

Light Rail Transit Edmonton (CDN)

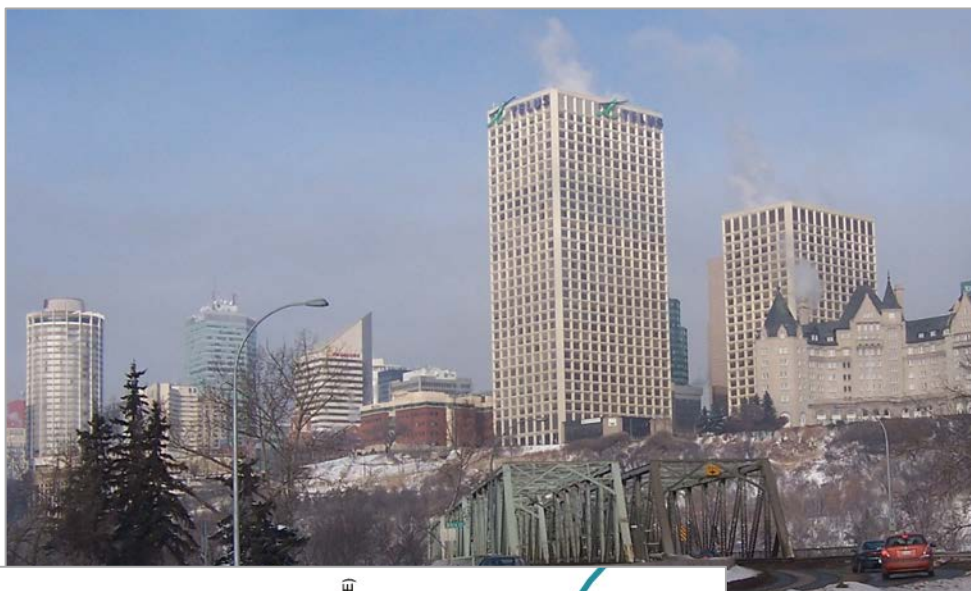
South-East to West Light Rail Transit Line Operational simulation with OpenTrack



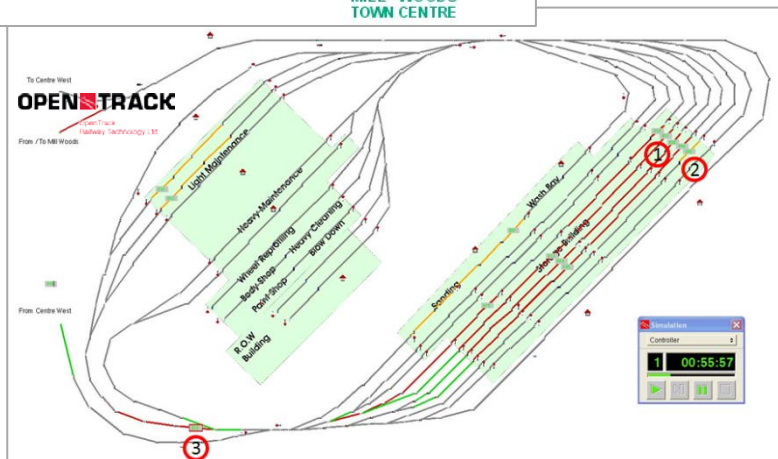
Technical assistance & operations, feasibility studies

Client: ARGE connectEd
Partner: Hatch Mott MacDonald, Aecom

End: 2012



Line plan



Model of depot

In Edmonton, capital of the Canadian province of Alberta with 812,000 inhabitants, the so far only inner-city tramtrain line of Canada (with a length of 20.5 km) is to be extended by further lines. The resulting network will have a length of 69 km.

In this process the future line from Lewis Farms in the west to Mill Woods in the south east of the city plays a specific role: contrary to the existing line which - in the city centre - runs underground like a metro the new line cross to it is planned as a street running low-floor tram. Moreover it will be integrated into the urban environment following European ideas for urban design.

The double-track line was modelled with the software OpenTrack. Operational robustness was studied for a number of scenarios:

- Short term perturbation without dispatching;
- Splitting of the line into two trunk lines;
- Single-track operation passing the perturbation.

In a further step a number of variants for the depot (OMF) were modelled. A closer look was taken at the ramp down process in the evening, the nightly maintenance procedures as well as the ramp up in the morning.

Resulting from TTK recommendations the alignment originally foreseen was adapted so as to guarantee the necessary network capacities.