# Route Management System Phase II

 The Motor Vehicles Department is one of the leading departments in implementing various e-governance activities for the public and its employees alike as part of Ease of Doing Business. All the major services of the department delivered to the public are fully computerized and are provided through online only. The department provides various services related to registration of vehicles, driving licenses, and permits to transport vehicles.

The Regional Transport Authority (RTA) of each district is authorized for issuing various types of permits to the vehicles operating as stage carriages for public passenger transport. Permits are issued to both Government and Private stage carriages by RTAs. Each stage carriage is also issued a trip sheet detailing the route and the arrival time/departure time at each stop/way-points along the route as decided in the timing conference held with the stage carriage operators. It is also to be ensured that there is no overlapping on the way-point timings for the buses plying in the same route. Non compliance of the trip sheet and trip curtailment is a compoundable offense as per Motor Vehicles Rules and the department needs to ensure strict enforcement in this regard.

At present all works related to timing conferences are performed manually. Hence, many errors and omissions are crept in the trip sheets leading to frequent disputes and court cases among the stage carriage operators and the department, and have all other disadvantages of a manual system. There is also no uniformity and transparency in the present procedure.

With a view to efficiently and timely process the existing system using advancement in IT, the department had decided to digitize the entire workflow of the timing conference and enforcement of the same. The department has partially implemented the project 'Route Management System' in the year 2015 and developed a web application in this regard. In the first phase, details of trip sheets have been entered in the system by each district RTAs as per the data available.

Now, the system is to be enhanced further for enabling online timing conferences and automatic enforcement. The tentative requirements of the department in the second phase of the project are:-

(a) Development of a Passenger Information System to provide the public with bus timings, routes, real-time location and tracking. Details shall be provided through both web and mobile applications.

(b) Identification of bunching of buses – A common issue is that many buses are plying in the same route at the same time and there is no procedure to identify such cases. The system should be capable of automatically identifying such cases based on the data available in the system and suggest appropriate re-timings.

c) Enforcement system – As trip curtailment and non-compliance of timing schedule is a compoundable offense, the enforcement officers of the department needs to be automatically alerted with relevant details for taking timely action. A mobile application is to be developed exclusively for the officers.

(d) Integration with existing VTMS application – It is mandatory that all stage carriage vehicles are to be fitted with Vehicle Location Tracking Device. Department has already deployed an online Vehicle Tracking Management System. The project is to be integrated with VTMS or data shared to avoid duplication of common features.

(e) Dashboard facility – Web based dashboard to be provided for the entire monitoring and reporting process for MVD and KSRTC. A separate module is to be exclusively developed for KSRTC to monitor their stage carriages.

(f) Training to MVD/KSRTC officials.