(base) mertcolakoglu@Mert-MacBook-Pro 220316081\_MertÇolakoğlu\_210316082\_EmrahTunç\_210316084\_BinnurSöztutar % gcc -o 220316081\_MertÇolakoğlu\_210316082\_EmrahTunç\_210316084\_BinnurSöztutar 220316081\_MertÇolakoğlu\_210316082\_EmrahTunç\_210316084\_BinnurSöztutar.c -lpthread (base) mertcolakoglu@Mert-MacBook-Pro 220316081\_MertÇolakoğlu\_210316082\_EmrahTunç\_210316084\_BinnurSöztutar %

./220316081\_MertÇolakoğlu\_210316082\_EmrahTunç\_210316084\_BinnurSöztutar

## ### FERRY TRANSPORTATION SYSTEM SIMULATION ###

## Simulation parameters:

- Two city sides connected by a ferry route
- One ferry with capacity of 20 quotas
- 12 cars (1 quota each), 10 minibuses (2 quotas each), 8 trucks (3 quotas each)
- 2 toll booths on each side

Starting simulation...

Ferry docked at Side\_B

Simulation initialized. Ferry starts at Side\_B

Creating vehicles at Side\_B (ferry's starting location)

CAR\_1 (1 quota) arrived at Side\_B and joined the queue

CAR\_2 (1 quota) arrived at Side\_B and joined the queue

CAR\_3 (1 quota) arrived at Side\_B and joined the queue

CAR\_4 (1 quota) arrived at Side\_B and joined the queue

CAR\_5 (1 quota) arrived at Side\_B and joined the queue

CAR\_6 (1 quota) arrived at Side\_B and joined the queue

CAR\_7 (1 quota) arrived at Side\_B and joined the queue

CAR\_8 (1 quota) arrived at Side\_B and joined the queue

CAR\_9 (1 quota) arrived at Side\_B and joined the queue

CAR\_10 (1 quota) arrived at Side\_B and joined the queue

CAR\_11 (1 quota) arrived at Side\_B and joined the queue CAR 12 (1 quota) arrived at Side B and joined the queue MINIBUS\_13 (2 quota) arrived at Side\_B and joined the queue MINIBUS\_14 (2 quota) arrived at Side\_B and joined the queue MINIBUS 15 (2 quota) arrived at Side B and joined the queue MINIBUS 16 (2 quota) arrived at Side B and joined the queue MINIBUS\_17 (2 quota) arrived at Side\_B and joined the queue MINIBUS 18 (2 quota) arrived at Side B and joined the queue MINIBUS\_19 (2 quota) arrived at Side\_B and joined the queue MINIBUS 20 (2 quota) arrived at Side B and joined the queue MINIBUS\_21 (2 quota) arrived at Side\_B and joined the queue MINIBUS 22 (2 quota) arrived at Side B and joined the queue TRUCK\_23 (3 quota) arrived at Side\_B and joined the queue TRUCK 24 (3 quota) arrived at Side B and joined the queue TRUCK 25 (3 quota) arrived at Side B and joined the queue TRUCK\_26 (3 quota) arrived at Side\_B and joined the queue TRUCK 27 (3 quota) arrived at Side B and joined the queue TRUCK 28 (3 quota) arrived at Side B and joined the queue TRUCK 29 (3 quota) arrived at Side B and joined the queue TRUCK\_30 (3 quota) arrived at Side\_B and joined the queue Created and randomized 30 vehicles at Side B CAR\_1 (1 quota) is being processed at Side\_B\_Booth\_1 TRUCK\_25 (3 quota) is being processed at Side\_B\_Booth\_2 Simulation running (max 180 seconds)... Ferry remains docked at Side B - no vehicles to transport TRUCK\_25 (3 quota) completed toll processing at Side\_B\_Booth\_1 TRUCK\_25 (3 quota) entered the waiting area at Side\_B MINIBUS 13 (2 quota) is being processed at Side B Booth 2

TRUCK\_25 (3 quota) boarded the ferry for outbound journey (Used: 3/20, Remaining: 17)

```
- TRUCK_25 waiting times: In queue: 0.0 sec, In waiting area: 0.0 sec, Total: 0.0 sec
Waiting for 6 more vehicles to reach full capacity before departing (3/20 quotas filled)
Ferry remains docked at Side_B - no vehicles to transport
CAR_1 (1 quota) completed toll processing at Side_B_Booth_1
CAR 1 (1 quota) entered the waiting area at Side B
MINIBUS 15 (2 quota) is being processed at Side B Booth 1
MINIBUS_13 (2 quota) completed toll processing at Side_B_Booth_1
MINIBUS 13 (2 quota) entered the waiting area at Side B
MINIBUS_20 (2 quota) is being processed at Side_B_Booth_2
MINIBUS 20 (2 quota) completed toll processing at Side B Booth 1
MINIBUS 20 (2 quota) entered the waiting area at Side B
MINIBUS 17 (2 quota) is being processed at Side B Booth 2
CAR_1 (1 quota) boarded the ferry for outbound journey (Used: 4/20, Remaining: 16)
 - CAR 1 waiting times: In queue: 0.0 sec, In waiting area: 1.0 sec, Total: 1.0 sec
MINIBUS 13 (2 quota) boarded the ferry for outbound journey (Used: 6/20, Remaining: 14)
 - MINIBUS_13 waiting times: In queue: 1.0 sec, In waiting area: 1.0 sec, Total: 2.0 sec
MINIBUS 20 (2 quota) boarded the ferry for outbound journey (Used: 8/20, Remaining: 12)
 - MINIBUS 20 waiting times: In queue: 1.0 sec, In waiting area: 0.0 sec, Total: 1.0 sec
Waiting for 4 more vehicles to reach full capacity before departing (8/20 quotas filled)
Ferry remains docked at Side_B - no vehicles to transport
MINIBUS 15 (2 quota) completed toll processing at Side B Booth 1
MINIBUS_15 (2 quota) entered the waiting area at Side_B
CAR 3 (1 quota) is being processed at Side B Booth 1
MINIBUS_17 (2 quota) completed toll processing at Side_B_Booth_1
MINIBUS 17 (2 quota) entered the waiting area at Side B
CAR_7 (1 quota) is being processed at Side_B_Booth_2
MINIBUS_15 (2 quota) boarded the ferry for outbound journey (Used: 10/20, Remaining: 10)
 - MINIBUS 15 waiting times: In queue: 1.0 sec, In waiting area: 0.0 sec, Total: 1.0 sec
```

