



Hermesys



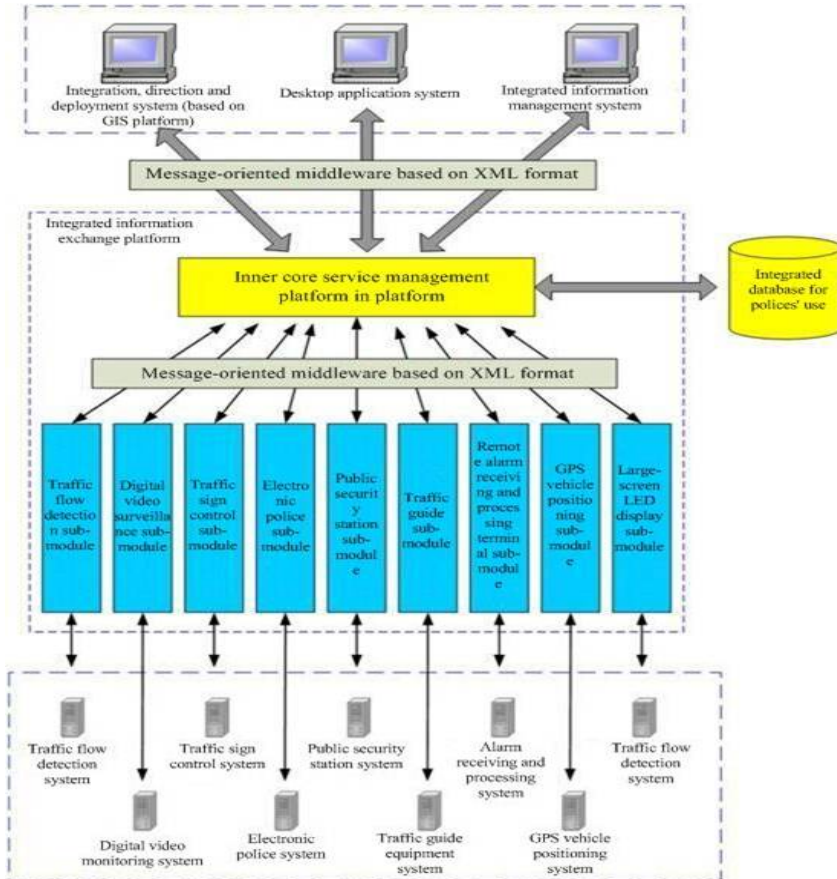
**Intelligent Traffic Comprehensive
Management System**

System Summary

Modern optical fiber communication technology, computer network and multimedia. The communication technology will be fully applied to construct a new style television surveillance and information management system. Modern technology allows us to use and to control or guide traffic, lessen violations of regulations, regulate and alleviate traffic jams, improve traffic capacity, ensure the safety and smoothness of road traffic, guarantee the maneuverable requirements upon traffic of various administrative organs or public security systems during some significant activities, coordinate peripheral accidents, alleviate traffic jams, strengthen the quick-reaction capability of traffic polices and realize 24-hour real-time TV surveillance upon various main intersections, locations and important departments so as to provide reliable bases to quickly handle emergencies and traffic accidents and rectify traffic violations.



System structure



Customer service layer:

