

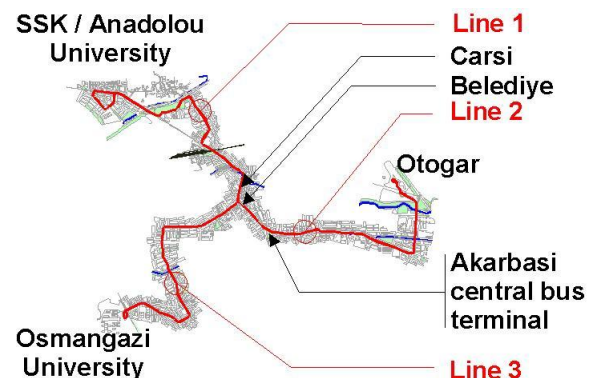


### The Challenge

Bombardier Transportation is part of a consortium building a turnkey tramway in Eskişehir in Turkey.

Transrail was contracted by BT to develop an optimised operation plan for the system and to identify design issues of importance for an efficient and reliable operation. Several parameters needed to be taken into consideration:

- + A timetable which fills the capacity requirements on different parts of the system;
- + Frequency, max speed and stops;
- + Co-ordination with other public transport;
- + Usage and availability of vehicles for maintenance;
- + Manpower requirements;
- + Contingency for disturbances;
- + Limitations and opportunities arising from fixed installations;
- + Traffic on streets.



### Our Solution

Transrail's Scheduling software tool was used to design timetables and a plan for vehicle and staff usage. It was also used to analyse traffic in failure and disturbance situations.

The data used to create these plans was gathered by an on-site study of the environment in Eskişehir, the city's visions and plans, expected demographic development, earlier traffic forecasts, alternate alignments, and fixed installations. The project's goals and conditions were also studied.

In addition to the traffic plan, Transrail also suggested modifications to the fixed installations to optimise the system, and to limit and recover from disturbances. The study was also used to make an establishment plan for the tram operating company as well as an overall plan for operation and maintenance. The embellishment of this plan was later awarded to Transrail.

**Implementation year:** 2003

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