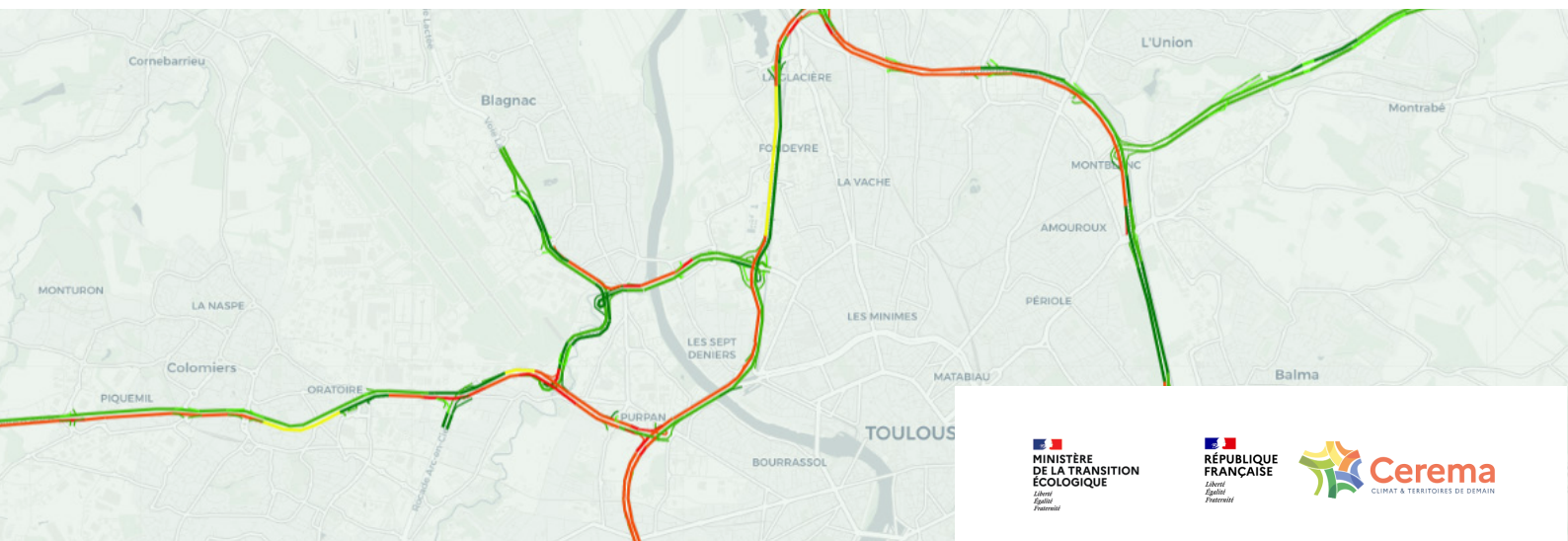




OPTIMIZING TRAFFIC MANAGEMENT WITH DYNAMIC SIMULATION - TOULOUSE URBAN AREA, FRANCE



CHALLENGE

Optimizing traffic management for Toulouse urban road network.

The Traffic Management Master Plan (TMMP) of the city of Toulouse brings together all stakeholders involved in the road mobility system. Its objective is to align and synchronize all players on traffic management measures to promote a smoother and safer road mobility.

The Road Directorate South-West is leading the development of the TMMP on behalf of the French State. The TMMP is including a flagship project aiming to manage traffic flow with access control measures for the national road, RN124, which is penetrating the west of the metropolis.

The Road Directorate South-West calls on Cerema, the French leading public institute for mobility engineering to assess the opportunity of this access control measure and to predict impacts on traffic flows.

Neovya Hubsim is selected as the unique platform to implement a dynamic simulation tool covering the entire road network of the Toulouse urban area.

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Neovya Hubsim brought us flexibility and fluidity in our exchanges with our partners during the construction of the model. The proposed interface also offers us easy monitoring of the results provided.

Olivier Donnet
Deputy District Manager,
Road Directorate South West

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We quickly took over Neovya Hubsim to perform many simulations in a very short time. Thanks to this time saving, we are focusing discussions with the client on issues of high expertise and added value.

Lucas Rivoirard
Operational strategy project manager and
traffic engineering, Cerema



ABOUT ROAD DIRECTORATE

The Road Directorate South West is one of the eleven Directorates on the French network. It operates a road network of nearly 950 km, covering a large area of 9 French departments.

Within its missions, the Road Directorate SW works on four critical missions: network operations, a quality approach of road operations, traffic engineering measures and incidents management.



SOLUTION

Dynamic simulation platform the urban road network of Toulouse.

- Implementation of a detailed road network model integrating a graph of more than 650 links for a total of 282 km of roadways.
- Integration of counting data from the three road operators in the area (Road Directorate, Toulouse urban area authority, and VINCI Autoroutes motorway concessionaire) coming from 431 data collection points with a historical depth of one month.
- Integration of travel time data on 22 routes via the Google Distance Matrix API.
- Integration of O/D matrices coming from the strategic planning model on the Toulouse urban area.
- Implementation of simulations on a large-scale network during the morning and evening peak periods over extended time slots from 6 a.m. to 12 a.m., and 1 p.m. to 9 p.m.
- Zoom and calibration on the national road RN124 for an optimal evaluation of the access control measure.
- Implementation of simulations on a set of 30 scenarios.



BENEFITS

- Unified traffic simulation platform for all mobility players in the Toulouse metropolitan area.
- Ready-to-use traffic model quickly aligned with the requirements of the Client thanks to a collaborative work process with Neovya Hubsim platform.
- Evaluation of a set of 30 simulation scenarios in a very short times thanks to Neovya Hubsim ultra-fast calculation engine and global indicators and KPI dashboards available 24/7.
- Extended collaboration on the same workspace with a group of 20 users and the management of their respective rights on the simulation tool.