Actual application of traffic management

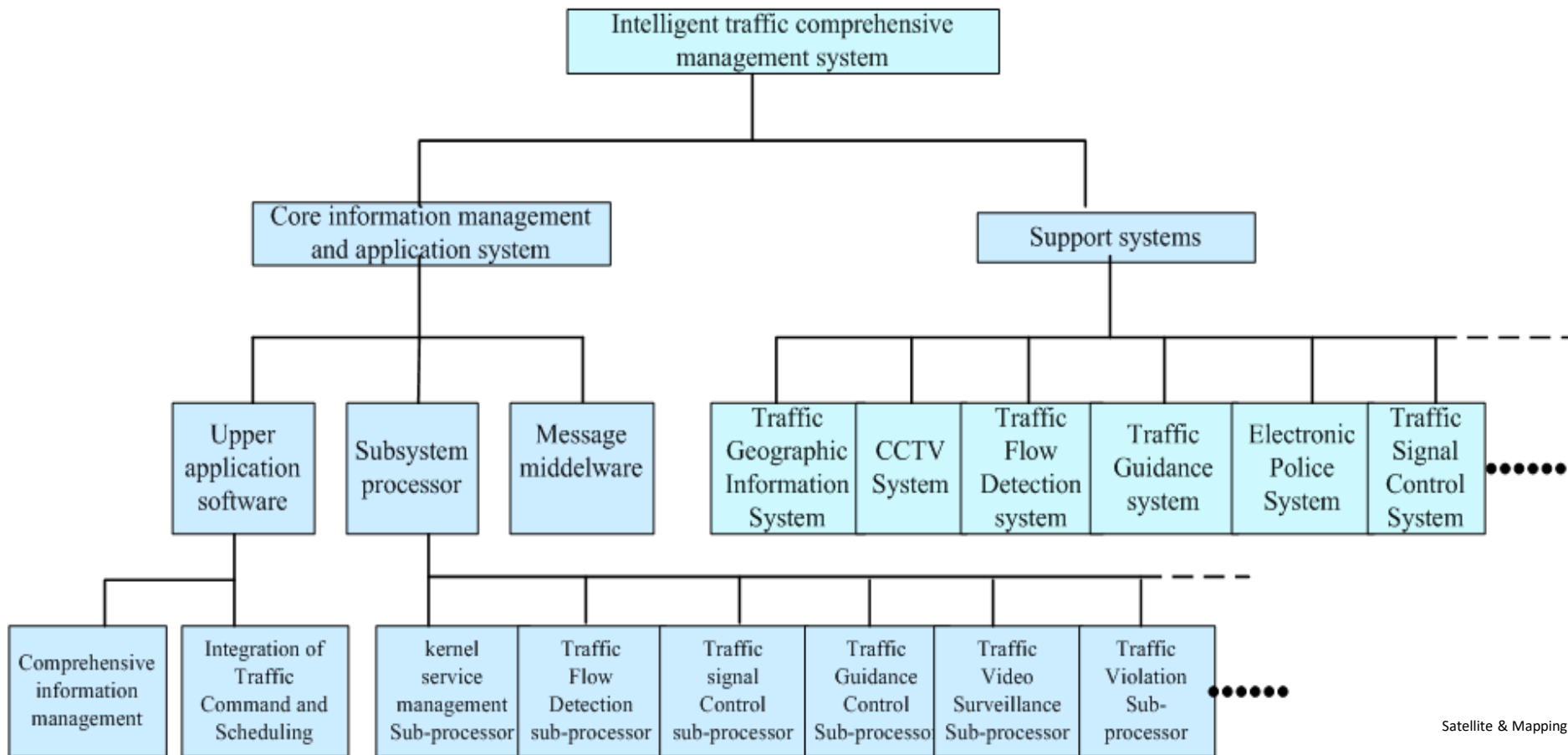
Application service layer:

Integrating and processing the basic data and functions to provide a variety of functions and data services for customer layer

Data service layer:

data collection and equipment control

System composition



Support system

01

Traffic geographic information system

02

Traffic video surveillance system

03

Traffic flow detection system

04

Traffic signal control system

05

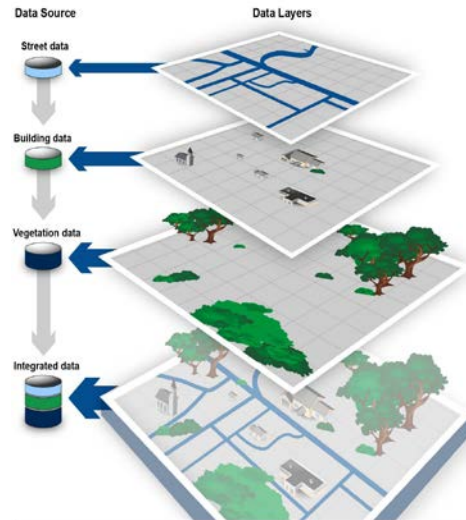
Traffic guidance system

06

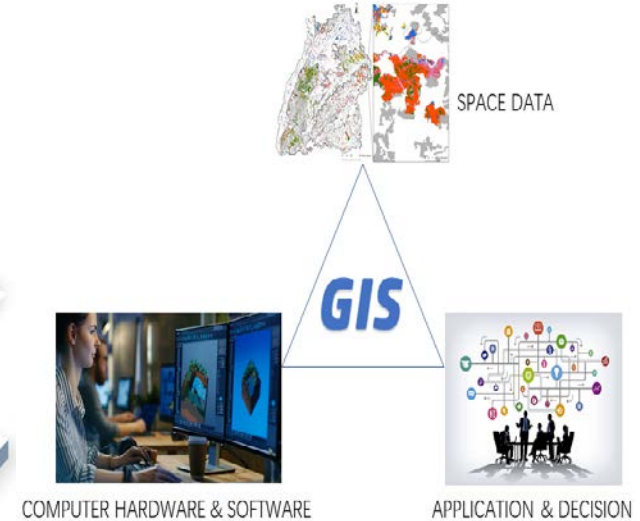
Electronic police system

GIS System

GIS is a human-computer interaction information system supported by a computer software and hardware, in which the various resources information and environmental parameters are encoded with a certain format and classification to input, process, store, output to meet the application needs, according to spatial distribution or geographical coordinates. In order to meet the satisfaction of the variety of applications of research works, by operating and comprehensive analysis to multiple element data, it exports the necessary informations quickly and easily on the form of graphics, images, digital etc. GIS is playing an active role in urban management and traffic management.

