future vision of the system

- 1. Linking the system to the traffic lights to activate the smart control in terms of time and priority. 2. Giving indications (alerts) in the event of an emergency (traffic stop for example).
- 3. Adding a feature to identify vehicles that have priority, such as fire trucks and ambulances.
- 4. Activating and monitoring the system at the entrances and exits of the main cities.
- 5. Monitoring the amount of carbon emissions resulting from traffic and giving detailed reports about them.

How the system works

- 1. Using artificial intelligence and computer vision techniques to identify, track and classify vehicles.
- 2. Archive statistics in databases.
- 3. Display the data in the form of graphs and maps.





Public Security Directorate

Communication and Information Technology Department

Traffic Management System (TMS)



(Traffic Management System (TMS

An intelligent system for managing traffic jams and finding alternative routes by collecting road conditions data and preparing vehicles on the roads using artificial intelligence algorithms under trial and development.

The system is considered the first project of the Public Security Team for Artificial Intelligence emanating from the national strategy for artificial intelligence within the axis of digital transformation, which is considered one of the main axes of the strategy of the Public Security Directorate.



System Features

- 1. Predicting traffic jams and finding alternatives ways as an assist to the traffic police for the decision making. 2. Traffic monitoring.
- 3. The ability to review traffic within a specific geographical area or more.
- 4. Displaying the number of vehicles on the roads in real time and representing it through graphs and digital maps.
- 5. Extract traffic statistics electronically. 6. The system is environmentally friendly.



System goals

- 1. Reducing traffic jams.
- 2. Finding alternative ways
- 3. Archiving traffic data.
- 4. decision making enhancing.
- 5. provide statistics about traffic jams.
- 6. Forecasting the traffic situation according to the expected data, such as the weather or holidays.

