



Ceinsys Road and Highways Solutions

Description

India connects to a vast web of road networks across. To manage and plan such a huge network requires skill on a National and Local level, for such major aspects of networks based on travel demands, requiring a large amount reliable, updated and relevant data. To manage such networks of Roads & Highways, Mapping is the need of the hour, to help the deterioration across. Highway Maintenance, Modeling, Accident Analysis, Decision support system, etc. helps execute an efficient way to tackle future crisis through GIS technology solutions using the database of the characteristics of the area for a broader sense to achieve analysis, queries, information, management and forecasting.

Road Asset Management

Road Asset Management System (RAMS) is a strategic and systematic process of maintaining, upgrading and operating road assets effectively. Information collected and made available through this system are useful for the agencies responsible for road development & maintenance, investors, as well as road users. Road Map Management Systems is a futuristic technology solution for short and long term planning.

Offerings

- Road Asset Management
- Corridor mapping
- Friction Analysis
- Road Navigation
- DPR & FSR



Friction Analysis

Several factors affect highway safety including pavement friction, road geometry, traffic conditions, vehicle speed and environmental conditions. Safety data shows low friction in conjunction with wet conditions directly correlates to increased number of skid related crashes. Thus, friction is a key factor from a pavement engineering perspective, in highway safety.

Objective of a pavement friction management program is to minimize friction-related vehicle crashes and increase safety by:

- Ensuring that new pavement surfaces are designed, constructed and maintained to provide adequate and durable friction properties.
- Identifying and correcting sections of roadways that have elevated friction-related crash rates.
- Prioritizing use of resources to reduce friction-related vehicle crashes in a cost-effective manner.

DPR & FSR

FSR – Feasibility study report is used to determine the viability of an idea, such as ensuring a project is legally and technically feasible as well as economically justifiable. It tells us, whether a project is worth the investment.

DPR is based on detailed survey and investigations, design and technology choice and should be of such detail that the quantities and costs are accurate and no cost over-run takes place due to changes in scope of work or quantities at the time or execution.



Corridor mapping

Corridor mapping refers to the mapping of large sections of highway to inspect:

- Pavement condition
- Lane markings
- Vegetation encroachment
- General state of the roads

It helps to monitor an inspection regime that is effective for the timely identification of defects on the road surface and associated assets (signs, curb/channel, footpaths, lighting etc.).

Prioritize and manage maintenance tasks to ensure that critical repairs are executed within agreed intervention times while making the most appropriate use of available budgets.

Schedule and monitor the execution of priority maintenance works.

Road Navigation

Road navigation is largely based on satellite navigation systems that can be integrated with onboard sensors (odometer and gyros) to compute optimal routes in real-time. Road Navigation applications are implemented using an in-vehicle navigation device, a standalone Personal Navigation Device or a standalone application runs on a GNSS-enabled mobile device.

Basically, the map and database of these applications are local, although in some case the local application is supported by online services that provide database updates, additional dynamic data (such as traffic information) or even parts of the navigation functionality.



Ceinsys Tech Ltd
10/5, IT Park, Opp. VNIT, Nagpur - 440022.
Maharashtra, India

+91 712 2249033/358/930
info@ceinsys.com

Branch Offices:
Mumbai | New Mumbai | New Delhi
Hyderabad | Pune | Jaipur | Lucknow

www.ceinsys.com