

Rail Passenger Demand Forecasting: Cross-Sectional Models Revisited

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Abstract

This chapter revisits cross-sectional models of rail travel demand, a much neglected area in recent years, by covering three developments in the context of inter-urban travel. First, the models are extended to allow a detailed analysis of catchment areas; the ticket-sales data that are used to estimate these models only cover journeys between stations. Second, access to and egress from stations are investigated by refining functions of population and accessibility to stations separately from rail service quality. The best models are achieved with inverted *s*-shaped access and egress functions rather than assuming constant elasticity. Third, station choice is modeled using a multinomial logit model that yields fresh insights into rail travel demand.

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