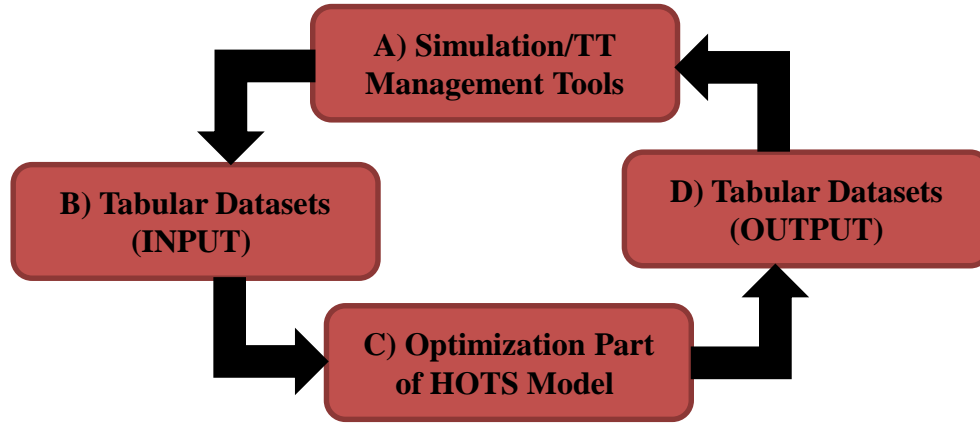


# Hybrid Optimization of Train Schedules (HOTS) Model



*Main Steps of HOTS Model*

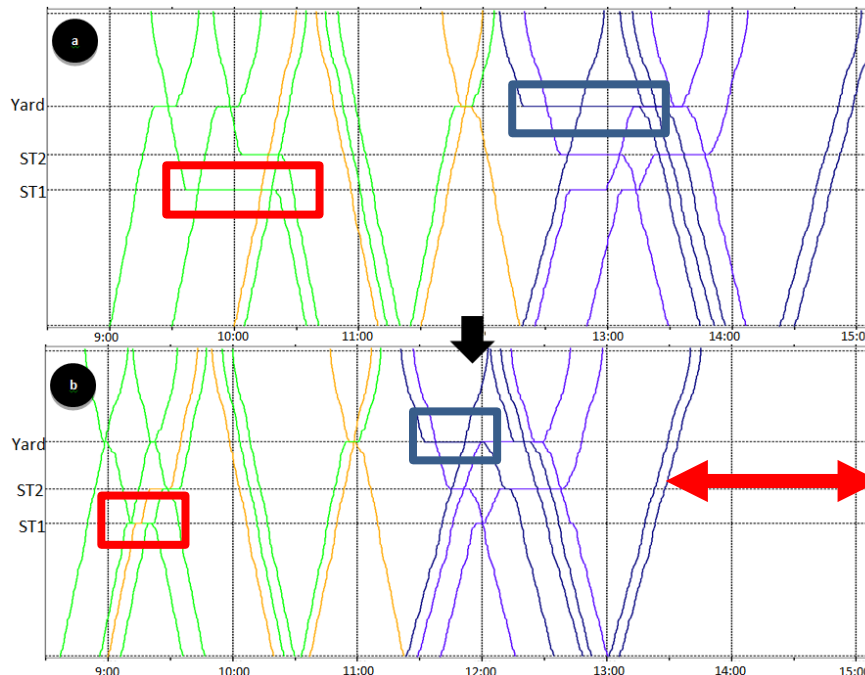


*How Initial Timetable Is Improved by HOTS*

**Initial  
Timetable**



**Improved  
by HOTS**



*Max. Dwell time: 61'*  
*Total Dwell times: 271'*  
*Timetable Duration: 6h 10'*

*Max. Dwell time: 30'*  
*Total Dwell times: 166'*  
*Timetable Duration: 5h 25'*