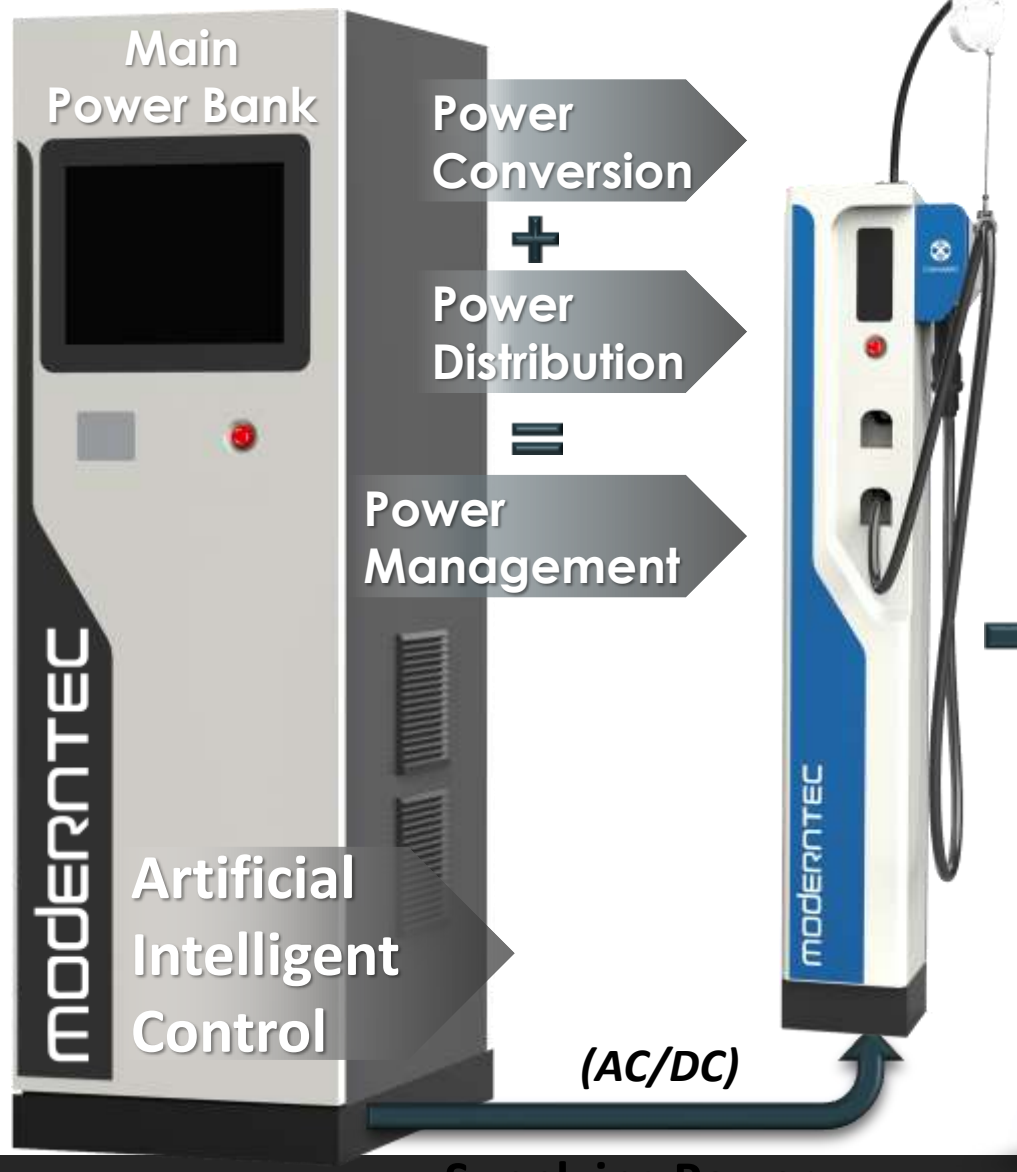
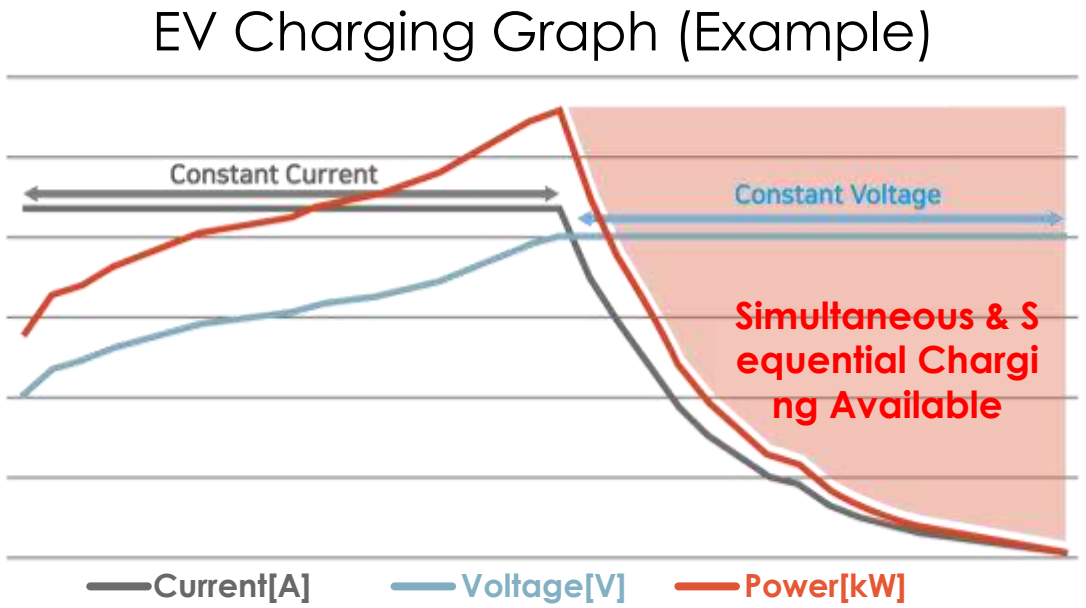