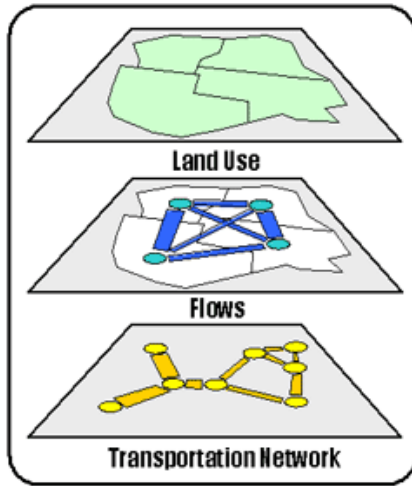


GIS Description

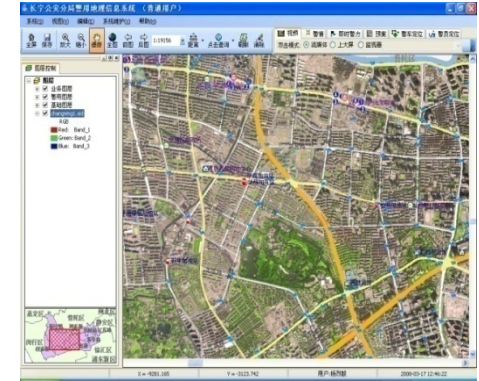
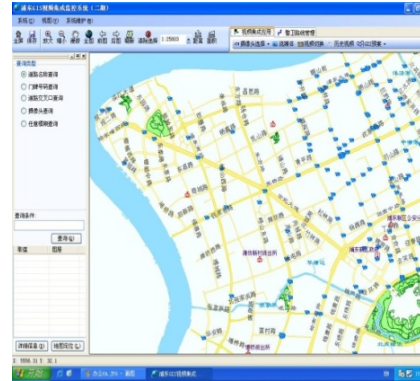


GIS Composition

GIS-T



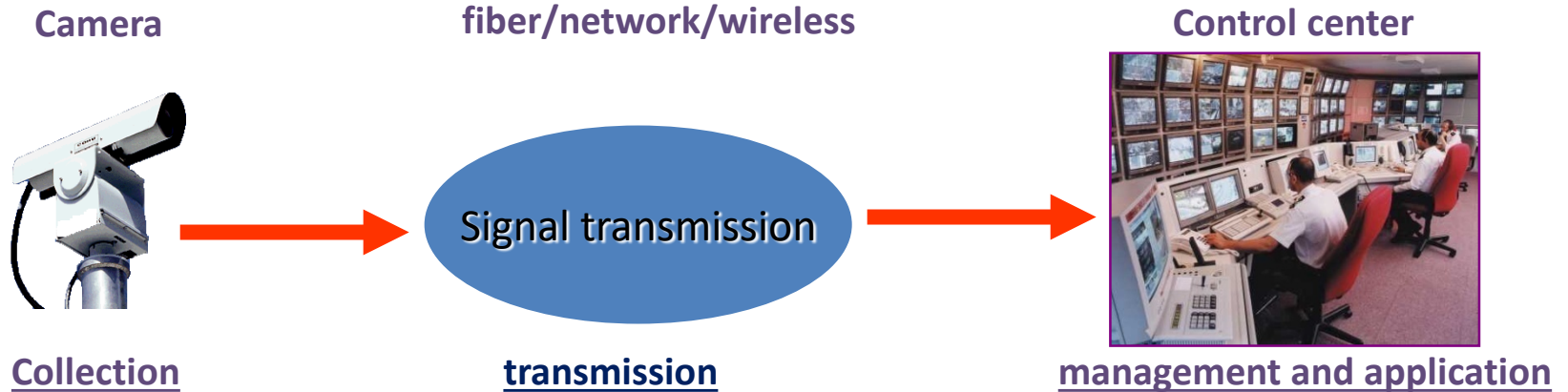
GIS-T (geography information system for transportation) refers to the principles and applications of geographic information technologies to traffic problems.



