

## Research Proposal

### Systematic Approach to Transport and Economic Interaction

Transportation system is considered as the artery of a nation. Road Transport Infrastructure, because of its Accessibility, Flexibility in operation and Reliability it occupies a prime position in the Transportation system. So, Road Transport is vital to the Economic Development and social integration of the country. Road Transport system is a massive sector which governs the Economic productivity and growth directly and indirectly. India's Transport system is one of the most extensive in the world . It accounts for a share of 6.4% in India's Gross Domestic Product (GDP). In which the road transport alone contributes approximately 4.8% of the GDP which carries 65% of freight traffic and 88% of passenger traffic. The transport sector is greatly influenced by the availability and affordability of infrastructure, Vehicles and fuel. India produces only 15% of its fuel demand and remaining 85% of demand is imported, which accounts for 3% of GDP in the year 2014 – 2015 and its likely to increase to about 3.5% by the year 2030. Besides this imported fuel cost, Loss in Economy due to accidents in India , due to Poor transportation safety, especially in road sector (138,000 road fatalities recorded in 2015) , which accounts for 3% GDP of India . This vulnerable and affecting the sustainable Economic development. A conventional method is not effective to face the challenges and minimize these unprecedented Economic losses and achieve Efficiency in complex Transportation systems . Transport Economy system is a complex system with interdisciplinary system and connectivity between its subsystems. other multidisciplinary systems such as population, transport, energy resources, economy, and environment and exhibits a dynamic behavior. Hence it is not appropriate to use the conventional approach to describe the characteristics of this complex system. A Systematic approach by integrating the transportation aspects with the all possible interdisciplinary aspects is required to minimize these economic losses and achieve efficiency in usage of transportation systems by implementing the Transport – Economics interaction results in planning stage of any Transportation infrastructure projects.