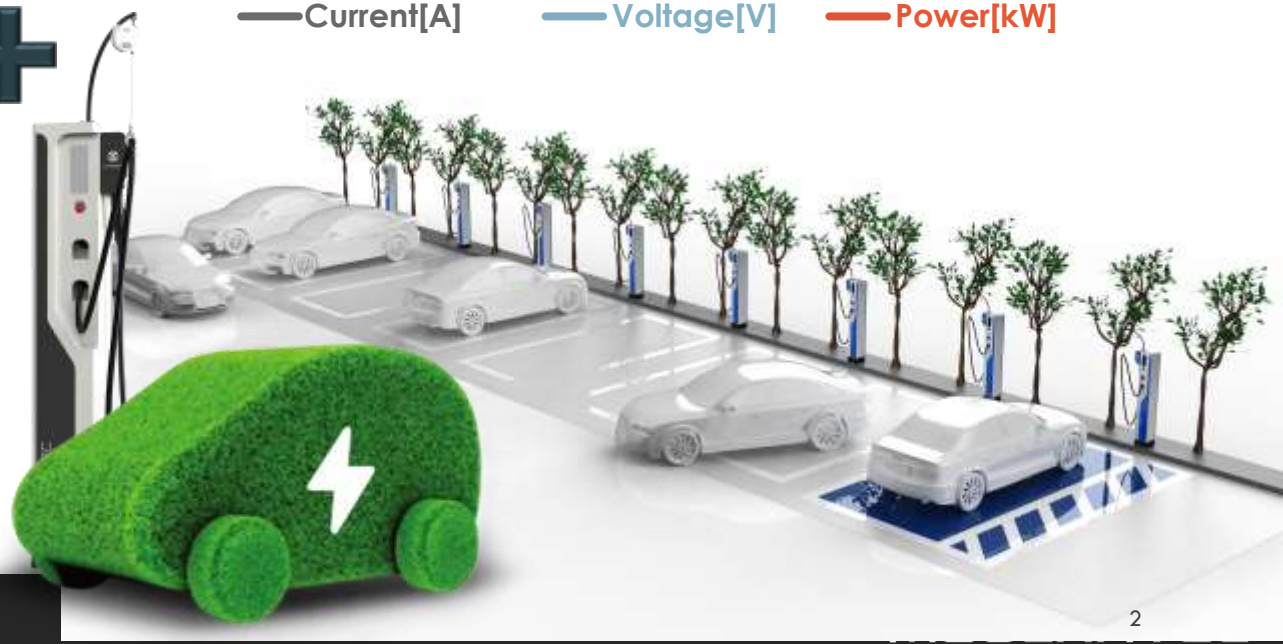

