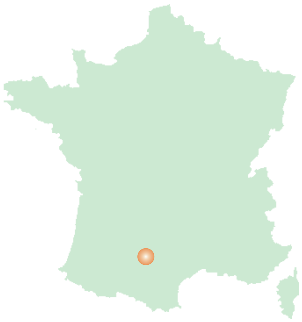
CASE STUDY



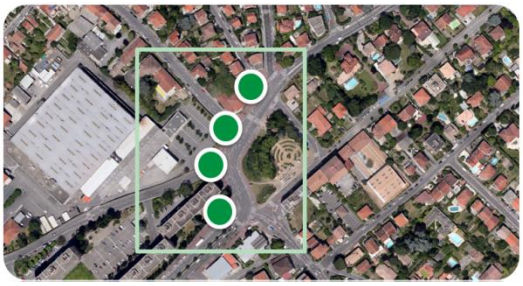
Dynamic simulation of the La Roseraie crossroad in Toulouse

As part of the urban area studies engaged by the city and the discussions results from the mobility workshop, urban proposals have been issued for the Place de la Roseraie.

Several scenarios have been considered. Toulouse Metropole asked for dynamic simulations to test these proposals on the actual crossroad functioning.

PROJECT DETAILS AND BACKGROUND

The 4 junctions of the Place work with crossroads controllers:



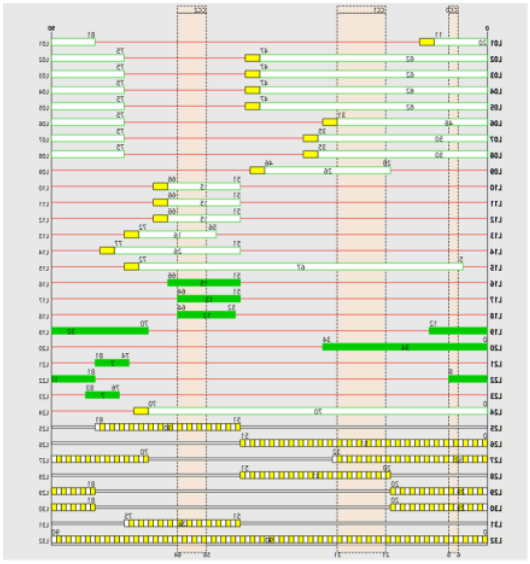
- Agde / Brunaud / Plana / Parc
- Agde / Périole
- Agde / Lavaur
- Agde / Doumergue

This mission includes works as:

- Simulation of actual functioning (morning & evening peak hours)
- Definition of the 2017/2030 Place functioning based on the defined scenarios
- Simulation of scenarios with optimized proposals
- Analysis and multicriteria comparison of the different simulations

ANALYSIS AND METHODOLOGY

The dynamic simulation has been conduct in several steps:



Modelling of the actual situation

CeRyX Trafic System used these different data:

- Aerial views
- Crossroads functioning files
- Directional counting
- Macroscopic model of Toulouse conurbation
- Timetables and bus network Tisséo layout

Simulation of 3 scenarios

- Scenario 1 : minimum changes
- Scenario 2 : intermediary level
- Scenario 3 : voluntary approach

CeRyX Trafic System and Toulouse Metropole decided of pertinent data to conduct the statistical analysis:

- About vehicles :
  - Travel times
  - Admissible flow rate
  - Riding between lanes
- About public transport :
  - Travel times

These statistics were compared and used in a global multicriteria analysis.

The presentation during the meeting and the report were helpful to decide the final scenario to develop, in accordance with the district elected representatives.

SOLUTIONS DELIVERED

During this mission, CeRyX Trafic System used all the capacities of its dynamic simulator:

- To compare the different urban design and crossroads functioning scenarios, based on criteria defined with the contracting authority
- To present the future functioning with an intuitive form (viewing of the vehicles behaviour)
- To show actual dysfunctions and potential dysfunctions for the future