It's based on a professional platform for GIS support, enables multi-source data integration and superposition of multiple layers which fits into traffic police business which is necessary for business expansion.

Not only the basic functions of GIS like layer management, showing location, distance etc, but also several extended business functions such as GIS-video display, GIS traffic incident comprehensive analysis, GIS dynamic police force management, GIS traffic management and GIS system maintenance can be achieved.

Traffic video surveillance system



- ◆ Traffic video surveillance system provides real-time video image information for control center to ensure to master the road traffic conditions in real time.
- ◆ Generally use the controlled camera, such as intelligent integrated high speed dome or PTZ camera.
- ◆ According to the characteristics of traffic management, resolution and definition of video in real time are relatively highly required, so all the transmission systems use optical system to transmit real-time and best-definition analog video signals.

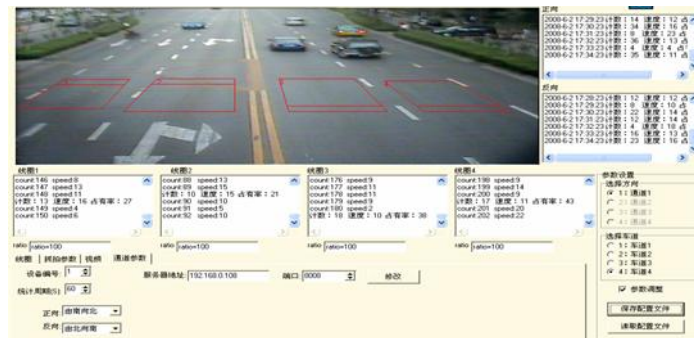
Traffic flow detection system

- ◆ Traffic detection system completes basic traffic flow information's tests on a road surface, such as vehicle count, speed, time occupancy, vehicle length, and then upload the information to traffic management center through transmission system.
- ◆ The system provides the basis to intelligent regulation and management of urban road, so that reduces road congestion and improves road resource utilization.

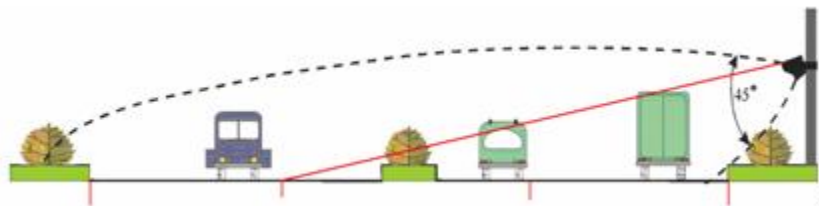
The mainly traffic flow detection methods used at present are in the following three ways:

- ◆ Loop detection
- ◆ Video detection
- ◆ Microwave detection

Video detection

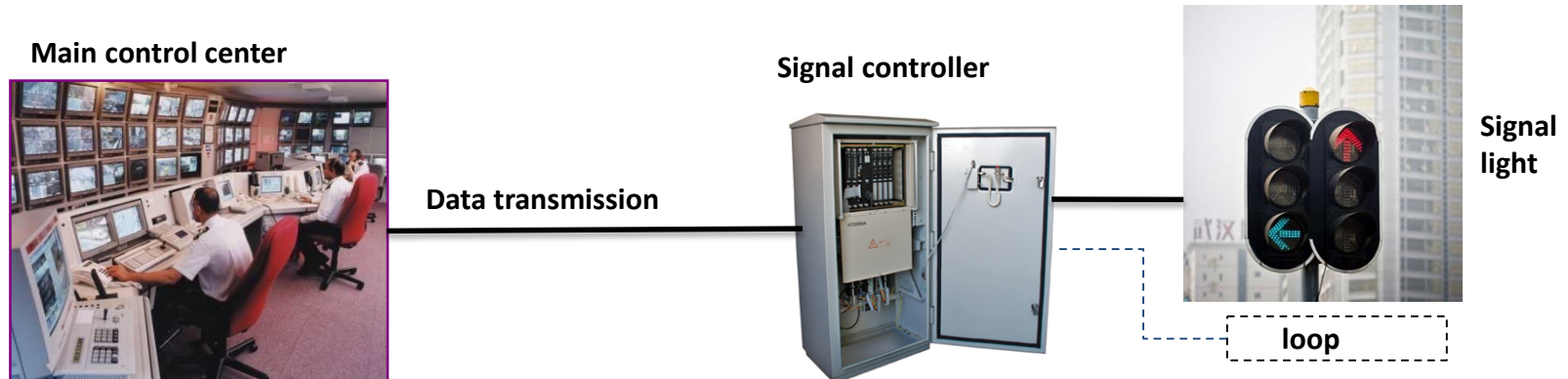


Microwave detection



Traffic signal control system

- ◆ Intelligent traffic signal control system is a controlled subsystem applied to intersections, pedestrians' crossings and loop exits in urban road traffic management. It is an application system to integrate several subjects' theory, including traffic engineering, psychology, applied mathematics, automatic control, information network technology, system engineering etc.
- ◆ general include traffic engineering design, vehicle information collection, data transmission and processing, control algorithm and simulation analysis, optimization of the control signal adjustment to traffic flow and so on.
- ◆ the basic component of Intelligent traffic signal control system is the main control center, intersection traffic signal controller (with lights), and data transmission equipment.

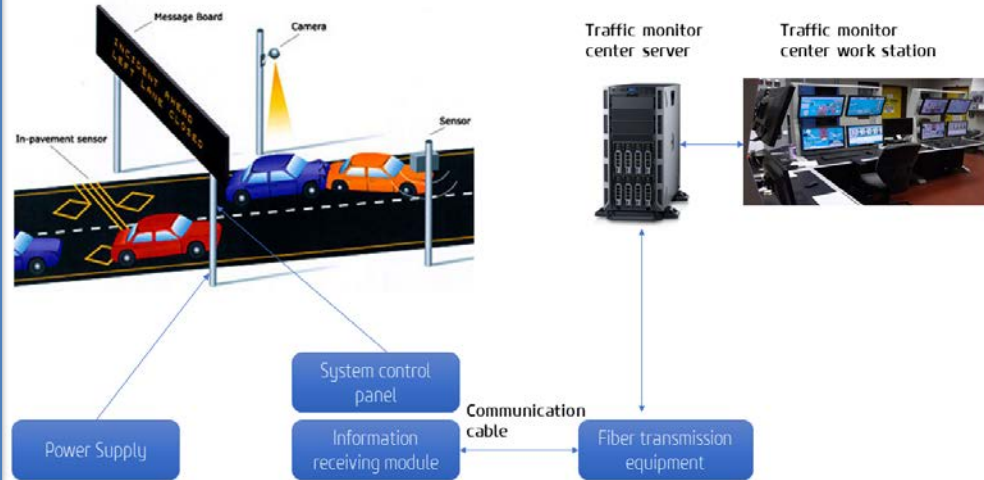


Traffic guidance system

◆ Traffic guidance system is one of the basic functions of traffic command center, it is an effective means of regulating and relieving the pressure of traffic congestion in urban area, is an important part of traffic management.

◆ The system is mainly composed of traffic information's detection and collection, gathering and processing, release, which forms a complete system.

◆ Such as traffic police conducting, Variable Message Sign (VMS), traffic broadcasting can be used for the release of guidance information. With the continuous development of communication technology, message platforms, cell phone and network are also be used for traffic guidance information. When traffic event happens, various inducement can be applied to regulate traffic flow "early" of traffic department.



Electronic police system

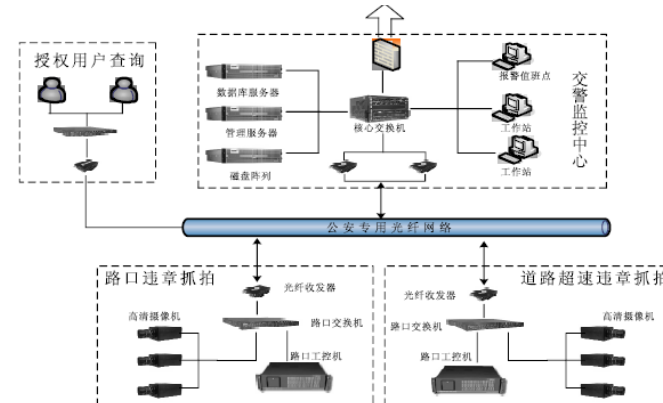
Electronic Police (motor vehicle violation automatically monitoring and recording system) is applied for automatic monitoring and illegal vehicles recording in signal control intersections on urban roads. Monitoring the behavior of running red lights, over speed, retrograde can not only prevent traffic violations and reduce traffic accidents, but also deter illegal drivers. At the same time, it supports traffic safety and provides scientific basis for effective enforcement to traffic management departments.

System Components: The system consists of control computer, detection system, transmission system and electronic police capture software.

Violation Detection Type: available to detect and capture of red light running, illegal lane change, pressing the yellow line, speeding, retrograde and other illegal activities.



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