# MASTER-SLAVE EV CHARGER

moderntec

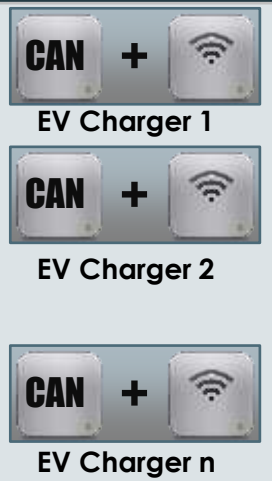
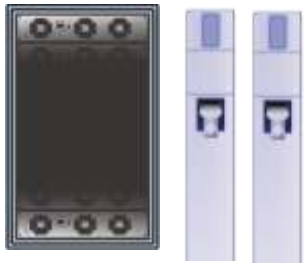
# MASTER/SLAVE CHARGER FOR E-BUS / E-CAR



# MASTER/SLAVE ADVANTAGES

| | Parking Spaces | Hardware Cost | Communication Cost | Contract Power |
|---|---|---|---|---|
| Integrated Charger |  |  |  |  <br>500kW |
| Master/ Slave |  |  |  |  <br>200kW |
| | *Parking Space Saving* | *Hardware Saving* | *Communication Installation Saving* | *Contract bill Saving* |

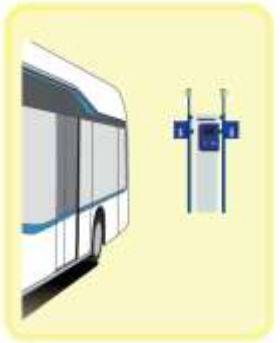
| Cost | Integrated Charger 10EA | Master-Slave Charger 10EA |
|---|---|---|
| Contract Power | 500kW(50kW *10EA) = **$2,821.74** | 200kW (200kW Master*1EA + Slave*10EA) = **$1,128.70** |
| Electricity | $155.65 (2,000kW) | |
| Communication | $6.70 * 10EA = **$67.00** | $6.70 * 1EA = **$6.70** |
| Every Month (V.A.T. Included) | **$3,452.24** | **$1,467.00** |
| Every Year (V.A.T. Included) | **$41,426.88** | **$17,604.00** |

