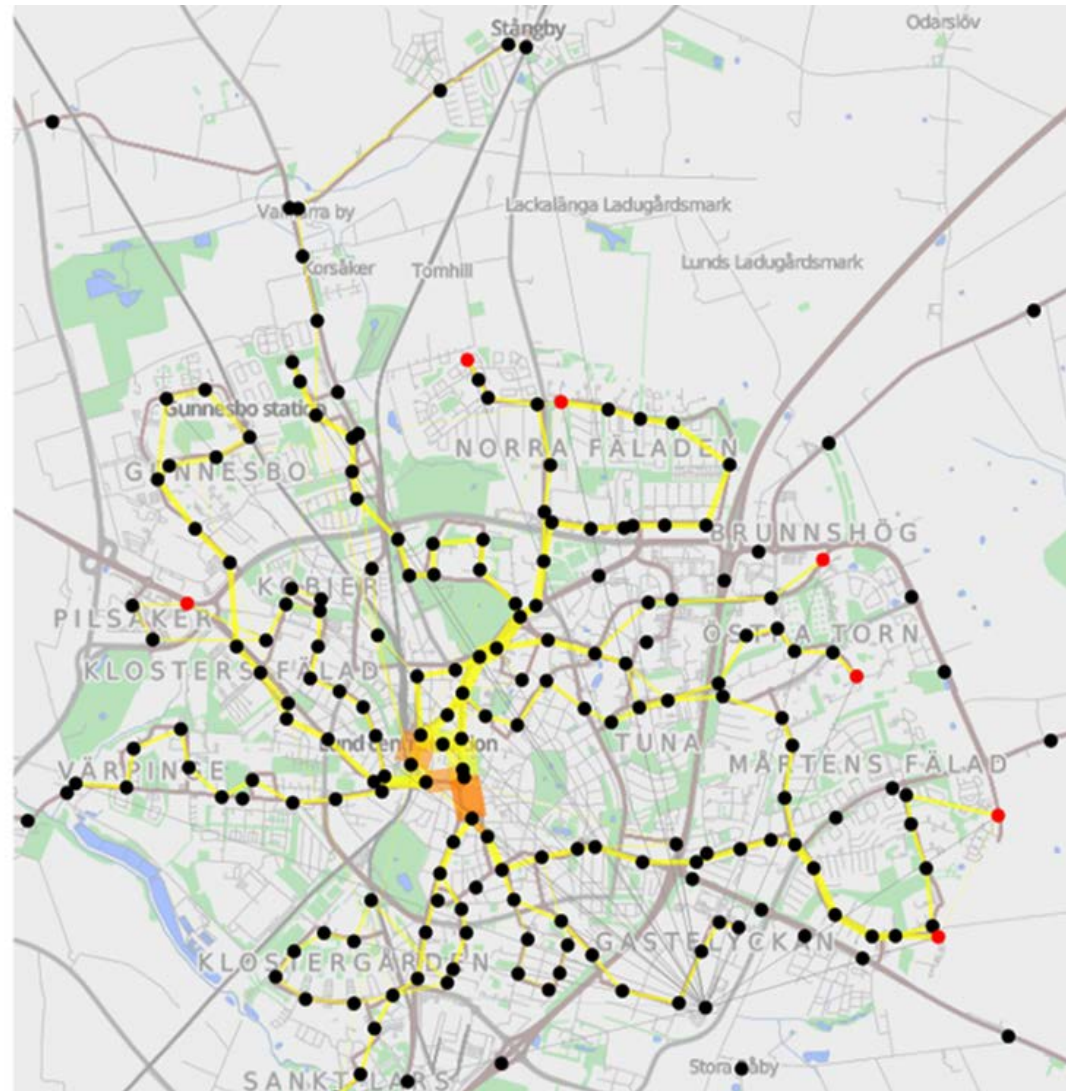




Full electrification of Lund city bus traffic

Project Goal

- Gain an understanding in how bus stop charging and Electrical Road Systems (ERS) can be combined in an cost efficient maner to provide full electric operation of city buses in a city such as Lund.



A map of the bus route network, the line width represents the number of buses. The dots represent bus stops or junction points. Here shown with an example of a possible charging system, red dots represents charging stations and orange lines represents parts with electrical road system installed.

