Flowchart Implementation for Traffic Management System

```
┌──────────┐        ┌────────────────────┐       ╱◆╲
│   Start  │───────▶│ Input the system   │──────▶ Choice 1 ──Yes──▶ ┌──────────┐
└──────────┘        │ that you want to   │        ╲◆╱                │ Parking  │
                    │ manage             │         │                 └──────────┘
                    └────────────────────┘        No
                                                   ▼
                                                  Choice 2 ──Yes──▶ ┌──────────┐
                                                   │                │Emergency │
                                                   No               │ Service  │
                                                   ▼                └──────────┘
                                                  Choice 3 ──Yes──▶ ┌──────────┐
                                                   │                │Pedestrian│
                                                   No               └──────────┘
                                                   ▼
                                                  Choice 4 ──Yes──▶ ┌──────────┐
                                                   │                │  Road    │
                                                   No               └──────────┘
                                                   ▼
                                                  Choice 5 ──Yes──▶ ┌──────────┐
                                                                    │  Exit    │
                                                                    └──────────┘
```

```mermaid
flowchart TD
    Parking --> InputCapacity[Input Capacity]
    InputCapacity --> IfZero{If Parking Capacity=0}
    IfZero -->|Yes| Break1[Break]
    IfZero -->|No| InputMgmt[Input Management type]
    InputMgmt --> Parked{Parked}
    Parked -->|Yes| IODrivers[Input and Output Drivers Data]
    IODrivers --> Break2[Break]
    Parked -->|No| Removed{Removed}
    Removed -->|Yes| InputFee[Input Drivers Data with Parking Fee and Parking Hour]
    InputFee --> CalcFee[Calculate Fee]
    CalcFee --> OutputFee[Output Drivers Data Including Parking Fee, Parking Hour and The Calaculated Fee]
    OutputFee --> Break3[Break]
    Removed -->|No| Availability{Availability}
    Availability -->|Yes| OutputSpace[Output Available Space]
    OutputSpace --> Break4[Break]
    Availability -->|No| Capacity{Capacity}
    Capacity -->|Yes| OutputCap[Output apacity]
    OutputCap --> Break5[Break]
```

Parking → Input Capacity → If Parking Capacity=0 —Yes→ Break

If Parking Capacity=0 —No→ Input Management type

Input Management type → Parked —Yes→ Input and Output Drivers Data → Break

Parked —No→ Removed —Yes→ Input Drivers Data with Parking Fee and Parking Hour → Calculate Fee → Output Drivers Data Including Parking Fee, Parking Hour and The Calaculated Fee → Break

Removed —No→ Availability —Yes→ Output Available Space → Break

Availability —No→ Capacity —Yes→ Output apacity → Break

Flowchart 1: Emergency

Emergency → Input Name → Input Type of Emergency → **If Fire Emergency**

If Fire Emergency —Yes→ Input Location → Output Data → Break

If Fire Emergency —No→ **Medical Emergency**

Medical Emergency —Yes→ Input Location → Output Data → Break

Medical Emergency —No→ **Crime**

Crime —Yes→ Input Location → Output Data → Break

Flowchart 2: Pedestrian Cross walk

Pedestrian Cross walk → **Activate signal**

Activate signal —Yes→ Signal is Activated

Activate signal —No→ Signal is not active wait for a sec to cross

→ **Preform an Emergency Stop**

Preform an Emergency Stop —Yes→ Road is shut for pedstrian → Go to Home Page

Preform an Emergency Stop —No→ Keep the signal as it is → Go to Home Page

```
Road  →  Input          →  Input what
            Capacity          you wanna
                              manage
                                  │
                                  ▼
                          ◇ Choice 1 ──Yes──→  Add        →  Vichel
                                               Veichel        Added
                              │No
                              ▼
                          ◇ Choice 2 ──Yes──→  Remove     →  Vichel
                                               Vechele        Removed
                              │No
                              ▼
                          ◇ Choice 3 ──Yes──→  Check      →  ◇ If Road ──Yes──→  Road is
                                               Road            Congestion         Congested
                                               Congestion        │No
                              │No                                ▼
                              ▼                              Road is not
                          ◇ Choice 4 ──Yes──→  Exit        congested
```