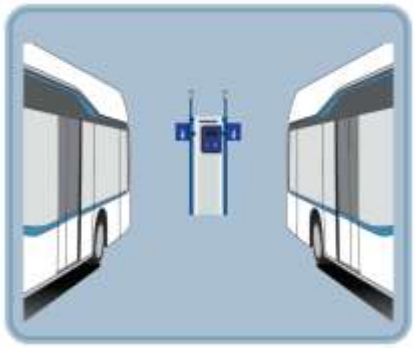
**$24,000**

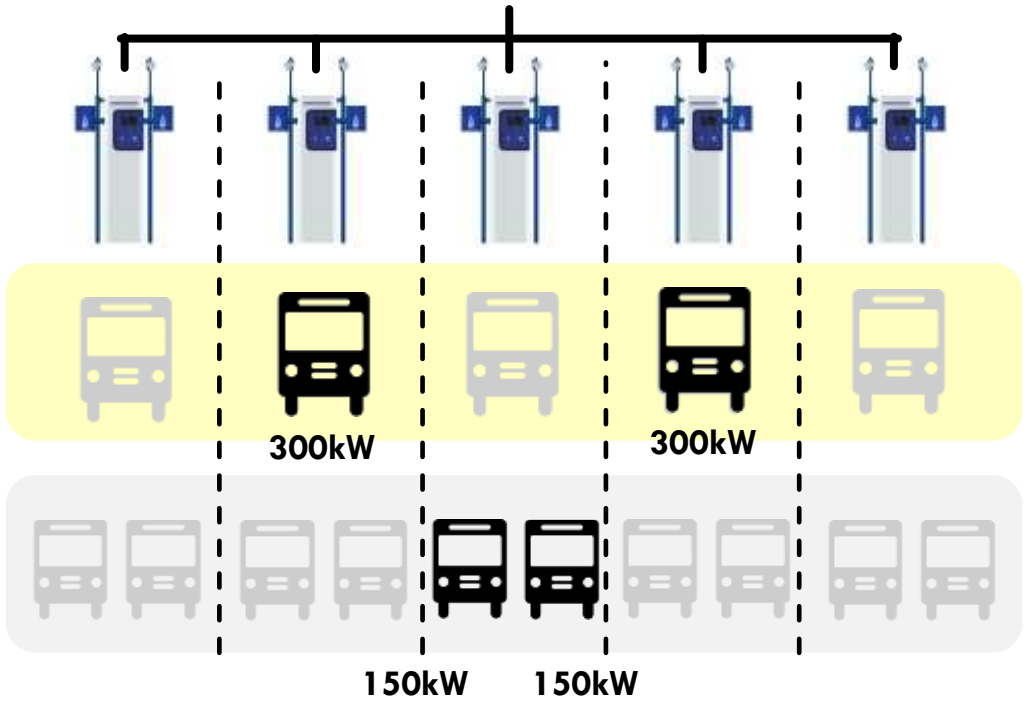
# SEQUENTIAL CHARGING: HOPPING WAY

## Efficient and Productive!


Charging time
Bus power Capacity








**Mode1: 300kW 2Port, Charging 1Bus**

- Each Charger available to charge with 2 ports
- Sequential charging in order
- Fast charging available for short break (300kW 2Port)

**Mode 2: 150kW 1Port, Charging 10Buses Simultaneously and Sequentially**

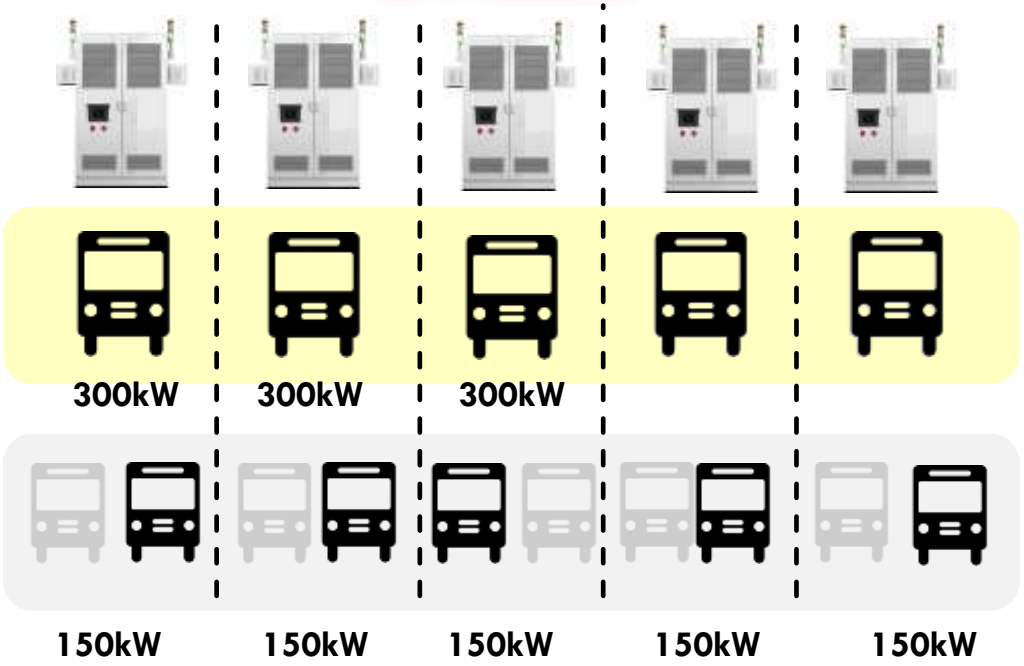
- Sequential charging in order
- Up to 10 buses can be charged
- During the long break or the night, charging numerous buses sequentially available

