**Q1: Simulation in excel**

By using the following formulations to generate intra-arrival time and service time duration for each customer, the simulation result can be obtained in excel.

(1)

(2)

1. 35 customers are served per day;
2. Total delay per day is 278.61 min;
3. Average delay per customer is 7.96 min.

**Q2: Cumulative arrival and departure**

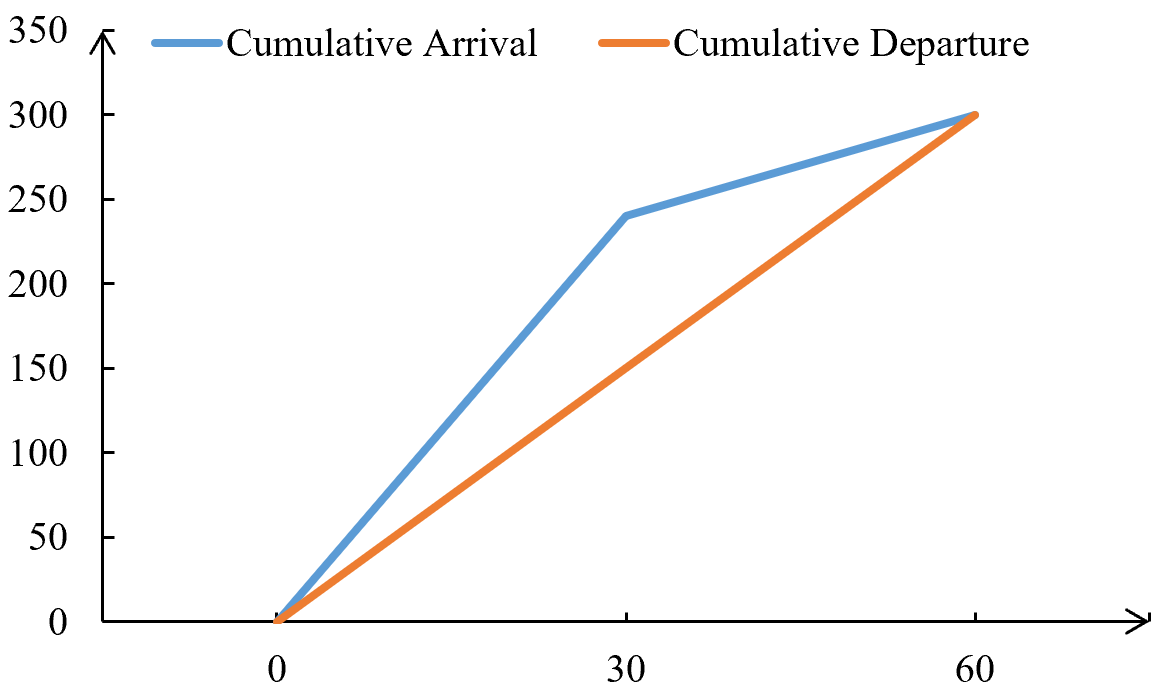


Figure 1 Cumulative arrival and departure

So, the queue will disappear at 60min.

1. Total waiting time

Average queue length

Average waiting time

**Q3: Car following**

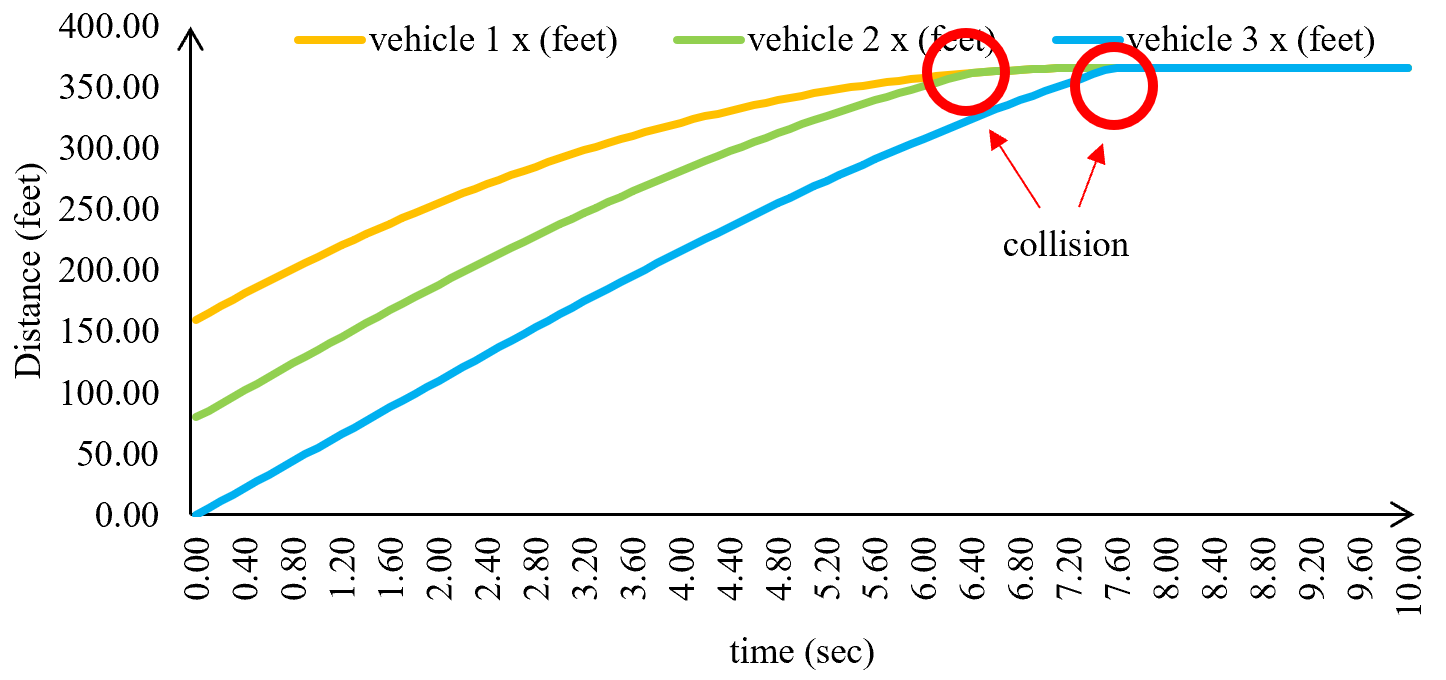


Figure 2 Vehicle trajectories

Please refer to excel file for detailed calculation process.