

Mis

Technology



**ASSIGN
BUSTER**

Before develop of the MIS, it was impossible to connect various information into the highway digital map. It is because each individual system did not have digital map to share. Through the highway digital map, it became possible to give visual information by expressing the highway related information on highway digital map. MIS became easier through easy location finding, and spatial queries made it possible to conduct various analysis. The MIS Digital maps include various layers such as highway centerlines, administrative boundaries, bridges, rivers, and so on.

In many cases, highway links can have one to many relationships. A link may have more than one attribute for pavement management. For example, at a certain location of one link, pavement data can be changed. In this case, highway link in the digital map should be divided according to the number changes. In order to solve this problems, a multi-attribute dynamic segmentation data model was designed and implemented in the MIS application software. -6 In order to enhance efficiency and utilization of the MIS, a highway photocopying system was developed.

A highway visual image shows highway alignment information, road sign and roadside safety facilities. Visual image database will be added and integrated into the MIS. To collect highway visual images, highway photocopying vehicle was developed. Highway photocopying vacillates a visual mages every mm along the highway. The photocopying system will also be integrated into the MIS to provide highway visual images to the highway roadway, roadside facilities and pavement conditions, to improve frequent vehicle crash locations, and to quickly view the site in case of emergency such as landslide, severe accident and etc.

In highway photocopying vehicle, two progressive-scan CDC cameras, 2 GAPS (Global Positioning System) receivers, INS (Inertial Navigation System), DIM (Distance Measure Instrument), and signal synchronization device were installed. Proto-type highway photocopying application software which has nationalities to stimulate the highway driving on different driving speeds, and to enlarge or reduce view scale and bright control and etc. Figure 2 2. 4 Electronic Toll Collection Systems for individual routes.

Electronic Toll Collection (ETC) systems have been deployed in a few countries, and motivation for deployment is high. The deployment is aims to alleviate congestion around toll gates and to prevent theft by toll collectors. The toll plaza equipment consists of a lane controller, toll violation cameras, treadles, variable message signs (VIM), detector loops, and lane transponders. The lane controller coordinates all the information from each interacts and transaction with the Plaza Local Area Network (LANA).

The Plaza LANA connect either direct connection or via wide are network (WAN) to the appropriate service center for the toll road in question. All this items called E-Z Pass, each of the participating E-Z Pass toll authorities maintain their own service centers that issue the transponders and maintain the accounts fro their local patrons. The centers receive and correlate all of the transactions form the toll plazas it services and adjusts the accounts of the patron, then sending the transaction result back to the lazar within milliseconds.

These centers interact when patrons from one use the toll services of another center. 3. 0 Social Networking for Highway Management and

Maintenance Social networking Web sites such as Backbone, Namespace, and Twitter have impact daily life and social relationships in a profound way (Marcia Amid Lusted, 2011). Businesses, large and small, are finding ways to involve employees, customers, and partners in shared, online, collaborative activities that perform distinct business functions (Ran Shah, 2010). Social networking is a novel way of increasing a business by connecting with other people. 1 Establish connectivity with people/ users. Sites like backbone host a foundation for a mass audience and within any industry it is near impossible to please every customer open up a public opportunity for people to express their views or their problem in our services. Social networking allow businesses to reach customers on an individual level and address their inquires or a service, be aware that customers can also use social networking platforms to -8 grievances on past experiences. It may require addressing specific concerns in an online forum should a customer use this approach. 3.

Social networking distraction trap The threat from web-borne viruses and mallard are often overlooked by the company. Hackers are attracted to social networking sites because they see the potential to commit fraud and launch spam and mallard attacks. According to Backbone Company, there are tens of thousands of applications available for face book may make every effort to provide protection against mallard, these third-party applications may not all be safe. Some of the application have the potential to be used to infect computers with malicious code which in turn can be used to collect data from the user's site.

Messaging on social networking sites is also a concern and the Coffee worm is. One example of how message are used to spread malicious code and worms. 3.3 Viral social disadvantage The wrong online brand strategy could put the company at a viral social disadvantage and may even damage ours' reputation, e. G when the company make a mistake offline, a few will know but when the company make a mistake in front of thousands users what will happen?. Social networking also can have a negative influence on worker productivity. Employees may waste valuable time using media channels such as Backbone and Twitter.

They also usesocial mediato attack the company's reputation. Before the development of MIS in highway management and maintenance, there existed many problems in utilizing the highway data efficiently. It was difficult to indicate the same location among the highway management and maintenance system since each individual highway management and maintenance system has its own location expression with their own system. Similarly, it was hard to share highway data such as traffic volumes and highway drawings among the system since there was no integrated database system and this caused overlapping data storage ND overlapping data input effort.

Lastly, -9 since most systems were developed a decade ago, they are non-GIS (Geographic Information System) based system. Therefore, to solve this problems, first, new location reference system for the Highway was introduced by installing kilometer posts which were designed to have flexible adjustments to route change. Second, an integrated database was established by applying a unified location reference system to relevant data.

Third, the Highway digital maps were utilized and reproduced in order to provide highway information in a visual format by presenting each system's highway analysis data in common digital map.