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## **Geo Spatial Database for Railway Assets Management**

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**Abstract :** Safety and Assets management is considering a backbone of every department. GIS in the Railway become very important to Manage Assets and Security through Digital Maps and Web based GIS Maps. It provides a complete frame of work to the organization for the management of assets. Pakistan Railway is the most common and safest mode of traveling in Pakistan. Due to ever-increasing demand of transporting huge amount of information generated from various sources and this information must be accurate. This creates problems for Passengers and Administration that causes finical and time loss. GIS Solve this problem by Digital Maps & Database. It provides you a real time Spatial and Statistical analysis that helps you to communicate and exchange the information in a sophisticated way to the users. GIS Based Web system provides a facility to different end user to make query at a time as per requirements. This GIS System provides an advancement in an organization for a complete Monitoring, Safety and Decision System for tracks, Stations and Junctions that further use for the Analysis of different areas i.e. analysis of tracks, junctions and Stations in case of reconstruction, Rescue for rail accidents and Natural disasters .This Research work helps to reduce the financial loss and reduce human mistakes helps you provide a complete security and Management system of assets.

**Keywords :** Geographical Information System (GIS) for assets management, geo spatial database, railway assets management, Pakistan

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