

Modeling Passenger Volume on Yamanote Line in Tokyo

山手線の乗降人員の模型

Model

Models how passengers flow in a Circular Rail Line

Agents:

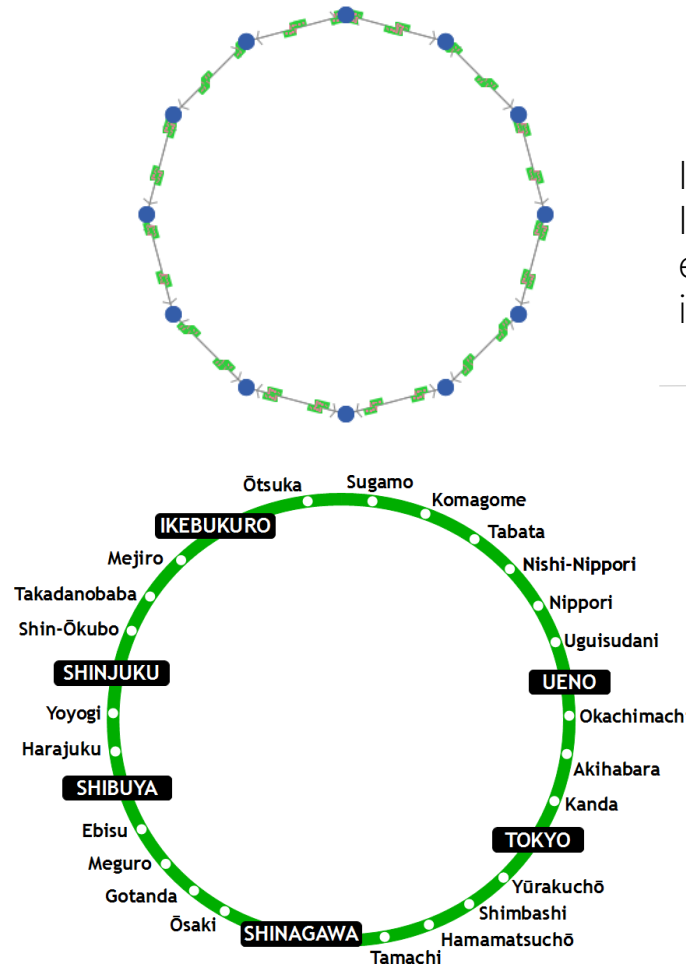
- Stations
- Passengers
- Trains

Operations

- Intuitive: just like how most trains operate
- Trains go both directions
- Passengers generated at each station according to Poisson Distribution input by the user
- Passengers each assigned destinations

3
·
6
0
M
P
a
s
s
e
n
g
e
r
s
/
D
a
y

毎日、3,600乗客は山手線を使っています

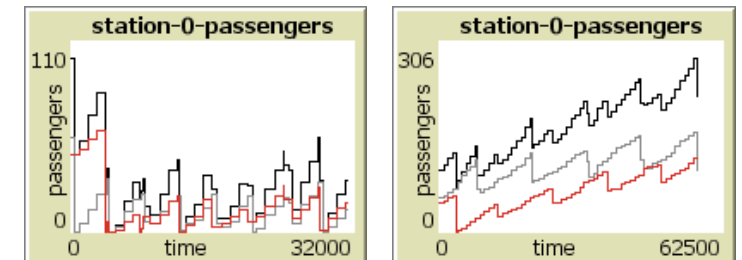


Parameters

Ensures Flexibility for Planners

Initial Station Volumes | Number of Stations | Trains Interval | Number of Trains | Time it takes to run each loop | Maximum Capacity of Trains | Passengers inflow into stations / min | Emergency Switch

Results



For all setups, a threshold exists between unbounded and bounded case