Different between Transportation System and Transportation Engineering.

Transportation

Transport or transportation is the movement of people, animals and goods from one location to another. Modes of transport include air, rail, road,water, cable, pipeline and space. The field can be divided into infrastructure, vehicles and operations. Transport is important because it enables trade between people, which is essential for the development of civilizations.

Transportation System

The transport system can be conceptualized as the set of relationships between nodes, networks and the demand. These relationships involve locations spatially expressing this demand, flows between them and infrastructures designed to handle these flows. All the components of a transport system are designed to facilitate the movements of passengers, freight and information, either as separate or joint components.

i. Demand. A derived function for the movement of people, freight and information for a variety of socioeconomic activities.
ii. Nodes. Where movements are originating, ending and transiting (intermediacy); points of entry or exit in a transport system. They vary according to the geographical scale being considered ranging from local nodes (such as a subway station) to global nodes (such as port or airport terminals).
iii. Networks. Composed of a set of linkages expressing the connectivity between places and the capacity to handle passenger or cargo volumes.
iv. Locations. Nodes where demand is expressed as an origin, destination or point of transit. The level of spatial accumulation of socioeconomic activities (production and consumption) jointly defines demand and where this demand is taking place.
v. Flows. The amount of traffic over a network composed of nodes and linkages. This is jointly a function of the demand and the capacity of the linkages to support them.
vi. Infrastructures. The conveyances such as roads and terminals expressing the physical reality of a network and designed to handle a demand with specific volume and frequency characteristics. Facilities enabling access to a network are jointly characterized by their centrality and the linkages that radiate from them.

http://people.hofstra.edu/geotrans/eng/ch1en/conc1en/trspsystem.html

Transportation Engineering

1. Transportation engineering is the application of technology and scientific principles to the planning, functional design, operation and management of facilities for any mode of transportation in order to provide for the safe, efficient, rapid, comfortable, convenient, economical, and environmentally compatible movement of people and goods (transport). It is a sub-discipline of civil engineering and of industrial engineering.
2. The planning aspects of transport engineering relate to urban planning, and involve technical forecasting decisions and political factors.

3. Transportation engineering, as practiced by civil engineers, primarily involves planning, design, construction, maintenance, and operation of transportation facilities.
4. The facilities support air, highway, railroad, pipeline, water, and even space transportation
5. The design aspects of transport engineering include the sizing of transportation facilities (how many lanes or how much capacity the facility has), determining the materials and thickness used in pavement designing the geometry (vertical and horizontal alignment) of the roadway (or track).

http://en.wikipedia.org/wiki/Transport_engineering