

TRAFFIC MANAGEMENT USING IOT

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Abstract

- *Traffic Management System is consider as one of the major dimensioning of the smart city.*
- *In the current problems of the world urban mobility is one the major problems especially in metropolitan cities.*
- *A Traffic congestion is a growing problems everyone face in their daily life.*
- *The purpose of this presentation is to propose a smart traffic management system using the internet of things(IOT).*
- *Various sensors are used to implement Traffic Management System using IOT.*

Role of IOT in Traffic Management

- With cities worldwide experiencing ongoing population growth – it results in stressed municipal infrastructure
- The increasing growth in cities leads to the demand to meet sustainability goals while evaluating traffic management strategies.
- IOT enables to,
 - Optimize the traffic flow and keep the drivers safe.
 - Collect data on congestion and improve traffic signaling.
 - Locate incidents and report them to emergency rooms immediately with road sensors.

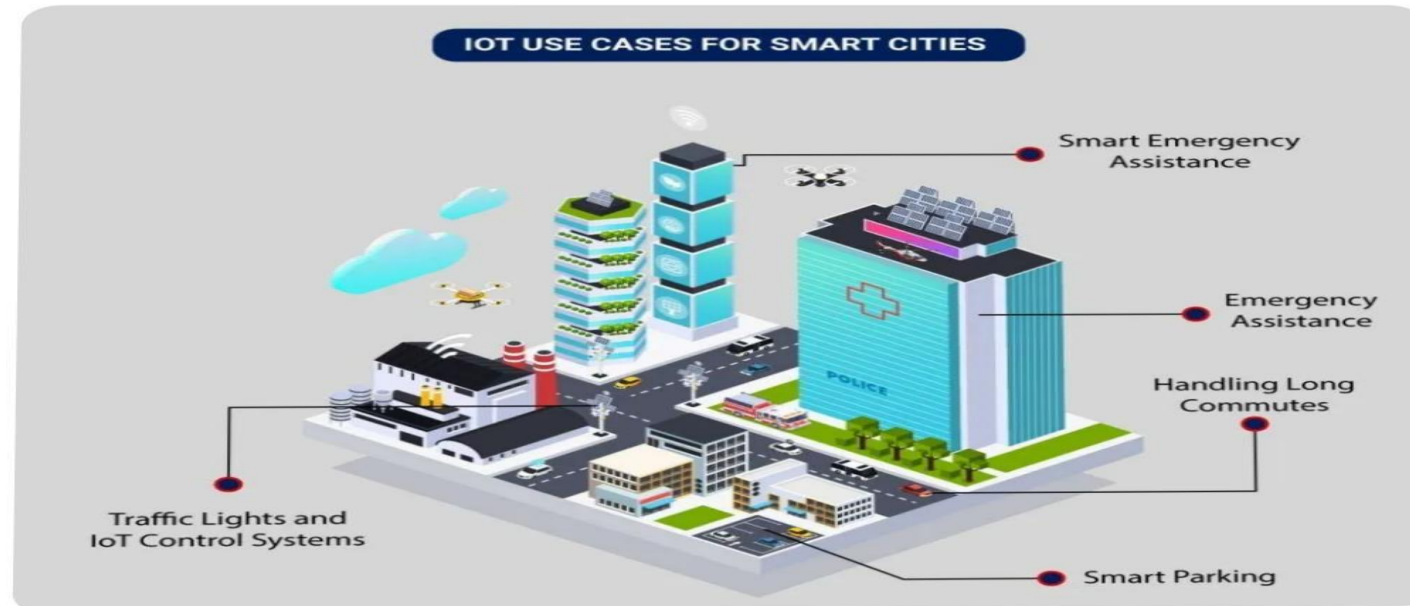
Functioning of traffic monitoring system

- Traffic monitoring system uses several components:
- 1)Wireless sensors
- 2)RFID tag
- 3)BLE beacons

Applications of IOT

Use cases:

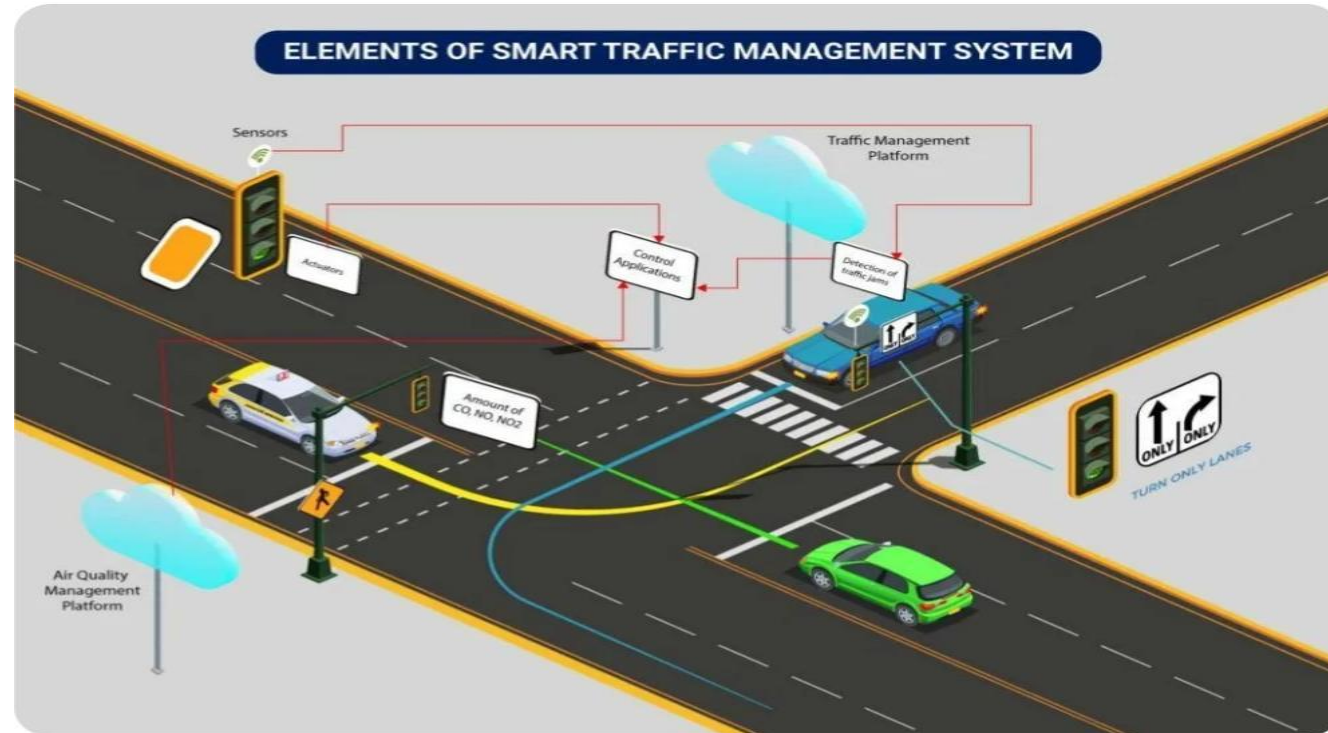
- 1) Traffic lights and IOT control systems
- 2) Smart parking.



Key Features

- Includes:
- 1)Traffic jam detection
- 2)connected vehicles
- 3)Digital payment
- 4)Road safety analytics

Implementation of smart traffic management system



- *The basic architecture consists of following components:*
- *1)Sensor*
- *2)Actuators*
- *3)Field gateways*
- *4)Cloud gateways*
- *5)Data lake*
- *6)User applications*
- *7)Data analytics*

Advantages of traffic management system

- Few benefits of implementing lot and intelligent technology:
- 1)Reduce traffic jam
- 2)Reduce accident on street.
- 3) Ensuring immediate clearance for emergency vehicle.
- 4)Saving billions of gallons of fuel wasted every year.

THANK YOU