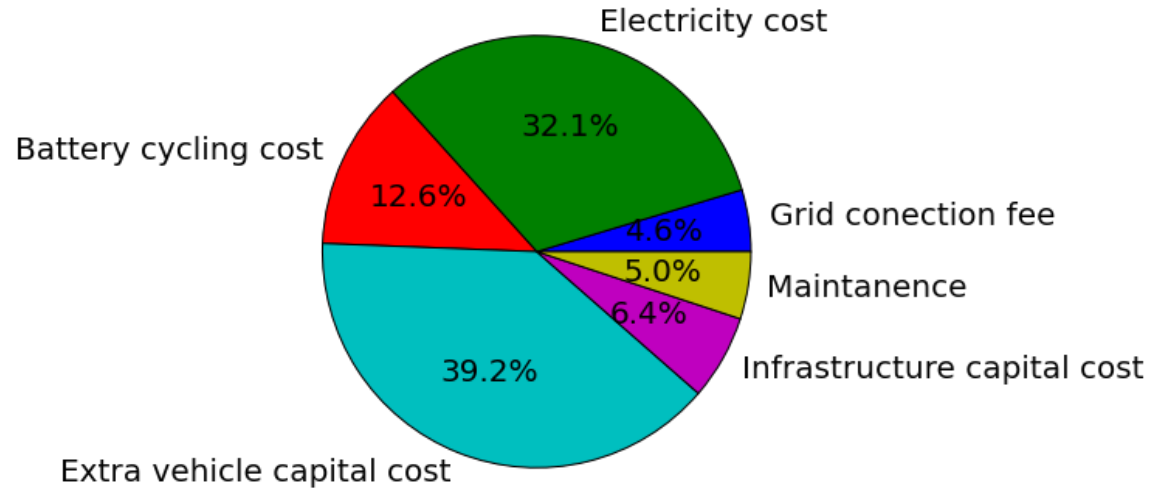
(Background map from OSM Transport

<http://www.openstreetmap.org/#map=14/55.7061/13.1918&layers=T>)

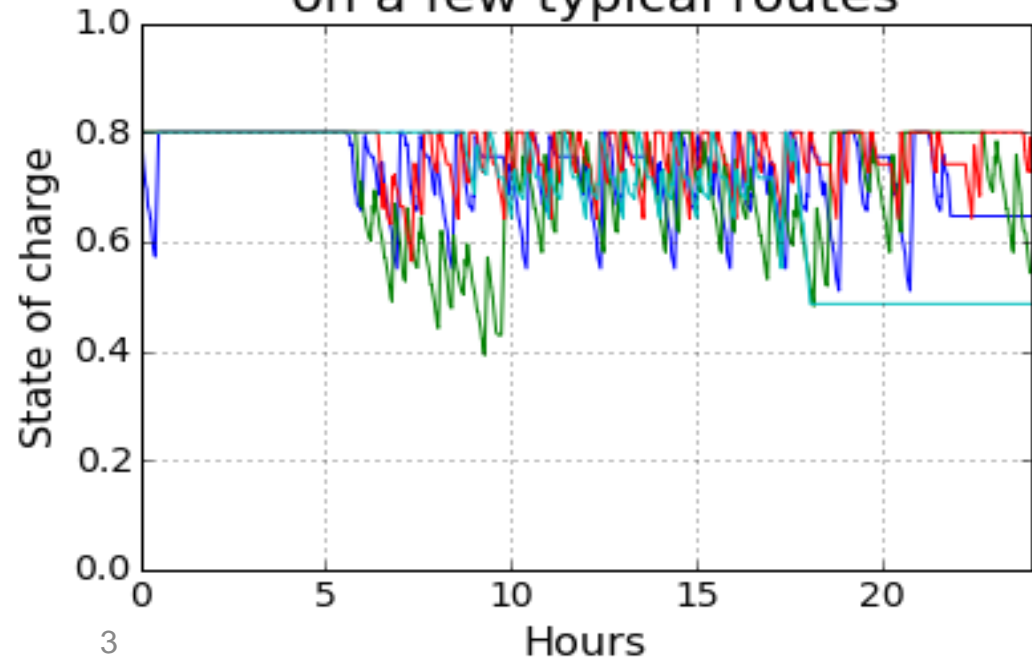
Project Scope

- Build a simulator software for electric bus systems
- Estimate the dominating costs
- Optimize charging infrastructure and battery size based on different cost scenarios
- The existing bus schedule is assumed to remain unchanged

Total yearly extra cost 10.4 MSEK



State of charge over the day on a few typical routes



Partners, Resources & Timeframe

- **Partners**

- LU OPEN INNOVATION CENTER
- Future by Lund
- Krafringen Nät AB

- **Resources**

- <https://www.trafiklab.se/api/gtfs-sverige>
- <https://www.python.org/>

- **Timeframe:**

- Start: 2014 April
- Finish: 2015 May

Contact Information ...

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More material:

- **Reports**

- <http://lup.lub.lu.se/record/5470329>