

SPEED LIMIT
80 MPH
ABC 0123

YOUR SPEED
87 MPH



JK TECHNOLOGIES

Section/Average Speed Enforcement System

Speed Enforcement system detects the speed of passing vehicle and its Number Plate and compare its speed with allowed speed by authorities if found over speed then VMS display specific Number Plate to commuter to make him slow down.

Methodology

In Motorway, Highway and urban roads drivers have most possibility to violate speed limit so it is very important that to control these violation. In this scenario the Point to point speed enforcement system provide a vital role to control these violations. Therefor in different section of motorway, speed detection points are installed with camera and vehicle detection software capture vehicle number plate and detect speed & time. Based on point to point covered distance and time system calculate speed and generate alerts for over speed vehicles and display it on VMS.

P2P Speed Enforcement Features

- Large numbers of drivers being detected and infringed for speeding offences.
- The driver may slow down if he is aware of the location where the radar control is made thus preventing the fine.
- It extends the speed enforcement coverage over a greater area.
- Requirement for less numbers of police staff, vehicles, time and resources.
- Provides connectivity for other systems

Features of a P2P Speed Camera System

- Cameras are installed at the entry and exit points to a corridor of known length.
- A photo is taken of the vehicle as it passes over a detection loop, or similar, at the entry or exit point.
- Vehicle images and time stamps captured at corridor entry and exit points are saved to a local server.
- ANPR software reads number plates and saves a data file to a local server.
- Data files from the entry and exits points are transferred over the communications network either fixed or wireless to a central processing computer.
- Central processing computer determines if a speeding offence

has been committed by matching entry and exit point data files and calculating the travel time.

- Average speeds are calculated using travel times over the known distance to confirm if the average speed along the corridor was greater than posted speed.
- Calculated average speed of the vehicle is send to VMS at exit point and drivers can read their section speed when they pass over an exit point.
- Local server image files are requested by and sent to the central processor via the communications network.
- An infringement file is created and it contains the image files and all necessary information captured at the entry and exit points for matching and enforcement purposes.
- The infringement file is sent to enforcement adjudication for verification and issuing.

System Components

- Cameras/Illumination
- Infrastructure (e.g., camera housing/mounting; cabling; clocks; power source)
- Processors
- ANPR/OCR engine and software
- Communications network
- Central processing unit/back office.
- Image grabber Software
- Frame OCR Processing
- Number Plate Filtering Software
- Speed Detection system
- VMS Display

Variable Message Sign System (VMS) Components

- Display technology: Display Module
- VMS housing: This style of access to VMS housing will allow the least amount of road disruption regarding maintenance repairs
- VMS Controllers
- Sign dimming system

- Cellular Digital Packet Data

Power Requirements

- Wiring
- Circuit Breakers
- Power Supply
- Battery Backup
- Grounding

Communications

- Fiber Optic
- Twisted Pair

P2P Speed Enforcement Benefits

- Effective in reducing both the number and severity of crashes
- Able to improve speed compliance within the enforced area and often reduce both average and instant speeds to the posted speed limit or below.
- Produce smoother traffic flows and reduce speed differentials between vehicles
- Speed enforcement on dangerous sections of road
- Greatly improved traffic management when combined with variable-message signs
- Can be combined with ANPR and toll applications
- Reduction of fuel consumption
- Violation rates are typically low
- The number of P2P enforcement corridors years
- There is an observed reduction in crash and casualty rates.