MINIBUS\_17 (2 quota) boarded the ferry for outbound journey (Used: 12/20, Remaining: 8)

```
- MINIBUS_17 waiting times: In queue: 2.0 sec, In waiting area: 0.0 sec, Total: 2.0 sec
Waiting for 3 more vehicles to reach full capacity before departing (12/20 quotas filled)
Ferry remains docked at Side_B - no vehicles to transport
CAR_3 (1 quota) completed toll processing at Side_B_Booth_1
CAR 3 (1 quota) entered the waiting area at Side B
TRUCK 29 (3 quota) is being processed at Side B Booth 1
CAR_7 (1 quota) completed toll processing at Side_B_Booth_1
CAR 7 (1 quota) entered the waiting area at Side B
TRUCK_30 (3 quota) is being processed at Side_B_Booth_2
TRUCK 29 (3 quota) completed toll processing at Side B Booth 1
TRUCK 29 (3 quota) entered the waiting area at Side B
CAR 4 (1 quota) is being processed at Side B Booth 1
CAR_3 (1 quota) boarded the ferry for outbound journey (Used: 13/20, Remaining: 7)
 - CAR 3 waiting times: In queue: 3.0 sec, In waiting area: 1.0 sec, Total: 4.0 sec
CAR 7 (1 quota) boarded the ferry for outbound journey (Used: 14/20, Remaining: 6)
 - CAR_7 waiting times: In queue: 3.0 sec, In waiting area: 0.0 sec, Total: 3.0 sec
TRUCK 29 (3 quota) boarded the ferry for outbound journey (Used: 17/20, Remaining: 3)
 - TRUCK 29 waiting times: In queue: 3.0 sec, In waiting area: 0.0 sec, Total: 3.0 sec
Waiting for 1 more vehicles to reach full capacity before departing (17/20 quotas filled)
Ferry remains docked at Side_B - no vehicles to transport
TRUCK 30 (3 quota) completed toll processing at Side B Booth 1
TRUCK_30 (3 quota) entered the waiting area at Side_B
MINIBUS 14 (2 quota) is being processed at Side B Booth 2
TRUCK_30 (3 quota) boarded the ferry for outbound journey (Used: 20/20, Remaining: 0)
 - TRUCK 30 waiting times: In queue: 4.0 sec, In waiting area: 0.0 sec, Total: 4.0 sec
Ferry is at full capacity and ready to depart
CAR_4 (1 quota) completed toll processing at Side_B_Booth_1
CAR 4 (1 quota) entered the waiting area at Side B
MINIBUS_22 (2 quota) is being processed at Side_B_Booth_1
```

Ferry departing from Side\_B to Side\_A (Trip #1)

MINIBUS 14 (2 quota) completed toll processing at Side B Booth 1

MINIBUS\_14 (2 quota) entered the waiting area at Side\_B

MINIBUS\_19 (2 quota) is being processed at Side\_B\_Booth\_2

MINIBUS\_22 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS 22 (2 quota) entered the waiting area at Side B

CAR\_9 (1 quota) is being processed at Side\_B\_Booth\_1

MINIBUS\_19 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS\_19 (2 quota) entered the waiting area at Side\_B

MINIBUS\_21 (2 quota) is being processed at Side\_B\_Booth\_2

CAR 9 (1 quota) completed toll processing at Side B Booth 1

CAR\_9 (1 quota) entered the waiting area at Side\_B

CAR\_6 (1 quota) is being processed at Side\_B\_Booth\_1

MINIBUS\_21 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS\_21 (2 quota) entered the waiting area at Side\_B

MINIBUS\_16 (2 quota) is being processed at Side\_B\_Booth\_2

MINIBUS\_16 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS\_16 (2 quota) entered the waiting area at Side\_B

TRUCK 27 (3 quota) is being processed at Side B Booth 2

CAR\_6 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR 6 (1 quota) entered the waiting area at Side B

TRUCK\_23 (3 quota) is being processed at Side\_B\_Booth\_1

TRUCK\_27 (3 quota) completed toll processing at Side\_B\_Booth\_1

TRUCK\_27 (3 quota) entered the waiting area at Side\_B

TRUCK\_24 (3 quota) is being processed at Side\_B\_Booth\_2

Ferry docked at Side\_A

Trip #1 completed: Side\_B -> Side\_A

Unloading 10 vehicles at Side A

- TRUCK\_25 transported (outbound): Total time: 10.0 sec, Ferry ride: 9.0 sec

```
TRUCK_25 will spend 28 seconds at Side_A before returning to Side_B
 - CAR 1 transported (outbound): Total time: 10.0 sec, Ferry ride: 8.0 sec
CAR_1 will spend 26 seconds at Side_A before returning to Side_B
 - MINIBUS_13 transported (outbound): Total time: 10.0 sec, Ferry ride: 8.0 sec
MINIBUS 13 will spend 17 seconds at Side A before returning to Side B
 - MINIBUS 20 transported (outbound): Total time: 10.0 sec, Ferry ride: 8.0 sec
MINIBUS_20 will spend 23 seconds at Side_A before returning to Side_B
 - MINIBUS 15 transported (outbound): Total time: 10.0 sec, Ferry ride: 7.0 sec
MINIBUS_15 will spend 19 seconds at Side_A before returning to Side_B
 - MINIBUS 17 transported (outbound): Total time: 10.0 sec, Ferry ride: 7.0 sec
MINIBUS_17 will spend 28 seconds at Side_A before returning to Side_B
 - CAR 3 transported (outbound): Total time: 10.0 sec, Ferry ride: 6.0 sec
CAR_3 will spend 25 seconds at Side_A before returning to Side_B
 - CAR 7 transported (outbound): Total time: 10.0 sec, Ferry ride: 6.0 sec
CAR 7 will spend 29 seconds at Side A before returning to Side B
 - TRUCK_29 transported (outbound): Total time: 10.0 sec, Ferry ride: 6.0 sec
TRUCK 29 will spend 24 seconds at Side A before returning to Side B
 - TRUCK 30 transported (outbound): Total time: 10.0 sec, Ferry ride: 5.0 sec
TRUCK 30 will spend 14 seconds at Side A before returning to Side B
TRUCK_24 (3 quota) completed toll processing at Side_B_Booth_1
TRUCK 24 (3 quota) entered the waiting area at Side B
CAR_2 (1 quota) is being processed at Side_B_Booth_2
TRUCK_23 (3 quota) completed toll processing at Side_B_Booth_1
TRUCK_23 (3 quota) entered the waiting area at Side_B
TRUCK 26 (3 quota) is being processed at Side B Booth 1
CAR_2 (1 quota) completed toll processing at Side_B_Booth_1
CAR_2 (1 quota) entered the waiting area at Side_B
CAR 5 (1 quota) is being processed at Side B Booth 2
TRUCK_26 (3 quota) completed toll processing at Side_B_Booth_1
```

