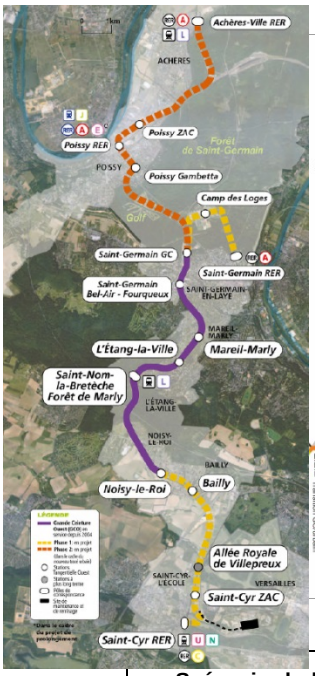
Operation planning
Tram Express Ouest (Paris)

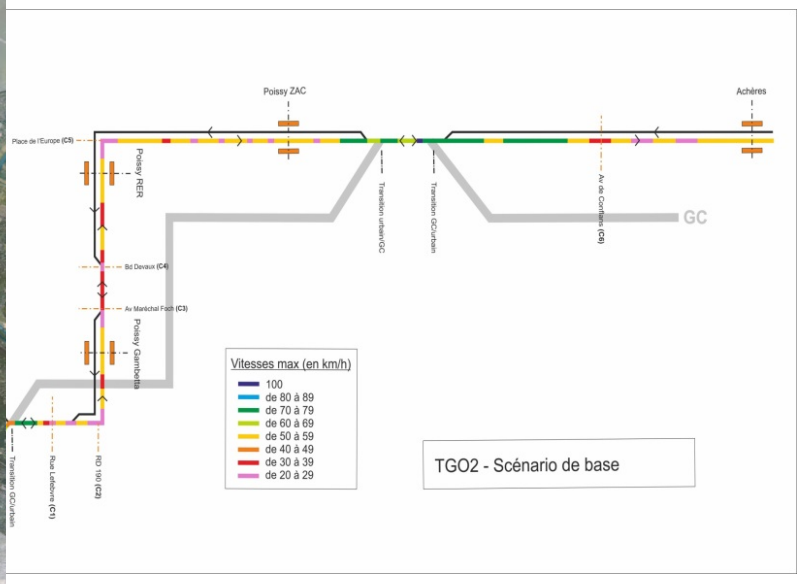
OpenTrack dynamic modelisation of future operation for phases 1 & 2 of the western tangential TramTrain in Paris

Preliminary study
Operational study

Client: SNCF Transilien

End: 2016



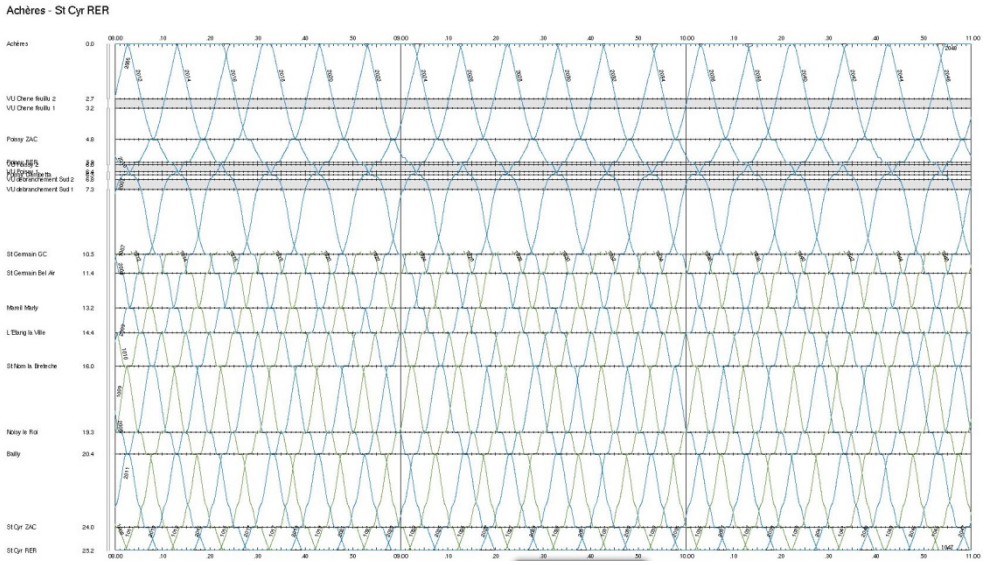


Maximal speeds along the line

Scénario de base	temps de parcours supplémentaire en situation perturbée				
	S1	S2	S3	S4	S5
St-Cyr <> Achères	0:00:47	0:00:48	0:00:02	- 0:00:02	0:00:34
Achères <> St-Cyr	0:01:00	0:00:43	- 0:00:23	- 0:00:11	0:00:02
St-Cyr <> St-Germain	0:00:19	0:00:31	0:00:03	- 0:00:14	0:00:07
St-Germain <> St-Cyr	0:00:07	0:00:10	0:00:00	0:00:08	0:00:06

Variante	temps de parcours supplémentaire en situation perturbée				
	S1	S2	S3	S4	S5
St-Cyr <> Achères	00:00:40	- 0:00:06	- 0:00:04	00:00:09	00:00:36
Achères <> St-Cyr	00:00:54	00:00:12	00:00:04	00:00:03	- 0:00:03
St-Cyr <> St-Germain	00:00:30	- 0:00:06	- 0:00:01	- 0:00:04	00:00:08
St-Germain <> St-Cyr	00:00:03	00:00:14	- 0:00:00	00:00:09	- 0:00:02

Table to compare travel times between different infrastructure scenarios and five different perturbations (scenario S1 to S5)



Train Diagram with dynamic modelling between the stations Achères and Saint-Cyr RER

The Tram Express Ouest project is composed of two phases: a first one going from “Saint-Cyr RER” to “Saint-Germain RER” (19 km infra-structure) and a second one splitting up at “Saint-Germain Grande Ceinture” (station located on the first part of the project) to “Achères RER” (10 km infrastructure).

Each branch will have a 10 minutes headway, meaning a 5 minutes headway between the stations “Saint-Cyr RER” et “Saint-Germain Grande Ceinture”.

This line project is based on the reactivation of some section of the wide railway belt around Paris. It also integrates the planning of new urban track section in order to connect better the urban area.

SNCF Transilien has commissioned TTK to realise an operational study of each phases to:
- benefit of a second assessment of the work made by the engineering consulting firm;
- evaluate the travel time based on the last update concerning the infrastructure (max. speed, new block section, etc.);
- model the line with dynamic parameters in order to study the real operation: more variability in the model has been introduced (variation of dwell times and of the performance of the trains, stop probability at the major junctions, etc.);
- analyse the constraints linked to the single track sections and their impact on the reliability of the operation.