

Ongoing projects at LET - Lyon

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Three ongoing projects

- SIMBAD: UrbanSim applied to greater Lyon area
- ILOT/ACI: Complex systems approach
- SMA-LOCMOB: MAs applied to transport/LU

Objectives

- Mobility and city planning scenarios on Lyon

Methodology

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- Focus on the travel demand model
- Provision of high-resolution data

High-resolution Lyon network

High-res network



- Contains all road sections
- Zonal system imported from low-res network
- Problem: transport attributes (spatial correlation?)

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- RePast framework

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- Modeling of intra-zonal traffic, cruise for parking

Hardware

- 1 master-node bi-proc AMD Opteron 2.4 Ghz, 8Gb RAM, ca. 500Gb storage
- 8 slave-nodes bi-proc AMD Opteron 2.4 Ghz, 4Gb RAM
- ...no fancy network (gigabit)

Software

- Linux 2.6 64bits
- FORTRAN, C/C++, Java, ...
- *Grid computing: Globus*
- *Parametric modeling (soon):Nimrod*
- *Black-box optimization (soon...)*

In the proposal pipeline...

- Automatic collection of GPS data (calibration of traffic modules)
- Social network data collection (mobile phones)
- PT microscopic assignment