ABSTRACT

Forecasting represents an indispensable activity in railway transportation planning.Forecasting of demand levels is vital to the railway company as a whole as it provides the basic input for the planning and control of all functional areas includingrailway transport operations planning, marketing and finance. Demand levels and the timing of their appearance (on a day, week, month or seasonal basis) greatly effects capacity levels, financial needs and general structure of the business. Forecasting employs historical data and uses various forecasting methods to make accurate estimates of future demands. Forecasting approaches can be generally divided into two categories: econometric or causal and time series techniques. In thischapter a comprehensive review of methods belonging to these two broad classes will be made. Special emphasis will be given to the application of these techniques to railway demand modeling.