

ABMT 2018: Project

November 13, 2018

1 Project

The project is meant to make you use MATSim to evaluate a transport policy.

The policy we will study is a controversial project that was performed by the City of Paris, starting in September 2016. In this project, the city decided to close part of the urban motorway close to the Seine river to cars completely (see figures 1 and 2).



Figure 1: Localization of the closed roads (Source: Les Echos)



Figure 2: Georges Pompidou Street in February 2016 (Source: Wikimedia Commons)

There was, and there is still, a lot of opposition to this project, in particular from travelers used to use this road. In this project, you will have to look at the impact of this road closure on traffic.

2 Input Data

You are given simple MATSim input data, based on open data sources. The files are:

- `ile_de_france_config.xml`: the basic configuration to run your first simulations
- `ile_de_france_network_simplified.xml.gz`: the road network for the Ile de France region
- `ile_de_france_population_diluted_caronly.xml.gz`: a population of car drivers. It was done by:
 - creating a synthetic population for the whole Ile de France region, using methods you saw in the first part.
 - filtering away all persons that did not drive for all their trips, as the study will focus on car traffic

- “diluting” the population by keeping only those persons that drive through Paris during their day

The simulation only considers car route choice (no departure time choice, no mode choice).

Coordinates are in the EPSG:2154 System.

In addition, the ZIP file contains a `abmt-2018-0.0.1-SNAPSHOT-jar-with-dependencies.jar` file that allows you to run the simulation. It is different than the one used in the first lab.

3 Scope of the Project and Evaluation

- The project should be performed in groups of 2
- Expected tasks as part of the project will be:
 - create a modified network, in which the road closure is implemented
 - run at least one simulation with the road closure.
 - create analysis, mostly using VIA
 - possibly modify the simulation to include other effects, such as departure time choice. You are not expected to calibrate the scenario carefully, simply to create one configuration that is plausible.

You are expected to decide yourself on the analysis you want to perform.

The output should take the form of a report, presenting at least the question you want to ask the model, your simulations, a description of the simulation and how they can help you answer your questions, a reflection on the limitations and possible future work.