TRUCK\_26 (3 quota) entered the waiting area at Side\_B

TRUCK\_28 (3 quota) is being processed at Side\_B\_Booth\_1

CAR\_5 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR\_5 (1 quota) entered the waiting area at Side\_B

CAR\_10 (1 quota) is being processed at Side\_B\_Booth\_2

TRUCK\_28 (3 quota) completed toll processing at Side\_B\_Booth\_1

TRUCK\_28 (3 quota) entered the waiting area at Side\_B

CAR 12 (1 quota) is being processed at Side B Booth 1

CAR\_10 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR\_10 (1 quota) entered the waiting area at Side\_B

CAR\_8 (1 quota) is being processed at Side\_B\_Booth\_2

CAR\_12 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR\_12 (1 quota) entered the waiting area at Side\_B

MINIBUS\_18 (2 quota) is being processed at Side\_B\_Booth\_1

MINIBUS\_18 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS\_18 (2 quota) entered the waiting area at Side\_B

CAR\_11 (1 quota) is being processed at Side\_B\_Booth\_1

CAR\_8 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR 8 (1 quota) entered the waiting area at Side B

CAR\_11 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR 11 (1 quota) entered the waiting area at Side B

Ferry has been completely unloaded

No vehicles at Side\_A, but 20 vehicles waiting at Side\_B. Ferry departing empty.

Ferry departing from Side\_A to Side\_B (Trip #2)

Ferry docked at Side\_B

Trip #2 completed: Side\_A -> Side\_B

First outbound trip completed. Vehicles will spend some time at Side\_B before returning.

CAR\_4 (1 quota) boarded the ferry for outbound journey (Used: 1/20, Remaining: 19)

- CAR\_4 waiting times: In queue: 4.0 sec, In waiting area: 14.0 sec, Total: 18.0 sec

```
MINIBUS_14 (2 quota) boarded the ferry for outbound journey (Used: 3/20, Remaining: 17)
- MINIBUS 14 waiting times: In queue: 5.0 sec, In waiting area: 13.0 sec, Total: 18.0 sec
MINIBUS_22 (2 quota) boarded the ferry for outbound journey (Used: 5/20, Remaining: 15)
- MINIBUS_22 waiting times: In queue: 5.0 sec, In waiting area: 13.0 sec, Total: 18.0 sec
MINIBUS 19 (2 quota) boarded the ferry for outbound journey (Used: 7/20, Remaining: 13)
- MINIBUS 19 waiting times: In queue: 6.0 sec, In waiting area: 12.0 sec, Total: 18.0 sec
CAR_9 (1 quota) boarded the ferry for outbound journey (Used: 8/20, Remaining: 12)
- CAR 9 waiting times: In queue: 6.0 sec, In waiting area: 12.0 sec, Total: 18.0 sec
MINIBUS_21 (2 quota) boarded the ferry for outbound journey (Used: 10/20, Remaining: 10)
- MINIBUS_21 waiting times: In queue: 7.0 sec, In waiting area: 11.0 sec, Total: 18.0 sec
MINIBUS 16 (2 quota) boarded the ferry for outbound journey (Used: 12/20, Remaining: 8)
- MINIBUS 16 waiting times: In queue: 8.0 sec, In waiting area: 11.0 sec, Total: 19.0 sec
CAR_6 (1 quota) boarded the ferry for outbound journey (Used: 13/20, Remaining: 7)
- CAR 6 waiting times: In queue: 7.0 sec, In waiting area: 10.0 sec, Total: 17.0 sec
TRUCK 27 (3 quota) boarded the ferry for outbound journey (Used: 16/20, Remaining: 4)
- TRUCK_27 waiting times: In queue: 8.0 sec, In waiting area: 10.0 sec, Total: 18.0 sec
TRUCK 24 (3 quota) boarded the ferry for outbound journey (Used: 19/20, Remaining: 1)
- TRUCK_24 waiting times: In queue: 9.0 sec, In waiting area: 9.0 sec, Total: 18.0 sec
CAR 2 (1 quota) boarded the ferry for outbound journey (Used: 20/20, Remaining: 0)
- CAR_2 waiting times: In queue: 10.0 sec, In waiting area: 9.0 sec, Total: 19.0 sec
Unloading vehicles before first empty return trip
Unloading 11 vehicles at Side_B
- CAR_4 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec
CAR_4 will spend 21 seconds at Side_B before returning to Side_A
- MINIBUS 14 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec
MINIBUS_14 will spend 18 seconds at Side_B before returning to Side_A
- MINIBUS_22 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec
MINIBUS 22 will spend 27 seconds at Side B before returning to Side A
- MINIBUS_19 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec
```

