

**Analysis Method of Passenger Flow under Disrupted Train Traffic by Using
Accumulated Passenger Data**

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When a train operational disturbance occurs, it is important to reschedule disrupted train traffic appropriately, considering passenger flow. In this research, we use accumulated passenger data to estimate passenger flow under disrupted train traffic. We first have devised a visualization method to understand the relationship between rescheduling arrangements and passengers' flow. We have also conducted multiple regression analysis of collected data under timetable disruption having occurred in the recent one year, and have developed an estimation model for passengers' flow under timetable disruption. We have verified the proposed methods by applying actual cases on train traffic disturbances, and confirmed the reliability or effectiveness of them.