# SEQUENTIAL CHARGING: FULL CHARGE

**Load Management**

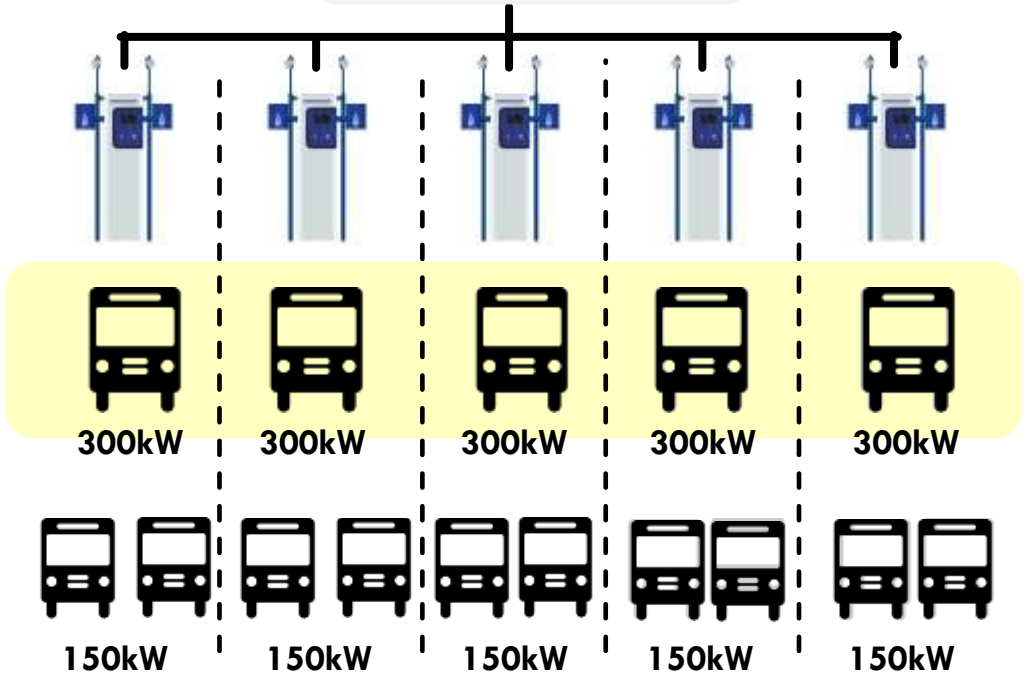
**(1000kW)**

**(1500kW)**





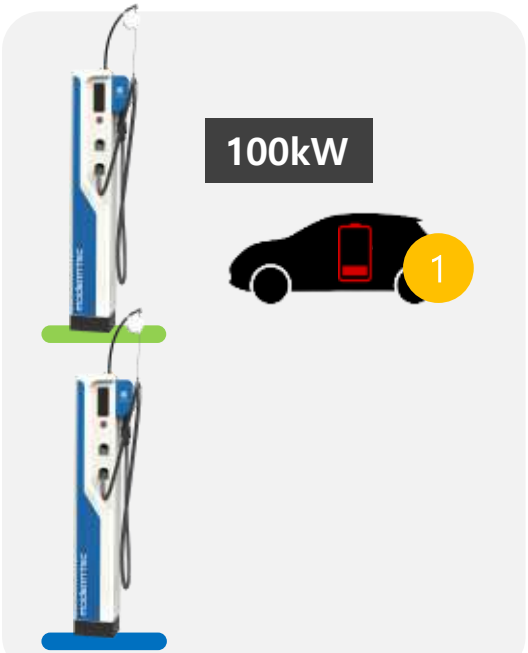
Graveyard Shift



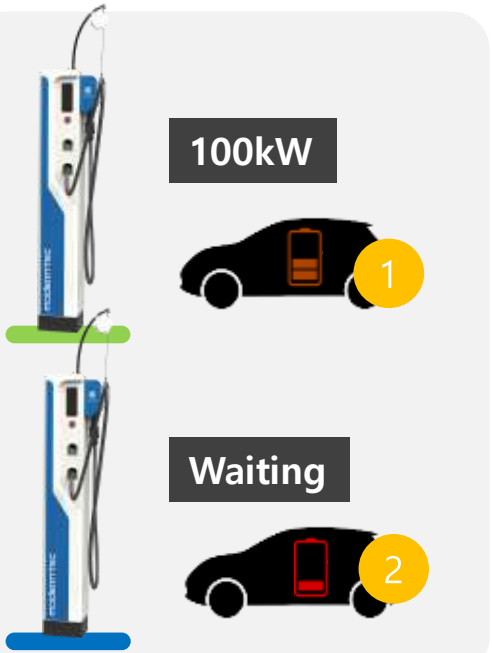
# EV CAR CHARGER SIMULTANEOUS & SEQUENTIAL