MINIBUS\_19 will spend 17 seconds at Side\_B before returning to Side\_A

- CAR\_9 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec

CAR\_9 will spend 19 seconds at Side\_B before returning to Side\_A

- MINIBUS\_21 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec

MINIBUS\_21 will spend 27 seconds at Side\_B before returning to Side\_A

- MINIBUS\_16 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec

MINIBUS\_16 will spend 10 seconds at Side\_B before returning to Side\_A

- CAR 6 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec

CAR\_6 will spend 11 seconds at Side\_B before returning to Side\_A

- TRUCK\_27 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec

TRUCK\_27 will spend 18 seconds at Side\_B before returning to Side\_A

- TRUCK\_24 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec

TRUCK\_24 will spend 26 seconds at Side\_B before returning to Side\_A

- CAR 2 transported (outbound): Total time: 20.0 sec, Ferry ride: 1.0 sec

CAR\_2 will spend 30 seconds at Side\_B before returning to Side\_A

Ferry has been completely unloaded

First return trip: Ferry returning empty from Side\_B to Side\_A

After spending 14 seconds at Side\_A, TRUCK\_30 is now joining the return queue

TRUCK 30 (3 quota) is being processed at Side A Booth 1

Ferry docked at Side\_A

Trip #3 completed: Side B -> Side A

Unloading 0 vehicles at Side\_A

Ferry has been completely unloaded

No vehicles at Side\_A, but 9 vehicles waiting at Side\_B. Ferry departing empty.

Ferry departing from Side A to Side B (Trip #4)

TRUCK\_30 (3 quota) completed toll processing at Side\_A\_Booth\_1

TRUCK\_30 (3 quota) entered the waiting area at Side\_A

After spending 17 seconds at Side A, MINIBUS 13 is now joining the return queue

MINIBUS\_13 (2 quota) is being processed at Side\_A\_Booth\_2

MINIBUS\_13 (2 quota) completed toll processing at Side\_A\_Booth\_1

MINIBUS\_13 (2 quota) entered the waiting area at Side\_A

Ferry docked at Side\_B

Trip #4 completed: Side\_A -> Side\_B

TRUCK\_23 (3 quota) boarded the ferry for outbound journey (Used: 3/20, Remaining: 17)

- TRUCK\_23 waiting times: In queue: 9.0 sec, In waiting area: 23.0 sec, Total: 32.0 sec

TRUCK\_26 (3 quota) boarded the ferry for outbound journey (Used: 6/20, Remaining: 14)

- TRUCK\_26 waiting times: In queue: 10.0 sec, In waiting area: 22.0 sec, Total: 32.0 sec

CAR\_5 (1 quota) boarded the ferry for outbound journey (Used: 7/20, Remaining: 13)

- CAR\_5 waiting times: In queue: 10.0 sec, In waiting area: 22.0 sec, Total: 32.0 sec

TRUCK\_28 (3 quota) boarded the ferry for outbound journey (Used: 10/20, Remaining: 10)

- TRUCK\_28 waiting times: In queue: 11.0 sec, In waiting area: 22.0 sec, Total: 33.0 sec

CAR\_10 (1 quota) boarded the ferry for outbound journey (Used: 11/20, Remaining: 9)

- CAR\_10 waiting times: In queue: 11.0 sec, In waiting area: 21.0 sec, Total: 32.0 sec

CAR 12 (1 quota) boarded the ferry for outbound journey (Used: 12/20, Remaining: 8)

- CAR\_12 waiting times: In queue: 11.0 sec, In waiting area: 21.0 sec, Total: 32.0 sec

MINIBUS\_18 (2 quota) boarded the ferry for outbound journey (Used: 14/20, Remaining: 6)

- MINIBUS\_18 waiting times: In queue: 12.0 sec, In waiting area: 20.0 sec, Total: 32.0 sec

CAR 8 (1 quota) boarded the ferry for outbound journey (Used: 15/20, Remaining: 5)

- CAR\_8 waiting times: In queue: 12.0 sec, In waiting area: 20.0 sec, Total: 32.0 sec

CAR 11 (1 quota) boarded the ferry for outbound journey (Used: 16/20, Remaining: 4)

- CAR\_11 waiting times: In queue: 13.0 sec, In waiting area: 19.0 sec, Total: 32.0 sec

No more vehicles at current side, but vehicles waiting at other side - ferry departing

Ferry departing from Side\_B to Side\_A (Trip #5)

After spending 19 seconds at Side\_A, MINIBUS\_15 is now joining the return queue

MINIBUS\_15 (2 quota) is being processed at Side\_A\_Booth\_1

MINIBUS\_15 (2 quota) completed toll processing at Side\_A\_Booth\_1

MINIBUS\_15 (2 quota) entered the waiting area at Side\_A

After spending 10 seconds at Side\_B, MINIBUS\_16 is now joining the return queue

MINIBUS\_16 (2 quota) is being processed at Side\_B\_Booth\_1

After spending 11 seconds at Side\_B, CAR\_6 is now joining the return queue

CAR\_6 (1 quota) is being processed at Side\_B\_Booth\_2

Ferry docked at Side\_A

Trip #5 completed: Side\_B -> Side\_A

Unloading 9 vehicles at Side\_A

- TRUCK\_23 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

TRUCK\_23 will spend 15 seconds at Side\_A before returning to Side\_B

- TRUCK\_26 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

TRUCK\_26 will spend 15 seconds at Side\_A before returning to Side\_B

- CAR\_5 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

CAR\_5 will spend 21 seconds at Side\_A before returning to Side\_B

- TRUCK\_28 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

TRUCK 28 will spend 22 seconds at Side A before returning to Side B

- CAR\_10 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

CAR\_10 will spend 19 seconds at Side\_A before returning to Side\_B

- CAR\_12 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

CAR\_12 will spend 11 seconds at Side\_A before returning to Side\_B

- MINIBUS 18 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

MINIBUS\_18 will spend 17 seconds at Side\_A before returning to Side\_B

- CAR\_8 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

CAR\_8 will spend 30 seconds at Side\_A before returning to Side\_B

- CAR 11 transported (outbound): Total time: 37.0 sec, Ferry ride: 4.0 sec

CAR\_11 will spend 22 seconds at Side\_A before returning to Side\_B

MINIBUS\_16 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS\_16 (2 quota) entered the waiting area at Side\_B

CAR\_6 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR\_6 (1 quota) entered the waiting area at Side\_B

After spending 23 seconds at Side\_A, MINIBUS\_20 is now joining the return queue

