

Planing bike sharing systems considering the demand, distribution and maintenance works

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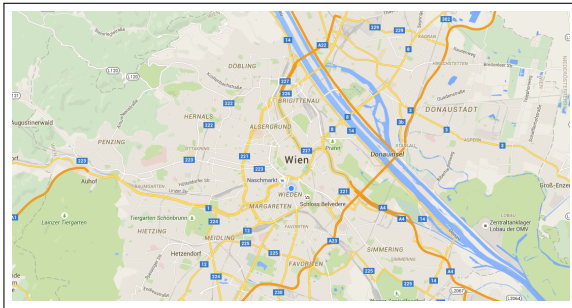


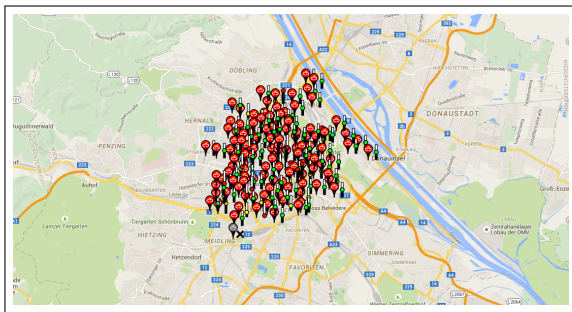
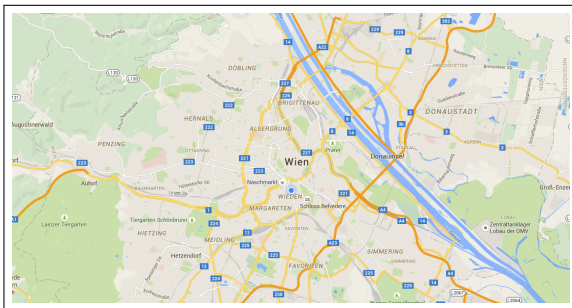
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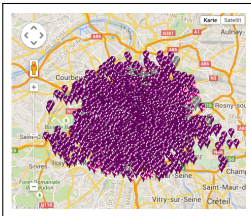
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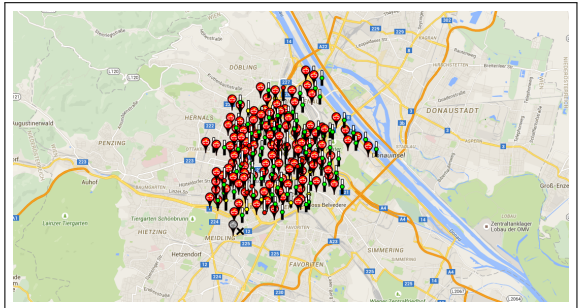








Vélib', Paris, France



Citybike Wien, Vienna, Austria.

- stations of public transport
 - ▶ BSSs should augment public transport, and
 - ▶ should solve the "last mile problem"
- housing complexes
- industrial parks
- shopping centers
- local recreational areas

- density of the system
 - ▶ which distance are potential users willing to walk?
 - ▶ what would be the maximal distance traveled by bike?
- bike flow of the potential system
 - ▶ to reduce the costs for rebalancing
- estimation of maintenance work

inputs

- list of candidate stations
- fixed and variable costs
 - ▶ parking slots
 - ▶ stations
 - ▶ bicycles
- user demand
- construction budget
- OD-matrices (by foot, by bike)

outputs

- stations to be built
- number of docks for each station
- number of bikes in the system