**Contract Power**

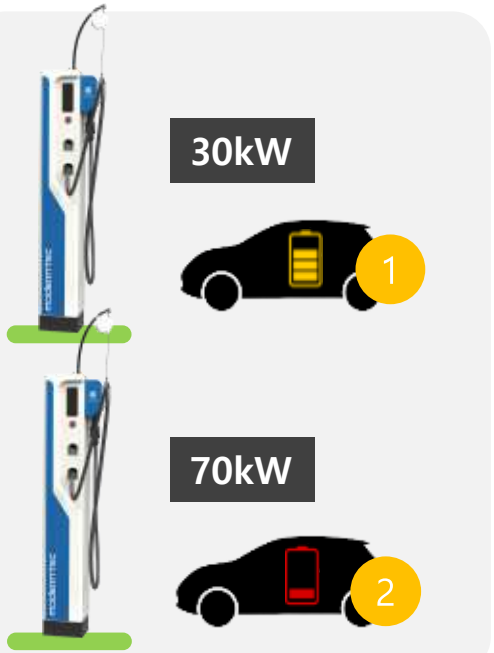
***100kW***




- ✓ Cabinet Capacity 100kW, 2 Dispensers(100kW)
- ✓ Fast Charging Mode within 100kW Capacity




- ✓ Sequential Charging Mode within 100kW Capacity
- ✓ Car #2 is waiting for the available power being idle




- ✓ As the available power being idle increases based on remaining battery of Car #1, the power will be transferred to Car #2.
- ✓ Efficient use of limited contract power, not being idle
- ✓ When Car #1 is fully charged, Car #2 will be charging with 100kW.

# CURRENT DOMESTIC DEPLOYMENT

**GIMPO**
- 1 Station
- 2 Power Banks
- 3 Dispensers

**SEOUL**
- 6 Station
- 11 Power Banks
- 32 Dispensers

**INCHEON**
- 1 Station
- 5 Power Banks
- 8 Dispensers

**SUWON**
- 1 Station
- 9 Power Banks
- 48 Dispensers

**BUCHEON**
- 1 Stations
- 5 Power Banks
- 12 Dispensers

**GWANGMYEONG**
- 1 Stations
- 2 Power Banks
- 6 Dispensers

**ASAN**
- 3 Station
- 5 Power Banks
- 5 Dispensers

**CHEONAN**
- 1 Stations
- 6 Power Banks
- 6 Dispensers

**CHEONGJU**
- 2 Stations
- 2 Power Banks
- 3 Dispensers

**JEONJU**
- 1 Stations
- 1 Power Banks
- 1 Dispensers

**DAEGU**
- 1 Stations
- 2 Power Banks
- 2 Dispensers

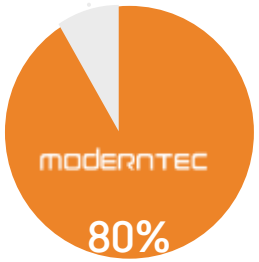
**YANGSAN**
- 3 Stations
- 6 Power Banks
- 13 Dispensers

**BUSAN**
- 6 Stations
- 17 Power Banks
- 38 Dispensers

**CHANGWON**
- 5 Stations
- 17 Power Banks
- 33 Dispensers

**Jeju Island**
- 1 Stations
- 4 Power Banks
- 10 Dispensers

**Others**




**[ Suwon Bus Station; 9 Master / 44 Slaves]**

# EV CHARGER: MASTER-SLAVE CHARGER

## Charging Type

| | |
|---|---|
| **■ DC Charging (CCS1 and CSS2)** | **50kW, 100kW, 150kW** |
| Maximum Output Power (kW) | 50kW per Gun |
| Output Voltage (V) | 150-1,000VDC |
| Output Current (A) | 125A Max |
| Connector / Socket Type | CCS 2 as per IEC 62196 Mode-4 (PLC) |
| **■ DC Charging (CHAdeMO)** | **50kW, 100kW, 150kW** |
| Maximum Output Power (kW) | 50kW |
| Output Voltage (V) | 150-500VDC |
| Output Current (A) | 125A Max |
| Connector / Socket Type | CHAdeMO as per IEC 62196 Mode-4 (CAN) |

## Recommended Area

- ✓ Large Apartments
- ✓ Large Parking Lots like Marts or Government Buildings
- ✓ Highways System
- ✓ Public Transport Systems