Nowadays, with the increasing trend of globalization, companies are continuously looking for the ways to improve their performance and stay competitive in their markets. To do so, logistics operations have an increasing importance throughout the World. Logistics as a global term is also very crucial for countries’ welfare as well. As a developing country, Turkey’s progress in logistics is highly correlated to various parameters such as Turkey’s geo-strategic location, ongoing accession negotiations with European Union, participation to routes within the corridors of EU transport policy and container flow between Europe and Asia. Increasing volume and value of logistics activities in Turkey raised the necessity to analyze the market in detail. In this study, Turkish logistics sector is statistically analyzed in the view of each transport mode and logistics activity. Analysis phase is based on three fundamental frameworks that are called as traffic (flows), infrastructure and modal splits. The problems that are derived from analysis phase are clustered according to the criteria listed in Logistics Performance Index Report published by World Bank in 2010. Solutions to apply to emerging problems that can be reflected in each cluster are selected by considering a number of performance factors by using a deterministic dynamic multicriteria decision making technique.