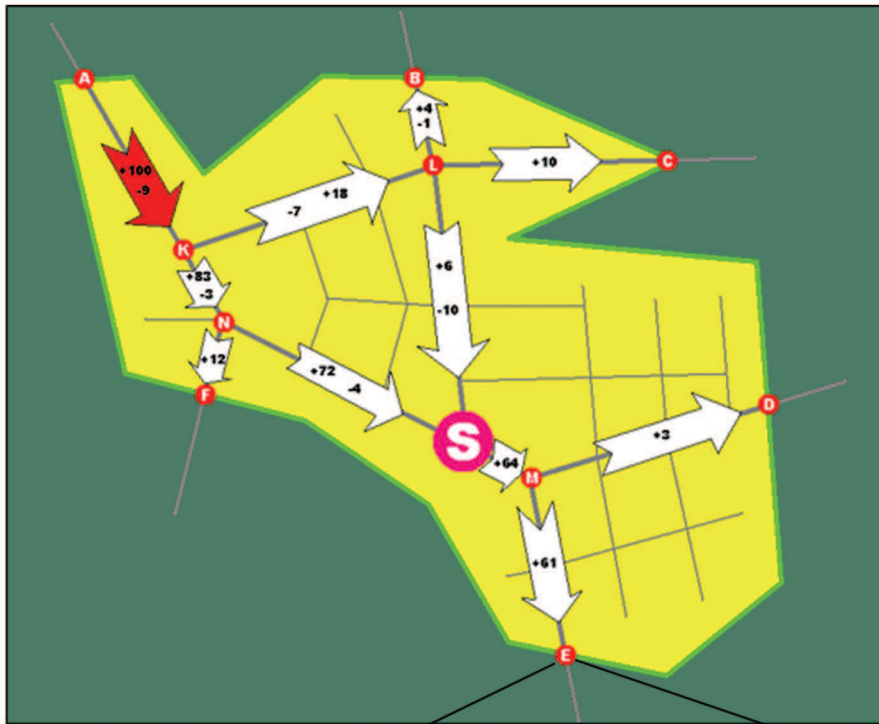


Super Vision LPR

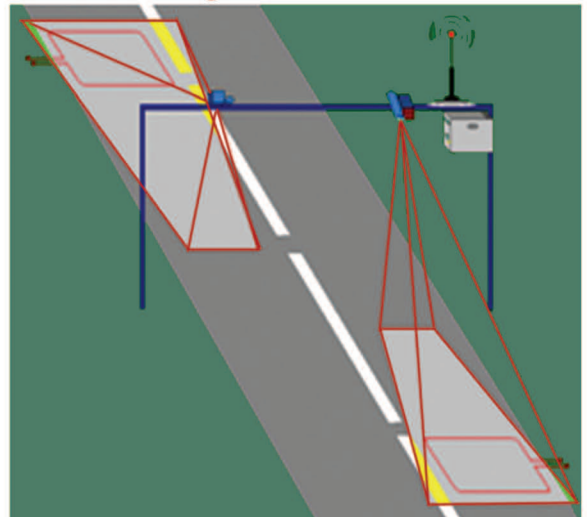
Traffic Enhancement



The system allows automatic surveillance and traffic analyses for a compact highway system. Having **LPR-GATES** supervision points at the “city” entrance in the main roads and before their crossroads, the **LPR-GATES** network being inter-connected, the gathered information added into a analyses and command centre, the system can offer useful dates about the traffic enhancement and it can also alarm the presents of some events type – confinement vehicles, accidents, traffic jam, etc



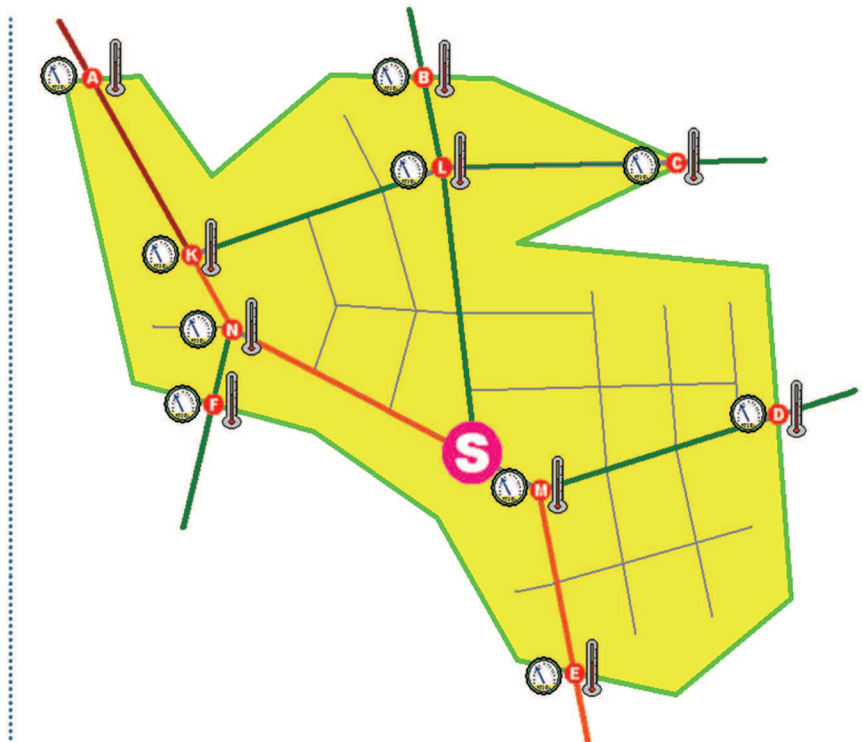
	Induction knots into carriage road for each lane circulating track
	LPR Cameras (video camera having special characteristics + IR lamp for each lane circulating track)
	Rigid gang plank structure that allows to hang up LPR Cameras, units of reckoning, other recorders, over each lane circulating track
	Super Vision software system
	Data base system transmission to main server S





Monitoring – recording, analyses and management function

- Local and distances recording;
- Local and distance restore;
- Display the sensors and recorders condition;
- Display de sudden densities traffic map: calculates in real-time the traffic density for all road segments determinate by LPR – GATES shriveling network.



In this way for each sector/segment road (between two monitoring adjacent points) we can associate the number of vehicles from that part of the road and from the abutting area.

Depending of the density value, the segment can be displayed on the cell's map with a proper color and the controller can inform the traffic attends and can re-direct them.

$$\text{Current_density}_{AK} = \frac{F_{A \rightarrow K}(\Delta t) + F_{K \rightarrow A}(\Delta t)}{\text{Dist}(A, K)}$$

where $F_{X \rightarrow Y}(\Delta t)$ is the vehicle number that entered in the area through X point and haven't (yet) get out through Y in the last time period (Δt) to this moment.

"Black list vehicle" alarm: this alarm presumes the existence of a tracking vehicles list and a "black list" who will describe the proper reaction from the system. When a vehicle number is recognized in traffic, it will be found on this list and the system will act by him-self following the pre-establish scenario.

- Specific function for traffic analyze: statistical, rush hours, calendar days, seasonal.
- Tracking functions – online or offline.
- Monitoring and alarming functions for weather conditions, speed travel, traffic jam, etc.

The Traffic Enhancement Solution is perfectly achievable, being advanced, innovative; the technologies are already available in different shapes and applications; the implementation is flexible and adapts perfectly for specific circumstances.