MINIBUS\_20 (2 quota) is being processed at Side\_A\_Booth\_2

After spending 24 seconds at Side\_A, TRUCK\_29 is now joining the return queue

MINIBUS\_20 (2 quota) completed toll processing at Side\_A\_Booth\_1

MINIBUS\_20 (2 quota) entered the waiting area at Side\_A

TRUCK\_29 (3 quota) is being processed at Side\_A\_Booth\_2

TRUCK\_29 (3 quota) completed toll processing at Side\_A\_Booth\_1

TRUCK\_29 (3 quota) entered the waiting area at Side\_A

After spending 25 seconds at Side\_A, CAR\_3 is now joining the return queue

CAR\_3 (1 quota) is being processed at Side\_A\_Booth\_1

CAR\_3 (1 quota) completed toll processing at Side\_A\_Booth\_1

CAR\_3 (1 quota) entered the waiting area at Side\_A

After spending 26 seconds at Side\_A, CAR\_1 is now joining the return queue

CAR\_1 (1 quota) is being processed at Side\_A\_Booth\_1

Ferry has been completely unloaded

TRUCK\_30 (3 quota) boarded the ferry for return journey (Used: 3/20, Remaining: 17)

- TRUCK\_30 return waiting times: In queue: 0.0 sec, In waiting area: 12.0 sec, Total: 12.0 sec

MINIBUS\_13 (2 quota) boarded the ferry for return journey (Used: 5/20, Remaining: 15)

- MINIBUS 13 return waiting times: In queue: 0.0 sec, In waiting area: 9.0 sec, Total: 9.0 sec

MINIBUS\_15 (2 quota) boarded the ferry for return journey (Used: 7/20, Remaining: 13)

- MINIBUS\_15 return waiting times: In queue: 0.0 sec, In waiting area: 7.0 sec, Total: 7.0 sec

MINIBUS 20 (2 quota) boarded the ferry for return journey (Used: 9/20, Remaining: 11)

- MINIBUS\_20 return waiting times: In queue: 0.0 sec, In waiting area: 3.0 sec, Total: 3.0 sec

TRUCK 29 (3 quota) boarded the ferry for return journey (Used: 12/20, Remaining: 8)

- TRUCK\_29 return waiting times: In queue: 0.0 sec, In waiting area: 2.0 sec, Total: 2.0 sec

CAR\_3 (1 quota) boarded the ferry for return journey (Used: 13/20, Remaining: 7)

- CAR\_3 return waiting times: In queue: 0.0 sec, In waiting area: 1.0 sec, Total: 1.0 sec

No vehicles at Side\_A, but 2 vehicles waiting at Side\_B. Ferry departing empty.

Ferry departing from Side\_A to Side\_B (Trip #6)

CAR\_1 (1 quota) completed toll processing at Side\_A\_Booth\_1

CAR\_1 (1 quota) entered the waiting area at Side\_A

After spending 17 seconds at Side\_B, MINIBUS\_19 is now joining the return queue

MINIBUS\_19 (2 quota) is being processed at Side\_B\_Booth\_1

After spending 28 seconds at Side\_A, TRUCK\_25 is now joining the return queue

After spending 28 seconds at Side\_A, MINIBUS\_17 is now joining the return queue

TRUCK\_25 (3 quota) is being processed at Side\_A\_Booth\_1

MINIBUS\_17 (2 quota) is being processed at Side\_A\_Booth\_2

After spending 18 seconds at Side B, MINIBUS 14 is now joining the return queue

MINIBUS\_14 (2 quota) is being processed at Side\_B\_Booth\_2

After spending 18 seconds at Side\_B, TRUCK\_27 is now joining the return queue

MINIBUS 19 (2 quota) completed toll processing at Side B Booth 1

MINIBUS\_19 (2 quota) entered the waiting area at Side\_B

TRUCK\_27 (3 quota) is being processed at Side\_B\_Booth\_1

After spending 29 seconds at Side A, CAR 7 is now joining the return queue

TRUCK\_25 (3 quota) completed toll processing at Side\_A\_Booth\_1

TRUCK\_25 (3 quota) entered the waiting area at Side\_A

CAR\_7 (1 quota) is being processed at Side\_A\_Booth\_1

MINIBUS\_17 (2 quota) completed toll processing at Side\_A\_Booth\_1

MINIBUS 17 (2 quota) entered the waiting area at Side A

MINIBUS\_14 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS\_14 (2 quota) entered the waiting area at Side\_B

After spending 19 seconds at Side\_B, CAR\_9 is now joining the return queue

CAR 9 (1 quota) is being processed at Side B Booth 2

TRUCK\_27 (3 quota) completed toll processing at Side\_B\_Booth\_1

TRUCK\_27 (3 quota) entered the waiting area at Side\_B

Ferry docked at Side\_B

Trip #6 completed: Side\_A -> Side\_B

Waiting for 3 more vehicles to reach full capacity before departing (13/20 quotas filled)

MINIBUS\_16 (2 quota) boarded the ferry for return journey (Used: 15/20, Remaining: 5)

