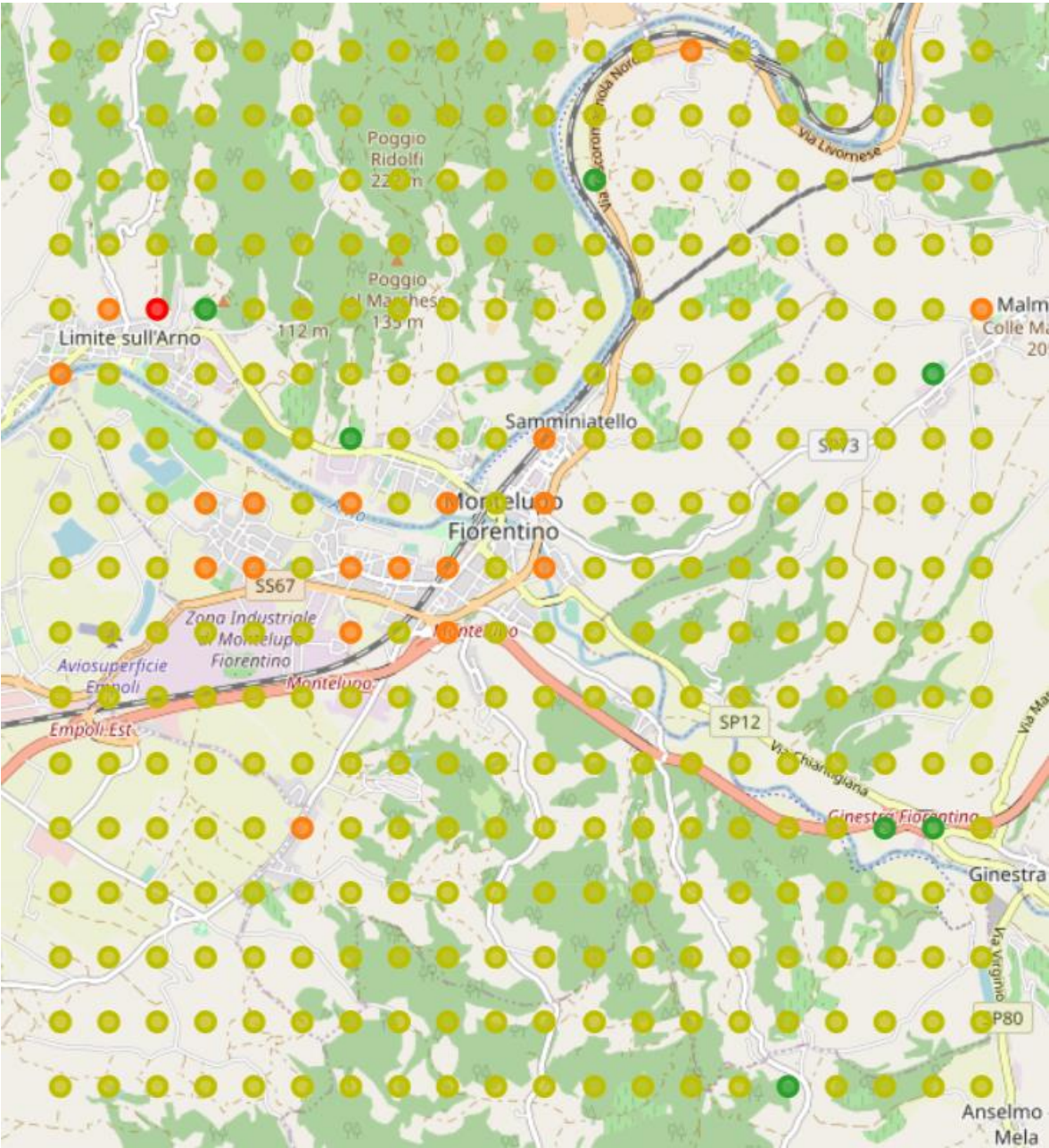# Mobility services vs Attractiveness

MOBILITY SERVICES

ATTRACTIVENESS

Identifying lacks

Mobility	Attractive	Result
Good	Good	Good
Medium	Good	Alert
Poor	Good	Alarm
Good	Medium	Good
Medium	Medium	Good
Poor	Medium	Alert
Good	Poor	Good
Medium	Poor	Good
Poor	Poor	Good

Download the Jupiter Notebook from **mobilityplanner** GitHub repository at:

https://github.com/mircosoderi/mobilityplanner

Run the notebook in a runtime environment of your preference such as:

https://labs.cognitiveclass.ai/

https://www.ibm.com/it-it/cloud/watson-studio

Follow instructions in the notebook:

👨‍🍳 means M*ake your hands dirty! (*assisted config, install, coding)

😊 means *Enjoy! (*just run cells and relax)

Let me know if you are in trouble:

mirco.soderi@gmail.com

... and also if you are not!

Do It Yourself

References

https://www.coursera.org/specializations/ibm-data-science

https://www.coursera.org/learn/applied-data-science-capstone/home/welcome

https://www.ibm.com/it-it/cloud/watson-studio

https://www.openstreetmap.org/relation/42586

https://developer.foursquare.com/docs/api-reference/venues/search/

https://developer.foursquare.com/docs/api-reference/venues/likes/

https://github.com/mircosoderi/mobilityplanner

https://www.linkedin.com/in/mirco-soderi-3b470525/