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- MINIBUS_16 return waiting times: In queue: 0.0 sec, In waiting area: 10.0 sec, Total: 10.0 sec
```

CAR\_6 (1 quota) boarded the ferry for return journey (Used: 16/20, Remaining: 4)

- CAR\_6 return waiting times: In queue: 0.0 sec, In waiting area: 9.0 sec, Total: 9.0 sec

MINIBUS\_19 (2 quota) boarded the ferry for return journey (Used: 18/20, Remaining: 2)

- MINIBUS\_19 return waiting times: In queue: 0.0 sec, In waiting area: 3.0 sec, Total: 3.0 sec

MINIBUS 14 (2 quota) boarded the ferry for return journey (Used: 20/20, Remaining: 0)

- MINIBUS\_14 return waiting times: In queue: 0.0 sec, In waiting area: 2.0 sec, Total: 2.0 sec

Ferry is at full capacity and ready to depart

CAR\_7 (1 quota) completed toll processing at Side\_A\_Booth\_1

CAR\_7 (1 quota) entered the waiting area at Side\_A

CAR\_9 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR\_9 (1 quota) entered the waiting area at Side\_B

Ferry departing from Side\_B to Side\_A (Trip #7)

After spending 21 seconds at Side\_B, CAR\_4 is now joining the return queue

CAR\_4 (1 quota) is being processed at Side\_B\_Booth\_1

CAR\_4 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR\_4 (1 quota) entered the waiting area at Side\_B

Ferry docked at Side\_A

Trip #7 completed: Side B -> Side A

Unloading 10 vehicles at Side\_A

- TRUCK 30 completed round trip: Outbound: 10.0 sec, Return: 21.0 sec, Total: 50.0 sec
- MINIBUS\_13 completed round trip: Outbound: 10.0 sec, Return: 18.0 sec, Total: 50.0 sec
- MINIBUS 15 completed round trip: Outbound: 10.0 sec, Return: 16.0 sec, Total: 50.0 sec
- MINIBUS\_20 completed round trip: Outbound: 10.0 sec, Return: 12.0 sec, Total: 50.0 sec
- TRUCK\_29 completed round trip: Outbound: 10.0 sec, Return: 11.0 sec, Total: 50.0 sec
- CAR\_3 completed round trip: Outbound: 10.0 sec, Return: 10.0 sec, Total: 50.0 sec
- MINIBUS\_16 completed round trip: Outbound: 20.0 sec, Return: 15.0 sec, Total: 50.0 sec
- CAR\_6 completed round trip: Outbound: 20.0 sec, Return: 14.0 sec, Total: 50.0 sec
- MINIBUS\_19 completed round trip: Outbound: 20.0 sec, Return: 8.0 sec, Total: 50.0 sec

- MINIBUS\_14 completed round trip: Outbound: 20.0 sec, Return: 7.0 sec, Total: 50.0 sec

After spending 26 seconds at Side\_B, TRUCK\_24 is now joining the return queue

TRUCK\_24 (3 quota) is being processed at Side\_B\_Booth\_1

After spending 11 seconds at Side\_A, CAR\_12 is now joining the return queue

CAR\_12 (1 quota) is being processed at Side\_A\_Booth\_2

After spending 27 seconds at Side\_B, MINIBUS\_21 is now joining the return queue

After spending 27 seconds at Side\_B, MINIBUS\_22 is now joining the return queue

MINIBUS\_21 (2 quota) is being processed at Side\_B\_Booth\_2

TRUCK\_24 (3 quota) completed toll processing at Side\_B\_Booth\_1

TRUCK 24 (3 quota) entered the waiting area at Side B

MINIBUS\_22 (2 quota) is being processed at Side\_B\_Booth\_1

CAR\_12 (1 quota) completed toll processing at Side\_A\_Booth\_1

CAR\_12 (1 quota) entered the waiting area at Side\_A

MINIBUS\_21 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS 21 (2 quota) entered the waiting area at Side B

MINIBUS\_22 (2 quota) completed toll processing at Side\_B\_Booth\_1

MINIBUS\_22 (2 quota) entered the waiting area at Side\_B

Ferry has been completely unloaded

CAR 1 (1 quota) boarded the ferry for return journey (Used: 1/20, Remaining: 19)

- CAR\_1 return waiting times: In queue: 0.0 sec, In waiting area: 14.0 sec, Total: 14.0 sec

TRUCK 25 (3 quota) boarded the ferry for return journey (Used: 4/20, Remaining: 16)

- TRUCK\_25 return waiting times: In queue: 0.0 sec, In waiting area: 12.0 sec, Total: 12.0 sec

MINIBUS 17 (2 quota) boarded the ferry for return journey (Used: 6/20, Remaining: 14)

- MINIBUS\_17 return waiting times: In queue: 0.0 sec, In waiting area: 12.0 sec, Total: 12.0 sec

CAR\_7 (1 quota) boarded the ferry for return journey (Used: 7/20, Remaining: 13)

- CAR\_7 return waiting times: In queue: 0.0 sec, In waiting area: 11.0 sec, Total: 11.0 sec

CAR\_12 (1 quota) boarded the ferry for return journey (Used: 8/20, Remaining: 12)

- CAR 12 return waiting times: In queue: 0.0 sec, In waiting area: 3.0 sec, Total: 3.0 sec

No more vehicles at current side, but vehicles waiting at other side - ferry departing

After spending 30 seconds at Side\_B, CAR\_2 is now joining the return queue

CAR\_2 (1 quota) is being processed at Side\_B\_Booth\_2

Ferry departing from Side\_A to Side\_B (Trip #8)

CAR\_2 (1 quota) completed toll processing at Side\_B\_Booth\_1

CAR\_2 (1 quota) entered the waiting area at Side\_B

After spending 15 seconds at Side\_A, TRUCK\_26 is now joining the return queue

After spending 15 seconds at Side\_A, TRUCK\_23 is now joining the return queue

TRUCK\_26 (3 quota) is being processed at Side\_A\_Booth\_1

TRUCK\_23 (3 quota) is being processed at Side\_A\_Booth\_2

TRUCK\_23 (3 quota) completed toll processing at Side\_A\_Booth\_1

TRUCK\_23 (3 quota) entered the waiting area at Side\_A

TRUCK\_26 (3 quota) completed toll processing at Side\_A\_Booth\_1

TRUCK\_26 (3 quota) entered the waiting area at Side\_A

After spending 17 seconds at Side A, MINIBUS 18 is now joining the return queue

MINIBUS 18 (2 quota) is being processed at Side A Booth 1

MINIBUS\_18 (2 quota) completed toll processing at Side\_A\_Booth\_1

MINIBUS\_18 (2 quota) entered the waiting area at Side\_A

Ferry docked at Side\_B

Trip #8 completed: Side A -> Side B

Unloading 5 vehicles at Side\_B

- CAR 1 completed round trip: Outbound: 10.0 sec, Return: 18.0 sec, Total: 59.0 sec
- TRUCK\_25 completed round trip: Outbound: 10.0 sec, Return: 16.0 sec, Total: 59.0 sec
- MINIBUS 17 completed round trip: Outbound: 10.0 sec, Return: 16.0 sec, Total: 59.0 sec
- CAR\_7 completed round trip: Outbound: 10.0 sec, Return: 15.0 sec, Total: 59.0 sec
- CAR\_12 completed round trip: Outbound: 37.0 sec, Return: 7.0 sec, Total: 59.0 sec

After spending 19 seconds at Side\_A, CAR\_10 is now joining the return queue

CAR\_10 (1 quota) is being processed at Side\_A\_Booth\_2

CAR\_10 (1 quota) completed toll processing at Side\_A\_Booth\_1

CAR\_10 (1 quota) entered the waiting area at Side\_A

Ferry has been completely unloaded

TRUCK\_27 (3 quota) boarded the ferry for return journey (Used: 3/20, Remaining: 17)

- TRUCK\_27 return waiting times: In queue: 0.0 sec, In waiting area: 19.0 sec, Total: 19.0 sec

CAR\_9 (1 quota) boarded the ferry for return journey (Used: 4/20, Remaining: 16)

- CAR\_9 return waiting times: In queue: 0.0 sec, In waiting area: 18.0 sec, Total: 18.0 sec

CAR\_4 (1 quota) boarded the ferry for return journey (Used: 5/20, Remaining: 15)

- CAR\_4 return waiting times: In queue: 0.0 sec, In waiting area: 16.0 sec, Total: 16.0 sec

TRUCK\_24 (3 quota) boarded the ferry for return journey (Used: 8/20, Remaining: 12)

- TRUCK\_24 return waiting times: In queue: 0.0 sec, In waiting area: 11.0 sec, Total: 11.0 sec

MINIBUS 21 (2 quota) boarded the ferry for return journey (Used: 10/20, Remaining: 10)

- MINIBUS\_21 return waiting times: In queue: 0.0 sec, In waiting area: 10.0 sec, Total: 10.0 sec

MINIBUS 22 (2 quota) boarded the ferry for return journey (Used: 12/20, Remaining: 8)

- MINIBUS\_22 return waiting times: In queue: 1.0 sec, In waiting area: 9.0 sec, Total: 10.0 sec

CAR 2 (1 quota) boarded the ferry for return journey (Used: 13/20, Remaining: 7)

- CAR\_2 return waiting times: In queue: 0.0 sec, In waiting area: 7.0 sec, Total: 7.0 sec

After spending 21 seconds at Side\_A, CAR\_5 is now joining the return queue

CAR\_5 (1 quota) is being processed at Side\_A\_Booth\_1

Ferry departing from Side\_B to Side\_A (Trip #9)

After spending 22 seconds at Side A, CAR 11 is now joining the return queue

After spending 22 seconds at Side\_A, TRUCK\_28 is now joining the return queue

CAR 11 (1 quota) is being processed at Side A Booth 2

CAR\_5 (1 quota) completed toll processing at Side\_A\_Booth\_1

CAR\_5 (1 quota) entered the waiting area at Side\_A

TRUCK\_28 (3 quota) is being processed at Side\_A\_Booth\_1

CAR 11 (1 quota) completed toll processing at Side A Booth 1

CAR\_11 (1 quota) entered the waiting area at Side\_A

TRUCK\_28 (3 quota) completed toll processing at Side\_A\_Booth\_1

TRUCK\_28 (3 quota) entered the waiting area at Side A

Ferry docked at Side\_A

Trip #9 completed: Side\_B -> Side\_A

Unloading 7 vehicles at Side\_A

- TRUCK\_27 completed round trip: Outbound: 20.0 sec, Return: 23.0 sec, Total: 66.0 sec
- CAR\_9 completed round trip: Outbound: 20.0 sec, Return: 22.0 sec, Total: 66.0 sec
- CAR\_4 completed round trip: Outbound: 20.0 sec, Return: 20.0 sec, Total: 66.0 sec
- TRUCK\_24 completed round trip: Outbound: 20.0 sec, Return: 15.0 sec, Total: 66.0 sec
- MINIBUS\_21 completed round trip: Outbound: 20.0 sec, Return: 14.0 sec, Total: 66.0 sec
- MINIBUS\_22 completed round trip: Outbound: 20.0 sec, Return: 14.0 sec, Total: 66.0 sec
- CAR\_2 completed round trip: Outbound: 20.0 sec, Return: 11.0 sec, Total: 66.0 sec

Ferry has been completely unloaded

TRUCK\_23 (3 quota) boarded the ferry for return journey (Used: 3/20, Remaining: 17)

- TRUCK\_23 return waiting times: In queue: 0.0 sec, In waiting area: 13.0 sec, Total: 13.0 sec
- TRUCK\_26 (3 quota) boarded the ferry for return journey (Used: 6/20, Remaining: 14)
- TRUCK\_26 return waiting times: In queue: 0.0 sec, In waiting area: 13.0 sec, Total: 13.0 sec

MINIBUS\_18 (2 quota) boarded the ferry for return journey (Used: 8/20, Remaining: 12)

- MINIBUS\_18 return waiting times: In queue: 0.0 sec, In waiting area: 11.0 sec, Total: 11.0 sec
- CAR\_10 (1 quota) boarded the ferry for return journey (Used: 9/20, Remaining: 11)
- CAR\_10 return waiting times: In queue: 0.0 sec, In waiting area: 9.0 sec, Total: 9.0 sec
- CAR\_5 (1 quota) boarded the ferry for return journey (Used: 10/20, Remaining: 10)
- CAR\_5 return waiting times: In queue: 0.0 sec, In waiting area: 7.0 sec, Total: 7.0 sec
- CAR 11 (1 quota) boarded the ferry for return journey (Used: 11/20, Remaining: 9)
- CAR\_11 return waiting times: In queue: 0.0 sec, In waiting area: 6.0 sec, Total: 6.0 sec

TRUCK 28 (3 quota) boarded the ferry for return journey (Used: 14/20, Remaining: 6)

- TRUCK\_28 return waiting times: In queue: 1.0 sec, In waiting area: 5.0 sec, Total: 6.0 sec

Both sides empty, ferry departing with partial load: 14/20 quotas

Ferry departing from Side\_A to Side\_B (Trip #10)

After spending 30 seconds at Side\_A, CAR\_8 is now joining the return queue

CAR 8 (1 quota) is being processed at Side A Booth 2

CAR\_8 (1 quota) completed toll processing at Side\_A\_Booth\_1

CAR\_8 (1 quota) entered the waiting area at Side\_A

Ferry docked at Side\_B

Trip #10 completed: Side\_A -> Side\_B

Unloading 7 vehicles at Side\_B

- TRUCK\_23 completed round trip: Outbound: 37.0 sec, Return: 18.0 sec, Total: 74.0 sec

- TRUCK 26 completed round trip: Outbound: 37.0 sec, Return: 18.0 sec, Total: 74.0 sec

- MINIBUS\_18 completed round trip: Outbound: 37.0 sec, Return: 16.0 sec, Total: 74.0 sec

- CAR 10 completed round trip: Outbound: 37.0 sec, Return: 14.0 sec, Total: 74.0 sec

- CAR\_5 completed round trip: Outbound: 37.0 sec, Return: 12.0 sec, Total: 74.0 sec

- CAR\_11 completed round trip: Outbound: 37.0 sec, Return: 11.0 sec, Total: 74.0 sec

- TRUCK\_28 completed round trip: Outbound: 37.0 sec, Return: 11.0 sec, Total: 74.0 sec

Ferry has been completely unloaded

No vehicles at Side\_B, but 1 vehicles waiting at Side\_A. Ferry departing empty.

Ferry departing from Side B to Side A (Trip #11)

Ferry docked at Side\_A

Trip #11 completed: Side\_B -> Side\_A

CAR\_8 (1 quota) boarded the ferry for return journey (Used: 1/20, Remaining: 19)

- CAR\_8 return waiting times: In queue: 0.0 sec, In waiting area: 12.0 sec, Total: 12.0 sec

Final trip: Ferry has all remaining 1 vehicles - ready to depart

Ferry departing from Side\_A to Side\_B (Trip #12)

Ferry docked at Side B

Trip #12 completed: Side\_A -> Side\_B

Unloading 1 vehicles at Side\_B

- CAR\_8 completed round trip: Outbound: 37.0 sec, Return: 16.0 sec, Total: 87.0 sec

Ferry has been completely unloaded

Ferry remains docked at Side\_B - no vehicles to transport

All 30 vehicles have been transported!

All vehicles processed, no vehicles remaining in the system! Stopping all threads... Total simulation time: 88.00 seconds Number of trips completed: 12 Transported Vehicles: Total: 30 / 30 vehicles (100.0%) Cars: 12 / 12 vehicles Minibuses: 10 / 10 vehicles Trucks: 8 / 8 vehicles Remaining Vehicles: Total remaining vehicles: 0 Waiting at Side\_A: 0 (in queue: 0, in waiting area: 0) Waiting at Side\_B: 0 (in queue: 0, in waiting area: 0) On ferry: 0 Current ferry location: Side\_B Quota Usage: Total quotas transported: 56 / 56 (100.0%) Total remaining quotas: 0 / 56

======== DETAILED VEHICLE STATISTICS =========								
++		+	+	+	+	+	+	-+
ID	Type	Origin	Outbound(s)	Return(s)	At Dest.(s)	Trip #	Status	I
++		+	+	+	+	++	·	-+
1	CAR	Side_B	10.0	18.0	26.0	1 → 8	Round trip	I
++		+	+	+	+	++	+	-+
2	CAR	Side B	20.0	11.0	30.0	3 → 9	Round trip	ı

++	Side_B	10.0	10.0	25.0	1 → 6	Round trip
4   CAR	Side_B	20.0	20.0	21.0	3 → 9	Round trip
5   CAR	Side_B	37.0	12.0	21.0	5 → 10	Round trip
6   CAR	Side_B	20.0	14.0	11.0	3 → 7	Round trip
7   CAR	Side_B	10.0	15.0	29.0	1 → 8	Round trip
8   CAR	Side_B	37.0	16.0	30.0	5 → 12	Round trip
9   CAR	Side_B	20.0	22.0	19.0	3 → 9	Round trip
10   CAR	Side_B	37.0	14.0	19.0	5 → 10	Round trip
11   CAR	Side_B	37.0	11.0	22.0	5 → 10	Round trip
12   CAR	Side_B	37.0	7.0	11.0	5 → 8	Round trip
13   MINIBUS	Side_B	10.0	18.0	17.0	1 → 6	Round trip
14   MINIBUS	Side_B	20.0	7.0	18.0	3 → 7	Round trip
++	Side_B	10.0	16.0	19.0	1 → 6	Round trip
16   MINIBUS	Side_B	20.0	15.0	10.0	3 → 7	Round trip
++	Side_B	10.0	16.0	28.0	1 → 8	Round trip
18   MINIBUS	Side_B	37.0	16.0	17.0	5 → 10	Round trip
19   MINIBUS	Side_B	20.0	8.0	17.0	3 → 7	Round trip
20   MINIBUS	Side_B	10.0	12.0	23.0	1 → 6	Round trip
21   MINIBUS	Side_B	20.0	14.0	27.0	3 → 9	Round trip
22   MINIBUS						

+		L	·	L	+	+	++
23	TRUCK	Side_B	37.0	18.0	15.0	5 → 10	'   Round trip
24	TRUCK	Side_B	20.0	15.0	26.0	3 → 9	Round trip
25	TRUCK	Side_B	10.0	16.0	28.0	1 → 8	++   Round trip
26	TRUCK	Side_B	37.0	18.0	15.0	5 → 10	Round trip
27	TRUCK	Side_B	20.0	23.0	18.0	3 → 9	Round trip
28	TRUCK	Side_B	37.0	11.0	22.0	5 → 10	++   Round trip
29	TRUCK	Side_B	10.0	11.0	24.0	1 → 6	++   Round trip
30	TRUCK	Side_B	10.0	21.0	14.0	1 → 6	++   Round trip

## **Average Transport Times:**

All vehicles (outbound): 21.77 seconds

All vehicles (return): 14.63 seconds

All vehicles (round trip): 62.07 seconds

Cars (outbound): 24.58 seconds

Minibuses (outbound): 17.70 seconds

Trucks (outbound): 22.62 seconds

Vehicles per Trip: 2.50 vehicles/trip

Completed Round Trips: 30 / 30 (100.0%)

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Simulation resources cleaned up